ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

THE ASSESSMENT OF THE STATUS OF AIDS EDUCATION PROGRAMS IN THE SECOND CYCLE PRIMARY SCHOOLS OF THE OROMIA REGION

BY

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JUNE, 2001

THE ASSESSMENT OF THE STATUS OF HIV/AIDS EDUCATION PROGRAMS IN THE SECOND CYCLE PRIMARY SCHOOL OF THE OROMIA REGION

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Approved By The Board Of Examiners

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ABBREVIATIONS

AIDS - Acquired Immune Deficiency Syndrome

ERCA - Ethiopian Red-Cross Association

FGAE - Family Guidance Association of Ethiopia

H.P.E. - Health and Physical Education

HIV - Human Immune deficiency Virus

ICDR - Institute of Curriculum Development and Research

KAS - Knowledge, Attitudes, and Skills

MOE - Ministry of Education

MOH - Ministry of Health

NTPC - Nature, Transmission, Prevention of AIDS, and Care for people living with the virus

OEB - Oromia Education Bureau

STDs - Sexually Transmitted Diseases

UNAIDS - United Nations Programs on AIDS

UNFPA - United Nations Population Fund

WHO - World Health Organisation

ABSTRACT

The main objective of this study was to assess the status of AIDS education in the second cycle primary school of the Oromia region. To achieve this purpose, school-teaching materials were surveyed; school implementation practices of AIDS education were examined; and students' awareness level on HIV/AIDS was tested.

Teaching materials of three school subjects (Science/Biology, Health and Physical education, and Social Studies) were purposively selected and analyzed for objectives and contents of AIDS education. By systematic random sampling technique, 600 students from both sexes and settings were selected to fill student questionnaires. Teachers teaching the school subjects in which AIDS education is integrated have filled the feedback form adapted from works of WHO. Club coordinators from each sampled schools have also responded to questions on how the implementation practices of the club. Parents and curriculum experts were interviewed on the present school AIDS education programs.

For data collection purposes, coding sheets, questionnaires, and tests were employed. Percentage and t-test were used for analyzing the data.

It was found out that inadequacies of AIDS education objectives and contents were observed. Only in grade six and eight Science courses and in grade seven H.P.E courses that few issues of AIDS were integrated. The available contents ignored the importance of care and support for people living with the virus.

The results of school survey revealed that teachers and Anti-AIDS club coordinator were not given enough orientation to successfully implement the program. The involvement of the risk groups and different social agencies in the development and implementation of the programs were unsatisfactory. Meager resources were being allocated for the implementation of the program. The peer education approach reported to be very fruitful in many countries was not properly applied in the schools observed. There were no enough references for teachers and students in the schools. Parents have strong interest if the school can assume the responsibility of informing their children about AIDS.

In spite of the above constraints, students have demonstrated an appreciable knowledge base on the first three categories. Deficiencies were, however, observed on the importance of care and support for people living with HIV/AIDS both in curricula and actually on the students' score. Students have demonstrated that they have no caring attitude for the victims. There is a statistically significant awareness differences between male and female. Males were more aware than females were. Setting has not brought about statistically significant difference of awareness on the students.

Based on the findings of the study, it was recommended that AIDS education objectives and contents as well as interactive teaching methodologies suggested by WHO should be adapted and integrated into all relevant school subjects. Continuous refreshment courses should be given to teachers coordinating School Anti-AIDS clubs and those teaching subjects in AIDS education is integrated; per-services-training (particularly sciences courses) should give much room to desensitizing the wound-be teachers on sexual issues. The peer educator's approach, which is loosely followed in schools, should be strengthened. Program designers and implementers should involve risk groups, parents and different agencies in the development and implementation of the programs to collaboratively win the war declared on AIDS. Finally, the feasibility of independent curricula on Sex and AIDS Education shall be studied.

CHAPTER ONE

I. INTRODUCTION

1. BACKGROUND OF THE STUDY

United Nations Population Fund (UNFPA) has reported that adolescents are facing an increasing risk of unprotected sexual activities in many parts of the world. In some countries, according to the report, high maternal and infant mortality rates are frequently the consequence of early marriage and subsequent childbearing. In others, Sexually Transmitted Diseases (STDs) are posing great health risks to the adolescents. (UNFPA, 1996).

Similarly, earlier studies in developed countries have revealed the high risk of adolescents' exposure to unsafe sexual practices (Jones et al, 1986). Western European countries reacted with strong sexuality education programs and adolescent contraceptive services. Research in Latin America, too, has revealed a high proportion of teenagers to be exposed to the risk of pregnancy (Wulf and Singh 1991). Access to sexuality education and family planning services are poor among adolescents in this region, and the incidence of teenage childbearing is high (Mfono, 1998:180).

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In Africa, studies have demonstrated that a large proportion of adolescents is exposed to the risk of conception, receives poor sex education, and experiences a high risk of adolescent childbirth (Gage-Brandon and Meekers, 1993 Mfono, 1999: 180). A more recent report of UNFPA indicates that some 20 million unsafe abortions take place in developing countries each year, and as many as 70,000 women die, thus accounting for about 13 percent of maternal death. There are also more than 333 million cases of treatable STDs each year (UNFPA, 1999; UNAID, 2000).

A decade back, many people believed that both HIV and AIDS did not exist at all, and what was going on was a mere "propaganda" of the West trying to incriminate Africa as the origin of this scourge (Beyene and Solomon, 1993). These researchers indicated that, the abbreviation "AIDS" is given different meanings as "American-Initiative to-Destroy-Sex." They added that, the effort of health educators to encourage condom use was considered by some students as a simple advertisement of a condom industry somewhere in the West to clear off its unsold commodity at a discount. From these erroneous assumptions, it is clear that the enemy is not only the virus, but also ignorance.

Currently, the AIDS (Acquired Immune Deficiency Syndrome) pandemic is the serious problem in these countries. The hard-won gains in reducing child mortality are being reversed, and the able-bodied are being robbed by the epidemic. Now, it is plainly recognized that HIV/AIDS in Africa constitutes a humanitarian crisis of immense proportion (Barnett and Blaikie, 1992; Cuddington, 1993; Forman and Bannett, 1992;Kerr, 1989;Potts, 1992). The epidemic has upturned many of the development

gains made in Central, Eastern, and Southern Africa over the past three decades, as measured by the Human Development Index (United Nations Development Program, 1997) and by Child Mortality Rates (Stanecki and Way, 1999; Barntt and Whiteside, 1999:200).

Today, about 36 million people are either infected by HIV or have AIDS (UNAIDS, 2000). It is, further, stated that young people aged 15-24 constitute one-third of the total infection rate world-wide, and more than 50% of the 16,000 who become infected with HIV each day are children and young people. In addition, Irving (1998), citing UNAIDS confirmed that currently the HIV/AIDS epidemic is disproportionately affecting the worlds' children and young adults. According to this scholar, half of the new HIV infections worldwide are occurring in those aged 15-24, with the epidemic inflicting an especially heavy toll on Sub-Saharan Africa (P.16).

In addition, as the incidence of AIDS increases and as the general public becomes more aware of HIV transmission, a greater number of the young are put at risk of infection. As (Malinga, 1993) report,

> Knowing that prostitutes are a high-risk group, many African men are turning away from mature women for' transactional sex' and towards young girls, with the assumption that the younger they are the less likely they will have HIV/AIDS (In Maclachlan et al., 1999:41).

For Ethiopia, the spread of HIV/AIDS comes at a period when the country is ill equipped to respond. Crippling famine, backward sexual behavior, low health care, inadequate (if any) sex education etc., have made HIV/AIDS potentially more serious

in the country than it is in most parts of the world. According to Children and Youth Affairs Association reports (1995), the majority of young people in Ethiopia have no access to information and education on reproductive health. As a result, the report added, vast number of sexually active youth is at risk (p.35).

The statement of UNAIDS-Ethiopia indicates that over 50% new infections with HIV/AIDS are now occurring in young people in the 10-24 age groups. According to the estimate, about 20% of all AIDS cases in Ethiopia are aged 10-24 years. A part of the people aged 10-29 accounts for more than 30 % of the entire population. And if HIV cases in this huge useful group are to remain so great, undoubtedly, Ethiopia will have to face a staggering, unbearable human and economic cost of vast number in adult AIDS cases.

At present, a large number of young people in Ethiopia attend school or in contact with those who do. Since these adolescents are accessible segments of the society, they are to be addressed through school programs. Information, values, and skills conveyed in schools can, thus, have a considerable impact on their lives. Though human sexual behavior is based on a pattern of natural reflexes and is triggered by the hormonal system, it is basically a learnt behavior. Its overt expressions can be modified by education. The education system should, therefore, be designed to fully inform young people about sexuality and its consequences, in general, as well as HIV/AIDS in particular.

World Health Organization (WHO), in line with this, has recommended the provision of Sex and AIDS education to young people particularly before they are sexually active (1992; 1994). The program should begin in the primary grades and continue through adolescence. Teachers should be trained, and programs should involve the community, parents, administrators, and religious leaders. The curriculum should include information on human development, reproductive anatomy, relationships, personal skills, sexual behavior and health, and gender role.

However, little information is available on what the regions are doing since the process of decentralization of the education system. This study, hence, attempts to assess the effectiveness of second cycle primary school AIDS education programs.

1.2. STATEMENT OF THE PROBLEM

Ethiopia, one of the poorest nations of the globe, is suffering from the hazards of various diseases. The most widespread diseases that are posing incalculable harms to the people are malaria, TB, and HIV/AIDS. Though all of these diseases and others are exerting their maximum harm, the case of HIV/AIDS would be different.

Experience has shown that AIDS is fatal. Its spread is so quick that many young people are being infected every day. Moreover, it is a development issue with far-reaching effect on national economy. It is a human right issue. It is connected with the issue of family safety, right to work, women, and gender, children and development to name a few.

In Oromia, the majority of the children aged 9-15 are likely to be either in primary or in the lower classes of secondary schooling. Nonetheless, school participation of these children is not risk free. The fact that there are many more AIDS cases among those aged 15-19 than among those aged 5-14 is shows that in many cases, HIV infection must have occurred long before the individual reached age 15. Being at school did not provide any protection. Indeed, in many cases, it may even have increased the chances.

As reports indicate, a large proportion of those attending second cycle primary school of Oromia region are already sexually active. They are of diverse age. Many of these students are in danger of sexual harassment from teachers, peers, and strangers. Schools do little to help its pupils develop behavior pattern for the responsible management of the sexuality.

Children of this level rarely communicate with their parents or other adults about sexual and reproductive health issues. It is reported that they are often reluctant or too embarrassed to approach parents with the topics (Goldman and Goldman, 1981). Parents, although wholehearted to help their children, still do not communicate adequately with them about sex (Geasler, Dannison and Edlund, 1995; Postrado and Nicholson, 1992). Many parents feel inadequate to the task (Geasler et al., 1995). Hence, although children of 5-15 age limit are window of hope, they are also constitutes 'window of concern'.

As of now, there can be no prevention of HIV transmission without the maintenance of behavior that will protect oneself or the change of the existing risk behavior. The only way of ensuring this is through education. To maintain the existing 'safe' behavior or to adopt safe behavioral practices, education is indispensable.

For instance, at the level of practice, messages about the risk of unprotected sex are essentially educational, as are messages about abstinence or contraceptive. The same is true about fidelity and about reducing the number of sexual partners. This holds for messages about needle exchange. In general, school educational interventions in informing young pupils about HIV/AIDS, its modes of transmission, methods of prevention, and care to be taken for AIDS victims are very decisive.

From this, the researcher is convinced that second cycle primary school children should be of primary concern in the educational sector response. For that reason, the extent and quality of diffusion of knowledge and understanding of HIV/AIDS, with special attention to human sexuality, traditional viewpoint, and perspectives of youth cultures.

In Ethiopia, a New Education and Training Policy has been formulated. Accordingly, new curricular materials have been prepared. In this regard, current issues like AIDS education are to be integrated in the school curriculum (MOE/ICDR, 1995).

Before this, Ethiopia has participated in a pilot HIV/AIDS project in collaboration with WHO and UNESCO in 1989/90 to integrate HIV/AIDS education into the school

curriculum (UNAIDS, 1997). The evaluation of this project revealed that students from the experimental sites had acquired more knowledge, adopted more protective behavior, and had supportive attitudes regarding HIV/AIDS patients than students from the control sites were.

However, until 1994, most primary school students in Ethiopia have never been taught about AIDS in schools but all of them want to learn about it (Getachew *et al*, 1995). Furthermore, teachers indicated that some contents of health education are found integrated in the primary school curriculum but content of AIDS are missing (Ibid. 42). The reality, however, is young children can learn more easily than adults to make their behavior safe or acclimatize safer practices from the start.

According to the needs assessment reports on the feasibility of AIDS education in primary school of Ethiopia, still teachers agreed that AIDS/STDs education should be given together with other health education content. They were also found willing to teach about AIDS/STDs if integrated in the curriculum and provided that they are given training (Getachew et al., 1995:42). Hence, MOE has recommended the integration of AIDS education into school subjects even prior to the needs assessment.

Thus, since regions are mandated to develop their own primary school curriculum, the introduction of AIDS education is their responsibility. However, so far almost no attempts were in the assessment of regional practices.

In particular, there is no study conducted on the status of AIDS education programs in the Oromia Region. No data are available on how teachers are being trained, how objectives and content/learning experiences of AIDS education are appropriately integrated in the already designed school subjects. A test of students' knowledge and attitudes, which is greatly helpful in the planning of future initiatives, is lacking.

For this reason, this study attempts to study the status of AIDS education program and the level of student's awareness on HIV/AIDS in the second cycle primary school of the Oromia Region.

1.3 OBJECTIVES OF THE STUDY

The central objective of this research is to assess the status of AIDS education program in the second cycle primary school of the Oromia region. More specifically, it aims at:

- assessing the extent to which objectives and content of AIDS education are appropriately included in the second cycle of Oromia primary school;
- investigating the degree of implementation of AIDS education program in the level specified;
- identifying the current students' awareness level of HIV/AIDS.

1.4 RESEARCH QUESTIONS

This paper intends to answer the following questions:

1. What is the status of HIV/AIDS education in the second cycle of Oromia primary school curriculum?
    1.1 To what extent are objectives of HIV/AIDS education integrated in the different curricular materials?
    1.2 Are contents of AIDS education available across the school teaching materials of the cycle?
2. Is there any barrier operating against the implementation of AIDS education program in the level?
3. What is the students' awareness level concerning the nature of AIDS, its mode of transmission, method of prevention, and care for the infected?
    3.1 Is there a significant awareness difference between settings and sexes?
    3.2 To what source(s) do the students attribute their correct or incorrect knowledge of the issues?

1.5 SIGNIFICANCE OF THE STUDY

As far as the Regional experience of primary school curriculum development and implementation is concerned so far, no information is available on how the Oromia region is addressing the issue of AIDS in the school curricula. In addition, no study is conducted on how AIDS awareness level is observed in the huge population of the risk group.

Hence, it is believed that the findings of this study could:

- help in judging the degree to which students are acquiring the knowledge, attitudes and skills they need to prevent HIV infections;
- help the implementing organizations and policy-makers in identifying the extent to which second cycle primary school curriculum is responsive to the dissemination of AIDS information to the massive adolescents of the region;
- be significant for curriculum developers, as it suggested better strategies of addressing the problem through school curriculum;
- help the stake-holders in identifying the barriers that might be hindering the effectiveness of the program;
- provide important base for the recently formulated AIDS Policy on how the issue can best be addressed; etc.
- help in articulating other researchers interested in areas of how curriculum could effectively address the crisis of HIV/AIDS/STDs and adolescents problems.

1.6 LIMITATION OF THE STUDY

Better data would have been extracted had observation of classroom been made. Unfortunately, the meager AIDS Education contents available in the school subjects were placed at the beginning of the courses (Grade 6 Science) and Grade 7 H.P.E). So it was impossible to observe the actual classroom interactions.

1.7 SCOPE OF THE STUDY

This study is delimited to the assessment of the status of AIDS education program in the second cycle of Oromia primary school. It focused on assessing the availability of AIDS issues in the curriculum, assessing the implementation processes, and testing the awareness level of the students of the level.

The Region is chosen only because of the researcher's acquaintance with the medium of instruction of the region. Second cycle was purposively selected. One reason is that, it is a critical period for the learner to be exposed to risk behaviors that could subject them to contracting HIV. The third reason is that the cycle is recommended for the introduction of AIDS education (MOE, 1994).

1.8 DEFINITION OF TERMS

Curriculum- the entire body of courses of study designed to meet the goals of school.

Health Education - Any combination of learning experiences designed to promote the adoption of behavior conducive to sexual health of human being.

Risk Behavior- any behavior by a person that may place the person or other people at a risk of contracting HIV infection or STDs or the use of infected skin-piercing equipment.

Status- the availability of AIDS education in the different school subjects, its effective implementation, and students' awareness level on HIV/AIDS issues.

1.9 ORGANIZATION OF THE STUDY

This study has five chapters. The first chapter deals with the background of the research. The second one discusses the available relevant literature on the issue under investigation. The third chapter reports the procedures followed to achieve the objectives of the study. The fourth chapter is the core of this paper. It displays the various data gathered through the different instruments from the relevant sources. The fifth last chapter comprises the summary, conclusions, and recommendations. The consecutive parts are lists of reference materials and appendices.

CHAPTER TWO

II. REVIEW OF THE RELATED LITERATURE

Literature on adolescent problems, attitudes, and knowledge of AIDS in Ethiopia is practically almost non-existent. Most of the available literature on the issue is from the developed world. This clearly indicates that an important problem has been overlooked for long time in the country.

However, the understanding of the adolescents' knowledge and attitude on sexuality in general and HIV/AIDS in particular, the consequences of sexual activity and contraception are considered as a vital factor for planning educational interventions.

In this section, the relevant literatures on the issue under investigation were briefly discussed. Accordingly, an overview of adolescence and sexuality, the nature of HIV/AIDS, countries' experiences on school AIDS education programs, approaches to program development, implementation practices, and related issues are discussed.

2.1 General Characteristics of Adolescence and the Need for STD/HIV/AIDS Education

World Health Organization (WHO) has defined the "Adolescent" as being ages of 10, 19 years, and "Youth" as between 15 and 24 years. The term "young people" covers both age groups (10 and 24)(WHO, 1993). Throughout this paper, the former definition of adolescence was used.

Adolescence is a period of profound physical and psychological changes. It is a period when young people learn to assume control of their own lives and make mature decisions in the light of the consequences for themselves and others. However, the rapid changes in society-urbanization, industrialization, increased travel, the spread of non-traditional values, the decline of the influence and support of family have given many adolescents a wide range of behaviour from which to choose, some of which may be dangerous.

The available studies from Africa and Asia indicate that many sexually active adolescents had begun sexual relations without sufficient knowledge about reproduction and contraception (Ezumokhar et al., 1981:581-585). Still others claim that even after sex education class, a great deal of ignorance and misconception on sexual and contraceptive matters exist among adolescents (Goldsmith, et al., 1972:32-38).

On the other hand, a significant progress is being observed. In the United States, for example, a review of nearly 80 sex education programs indicated that the programs increased knowledge among youth about sexuality (Kirby, 1997). Most of these successful programs have included community

involvement and clear messages about avoiding pregnancy and STDs including HIV/AIDS (Nguer *et al.*, 1999).

In order to develop school sex and AIDS education programs, local adolescents' sexual practices should be identified. In Chile, for example, a third of young people reported having had sex before age 15. In the analysis, today's young people in Cambodia were becoming sexually active at younger ages than in the past. And in Costa Rica and Colombia, a trend among youth to have a wide range of practices was noted (Dowseff, 1999; in Family Health International, 2000:2). In Ethiopia, the existences of earlier sexual practices among children were reported (Radda Barna, 1993).

However, according to Verman (1995), while adolescents' attitudes toward premarital sex are becoming more liberal, their awareness of contraceptives remains poor (In Abraham and Kumar, 1999:139). Numerous studies in developing countries, as reported by WHO and UNICEF (1995:65), have also shown that young people lack knowledge about contraception and disease prevention, and that they often have erroneous ideas about reproduction.

Consequently, every five minutes, a young person somewhere in the world commits suicide, often because of emotional and social problems related to sexual and reproductive health. These include physical abuse, sexual violence, breakdown of intimate relationships, unwanted pregnancy, and unsafe abortion, infection with STDs/HIV, and anxiety about being physically attracted to members of the same sex. According to Panos (1998:1) report,

most of these problems are preventable. Nevertheless, many parents and policy-makers are afraid to act.

Furthermore, reports on world population reveal that millions of young unmarried men are having sexual relations but know little about the consequences. Few young men, for example, have little knowledge about fertility or the menstrual cycle (Gorgen *et al.*, 1998: and Morris, 1994). Many think mistakenly that pregnancy cannot occur if their partners are Virgin (Gorgen, 1998), or that a woman is most fertile during menstruation (Morris, 1994; all in population Report, 1998:17).

According to Macauley (1995), many young men do not know about modern contraceptives or where to get information about services. Even if they know of contraceptives methods, many believe common misconceptions, for example, that contraception cause infertility (Gorgen, 1998; Ibid. p. 17).

More significantly, adolescents bear an increased risk of exposure to infections with STDs (Brabin, 1993). Merson (1993) has estimated that half of all HIV infections occur among people younger than 25 (In Gorgen *et al.*, 1998; 65). In particular, data on reproductive health of this group in developing countries show a serious and worsening situations (Waserheit, 1992). This indicates that adolescents have a lot to learn before they become sexually active.

2.2 Nature of Sexually Transmitted Diseases (STDs) and HIV/AIDS

So far, many of these STDs have been identified. The most common include gonorrhea, chlamydia, syphilis, trichomonas, genital warts, chancroid, genital hepatitis B, and HIV infections (WHO, 1994). Daniel (2000), citing UNAIDS, has reported that currently there are about 333 million new STD cases each year-excluding HIV. More than 50% of these infections in the world are occurring among adolescents. In Ethiopia, the distribution of STD cases attending STD clinic during Jan. 1993 to Feb. 1992 showed that the 12-24 age groups had the highest STD prevalence rate with 53.6% followed by the 15-35 age groups at 26.35(MOH, 1993; in Children and Youth Affairs Organization of Ethiopia, 1995:35). This paper, however, focuses on the deadly HIV/AIDS infections.

The abbreviation 'AIDS' stands for *Acquired* (not in born, passed by from person to person); *Immune* (relating to the body's immune system which provides protection from disease-causing germs); *Deficiency* (lack of responses by the immune system to germs); *Syndrome* (a number of signs and symptoms indicating a particular disease or condition)(WHO, 1994).

A virus called HIV (Human Immunodeficiency Virus) which attacks and, overtime, destroys the immune system of the body causes it. A person has AIDS when the virus has done enough damages to the immune system to allow infections to develop (p.21).

Incubation period of HIV infections and its predictors may depend on many factors. These include HIV transmission route (Spijkeramn *et al.*, 1996); HIV variants (Tersmette, 1993); host immune system (Bentwitch, *et al.*, 1995); host genotype (Samson, et al., 1996; Klein *et al.*, 1994); environmental pathogens (Marrow *et al.*, 1997); access to health care (Morgan *et al.*, 1997); etc., (In KIT, SAfAIDS, and WHO, 1998:382)

Widespread transmission of HIV, which causes AIDS, began in the late 1970s in Sub-Saharan Africa, North America, and the Caribbean. By the 1990, epidemics were being recorded in nearly all countries of the world (UN Report, 1998).

As it is frequently stated in this paper, so far, there is no cure or vaccine for HIV/AIDS. This makes it different from other STDs. In spite of this, studies indicated that people often mistakenly believe that AIDS has cure. For example, Agrawal, *et al.*, (1999) reported that approximately one quarter of some 1000 students surveyed in Karanatake, India, thought that a vaccine and cure for HIV/AIDS infection existed. In addition, Araoye *et al.*, (1996) affirmed that half of 970 secondary school students surveyed in Nigeria did not know that HIV causes AIDS (All in FHI, 2000:4).

The prevalence of HIV infections in Ethiopia had been confirmed by several serosurveys conducted since 1984. Sero-epidemiological surveys carried out in 23 towns since 1988 indicated that the highest prevalence rate of HIV infection was recorded in the age 15-19 ranges (Mengistu *et al.*, 1991).

In addition, available data from health institutions demonstrate a high incidence of gonorrhoea and other STDs among adolescents. A study made on the prevalence of STD patients attending Kazanchis Health clinic in Addis Ababa, for example, revealed that 14% of females and 23% of males in the 14-19 years bracket had STDs (Workineh, 1992).

2.4 Factors Aggravating the Spread of HIV/AIDS in Developing Countries

The HIV/AIDS condition of the Africa youth, in general, is aggravated by various determinant factors. For example, studies have revealed that young people are becoming sexually active at an ever-younger age. These studies publicized that girls of 10-14 years old and boys of 12 years old have had penetrative sexual experience (Joe, 1994). This, in Oromia case, is the age of primary school students.

The other factor is economic crisis, which affect women and youths. In many cases, poverty pushes some of them to the practice of commercial sex. The motivation to turn away from prostitutes in the search for HIV-free transactional sex, also worsen the propagation of the epidemic. With the high rate of HIV infection in Malawi, for example, more men that are adult are entering into such relationships with progressively younger girls (Malinga, 1993; in Maclachlan p.41).

As a result, the number of girls in Malawi who are HIV positives in the age range 15-19 years is now more than four times that for boys (Liomba, 1994:41). In one study conducted on child prostitution in Addis Ababa, it was found that an estimate of

50,000 child prostitutes exist among which were students in schools (Baardsen, 1993).

In addition, according to a survey made by Redda Barnna on child prostitution in Addis Ababa (1993), out of 77 samples, 50 (65%) of child prostitutes were aged between 10 and 15 and most of them were dropouts from primary schools.

The third factor is the presence of recognizable opposition from parents, religious leaders and even teachers to open discussion on sex education with young people. According to WHO, the beliefs that sex and AIDS education can hearten sexual activity in young people are powerful barriers to the introduction of prevention programs for adolescents (1994:13). Cynthia Waszak, an FHI Senior Scientist who focuses on adolescent health, however has to say the following:

> Youth are interested in sex because of biological and hormones. Suggestions about sex in music, radio, advertisements, films, and Television reinforces that interest. Kids talk about sex and have questions about it. We should find ways to give youth the right information so they can make better, informed decisions about their sexual behavior. (FHI, 2000:10).

Yet, evidence from evaluation studies that compared groups of young people who received such education with others who did not, shows that sex and AIDS education don't promote earlier or increased sexual activities.

In 35 studies, for instance, such education did not bring about earlier or increased sexual activities. In six studies, young people delayed their first sexual practices or

reduced their overall sexual activity. In 10 studies, individuals who were sexually active had less unprotected sex (Grunseit and Kippax, 1994).

Furthermore, AIDS can be transmitted by ways other than sexual intercourse. Primary school children, in the course of their play and in their routine activities at home, are exposed to the use of needles, blades and ear, skin and gum piercing instruments.

The other factors is, the diversity of age grouping in primary school student in which sexually matured students are found, mostly in rural areas of Oromia. This group may create a possibility of getting and transmitting HIV/AIDS. Earlier intervention is; thus, sought after and different countries have a lesson to be learned for Ethiopia.

To address AIDS crises through school some African countries have been conducting different programs. In Lesotho, they have AIDS education programs that cover all the levels of primary and secondary education (6-17 years old). At primary levels, they have already produced syllabuses and teacher's guides (Mosala and Mohili, 1994). In Zambia, the AIDS education Project Provides HIV/AIDS education and communication skills to youth at pre-school, primary school and secondary school levels (Phiri and Mashambu, 1994).

A study in the Kingdom of Swaziland looked at the students' knowledge, attitudes, beliefs, and practices in view of HIV/AIDS. Misconceptions and miss-information about the disease were reported. As Maseko and Mthembo (1994) indicated,

beginning from 1994, AIDS education was integrated in grades 6 and 7 of English and Science curriculum in the country.

In Malawi, there are series of AIDS booklets, for primary schools comprising students' handbook and teacher's guides. AIDS education is given as part of health education and co-curricular activities.

In Tanzania, AIDS education is operated by two projects for primary schools. They had a short-term project in which AIDS education was allocated a single period per week not attached to any of the existing subjects. The long-term project integrates AIDS education mainly with science education (Katende and Sawaya, 1994).

A baseline needs assessment survey for youth in and out of school in Kenya, on the other hand, has shown that most students in primary schools do not have full knowledge of the meaning of AIDS. According to Nturbi (1994), they do not have enough knowledge of the signs and symptoms of HIV/AIDS and have misconceptions about the causes of HIV/AIDS. The assessment proved that all the respondents (teachers, directors, parents, and primary school students) are in favor of the introduction of an AIDS education program for the youth.

Malawi's experience demonstrated that, although a quarter of million of booklets were printed and distributed; a preliminary evaluation report indicated a discouraging results. Nyirenda and Jere (1991) found no increase in pupil's scores on test of AIDS knowledge given before and after several weeks of using the AIDS education

materials. The researchers guess that teachers might have the materials wrongly; or the teachers did not feel it comfortable to talk to school pupils about sex and HIV/AIDS. It could be due to the fault of the context and the methods used (Maclachlan, et al., and 1997:42).

2.3 An Overview of HIV/AIDS Situation in Ethiopia

In the mid 1980s, government and public responses to the AIDS epidemic were initially ad-hoc and slow. Consequently, the epidemic spread fast, at the outset in most parts of urban towns and later to all regions.

In 1986, the government of Ethiopia responded to the HIV/AIDS epidemic by establishing an AIDS control program in the Ministry of Health (MOH) at departmental level. During its first six years, the AIDS control program in the MOH made substantial progress in the area of epidemiological surveillance, IEC activities, patient treatment, counselling, and blood transfusion services are among to mention (Daniel 2000; 7).

Following the process of decentralization activities, AIDS control programs were developed at regional states. However, as the coordination was being done by the health sector, the epidemic continued to be addressed almost exclusively as a health problem.

Currently, a National AIDS Policy is formulated and an interesting effort is being made by the different governmental and non-governmental organizations.

In the Policy, it is stated that;

> Intensive, extensive, and sustainable IEC activities materials and method through all possible media taking into account culture such as beliefs and languages shall be planed, tested and implemented and evaluated for continued success in educational efforts" (Article 1.2: P. 26).

Policy formulation is the first step forward. However, it should be systematically translated into practices.

2.5 The Development of School AIDS Education Programs

According to WHO, the goals of AIDS education are to promote behaviors that prevent the transmission of HIV/AIDS (WHO, 1994). It should aim to develop in the students the knowledge and skills needed for healthy human relationships, effective communication and responsible decision-making behavior that will protect them from contracting the virus. It should also target the promotion of ideas and values that are conducive to social concern and respect for human right (WHO, 1992; 3).

The eleven core objectives suggested by World Health Organization are the following:

Differentiate among HIV, AIDS, and STDs;

Identify ways of HIV transmission;

Identify ways in which HIV/STDs are not transmitted;

Rank methods of HIV/AIDS prevention for effectiveness;

Identify sources of help in the community;

Discuss reasons for delaying sexual intercourse;

Respond assertively to pressures for sexual intercourse;

Discuss reasons and methods for having protected sex when sexually active;

Respond assertively to pressures for unprotected sex;

Identify ways of showing compassion and solidarity towards people with AIDS;

Care for people with AIDS in the family or community (WHO, 1992:3).

All these are the general goals that lead AIDS education programs. In course design, however, learning objectives need to be formulated. These objectives need to be defined to guide the selection of the topics to be included in the curriculum.

According to WHO, the objectives are to be identified bearing in mind some basic criteria. These include: the behaviours that put young people at risk infections with HIV that are most prevalent in local settings; the amount of time available; percentages of time recommended; whether some topics have been taught in other subjects; ability of students and teachers, etc., (WHO, 1994: 16).

2.5.1 Selecting and Organizing Contents and Learning Experiences of AIDS Education

After goals and objectives of AIDS education are identified, the next step is selection and organization of content and learning experiences. Although the assessments of the existing local conditions guide this process, WHO suggests some basic contents.

Accordingly, the knowledge that will help adolescents decide what behaviours are healthy and responsible includes: what an HIV is; what an AIDS is; how an HIV is transmitted and isn't transmitted; who can be infected with the virus; what an individual can do to prevent transmission of HIV; sources of help; and how to care for people in the family or in the community who are victim of the virus. (WHO, 1992; WHO, 1994).

The skills relevant to HIV/AIDS preventive behaviours are self-awareness; decision- making; negotiating skills; assertiveness skills to resist having unprotected sex; practical skills in using contraceptives; and etc, (WHO, 1994). This skills are best taught through peer education, using drama rehearsal or role play of real life situation that might put young people at risk for HIV/AIDS (Tonks, 1996: WHO, 1994). Tonks adds that instructional material should contain concrete guidance on such issues as abstinence, prejudices and personal bias.

Attitudes to be developed include: positive attitudes toward delaying sex; personal responsibility; social attitudes such as confronting prejudices, being

supportive, tolerant, and compassionate towards people with HIV/AIDS; sensitive attitude about multiple sexual partners, violent and abusive relationships, etc, (WHO, 1994; 5). In addition, the attitudes of the local society toward behaviours that put adolescents at risk of HIV infections; how gender issues contribute to HIV transmission and relevant issues are to be incorporated in the school subjects. (WHO, 1992; 35).

Students, particularly at early stages, should be encouraged not to have sexual intercourse. Delaying sex to an older age results in more mature decisions about contraception and protected sex. Students need to discuses the reasons and supports for delaying sexual practices, and learn how to resist pressure for unwanted sex (P.5).

Hence, program developers should have an understanding of the principles and trends of preventive education and of program development methodologies. They should know about HIV infection and STDs, be able to prepare program that bring together knowledge, skills, and attitudes into a coherent whole. They should also be able to be sensitive to the needs of teachers and students (1992).

2.6 Implementation of School AIDS Education Programs

2.6.1 Training of Teachers

Teacher training is a crucial component of curriculum innovation particularly in the case of AIDS education, as the issues involved are extremely sensitive (WHO/UNCEF, 1994:28). Waszak in WHO/UNICF has said:

> Training teachers is a key element of successful sex education programs, and lack of good training has been a big problem". The teachers don't get trained, so they ignore the curriculum or don't know how to deal with it. The training has to desensitise the discomfort the teachers feel in talking about subjects that were taboo when they grew up. (P.29).

A recent evaluation of the Peru education program, for example, suggests the potential limitations of training and resources. It was indicated that there are still resistances by some teachers asked to implement the program, which undercut its effectiveness. No enough time and resources had been committed to gain the support of teachers and principals. This is a big issue in conservative societies.

Therefore, teachers need to understand what is known about HIV/AIDS/STDs so that they can give reliable information about them to students and the community. They have also to confront their own feeling especially about the disease, and about people with AIDS. They have to feel comfortable with the issues raised in the programs particularly, those related to human sexual behavior. Finally, they have to try out the classroom activities described in the program (p. 28). The training, hence, should equip teachers in this respect.

The training should also help the teachers to develop skills in counselling, the exploration of values, and a creation of suitable classroom environments. Additional training may be required to help teachers to integrate AIDS/STDs issues into the existing curriculum and to develop interactive teaching techniques. Educators reported that an appropriate training is a major factor in determining the overall success of the AIDS/STDs programs. Well-equipped and well-trained

teachers in addition can have an impact on the knowledge, skills, and attitudes of those in their cares. (WHO, 1992:52; Collier and Donnelly, 1991:72).

According to WHO, thus, the training should cover the following areas: the nature of HIV/AIDS, the transmission of HIV infections; how to prevent HIV/AIDS transmission; teaching techniques that deals with skills and attitudes as well as information. In addition, exploration of the personal, social, political, cultural, and sexual issues involved in the AIDS/STDs; assistance in dealing with difficult and controversial issues in the classroom; and understanding of preventive education should be stressed in the training (WHO, 1992:52).

Methods used in the training should reflect those expected to be used by teachers in the classrooms. Presentations should be reduced to a minimum, and participants should be encouraged to share thoughts and feelings as much as possible. (WHO/UNESCO, 1994).

Anbesu *et al.,* (1995:20-21) indicated that the effort made to sensitise and keep informed the agents of change on AIDS is insignificant. Of those who have participated in different training and sensitisation program on AIDS, 37% of teachers, 54% headmasters, and 75.9% of the coordinators have reported that their participation has helped them to some degree contribute the promotion of anti- AIDS campaign.

In general, training of teachers is vital for the successful implementation of an AIDS education program.

2.6.2 Some Teaching Styles Peculiar to AIDS Education

A comprehensive preventive program on AIDS/STDs needs to provide biomedical information, to facilitate the exploration of personal issues and ultimately to influence attitudes, knowledge, and skills (WHO, 1992). The participatory style often involves a learner-centred group process. In this approach, communication and interaction are encouraged and the orientation may be towards problem solving. Students and teachers together employ their knowledge, skill, and attitudes to examine problems related to AIDS/STDs.

Preventive education AIDS/STDs is more effective in an environment that accords with the goals of the program and where the relationship between teachers and students are open and trusting. Both the curriculum and teacher training should take into account the need to create such an environment.

According to WHO, an environment based on respect and trust in, which teachers and students can share opinions and feelings, facilitates growth in knowledge and skill and the explanation of values (1992:45).

In general, an effective AIDS education teacher should some basic qualities. She/he should be willing to and interested in teaching about HIV/AIDS and other sexual issues. She/he should be knowledgeable about HIV infections and STDs, their transmission, and their prevention. School staff, the community, and the students should accept him. S/he should be able to maintain confidentiality and objectivity. S/he should be familiar with and at ease when using sexual terminology and discussing sexual issues. S/he should be respectful of students

and families' values. S/he should be accessible to parents and community members for discussion. Such persons should be specially chosen and trained for these propose.

2.6.3 Community Involvement in School AIDS Education Programs

In every society, the success of any educational program is mostly determined by the involvement of the community. In particular, such involvement is crucial in AIDS education programs. There are a good number of reasons for this. In Ethiopia, studies indicate that during the last few decades, rapid social changes have been taking place. As a result, the traditional restraints on child- rearing practices and premarital sexual activities are being eliminated thereby exposing adolescents to the risk of STDs (Daniel, 2000:1).

However, our traditional society still believes that sex education for adolescent violets religious teachings, is insensitive to cultural traditions, and encourages on parental domains. For them, since the main mode of HIV transmission is sexual intercourse, dealing with sex matters in schools with students will arouse their curiosity, reduces their reservations about sexual activities (McCouley and Salter, 1995:2).

Consequently, they oppose courses in schools or demand that only messages on abstinence be given. In the words of John Woolsey, "We don't say 'smoke carefully'. "We say 'don't smoke' "(Gibbs, 1991). So if the community has such

attitude owing to their morality, they are sentencing their children to death. Nothing is immoral than that and schools are expected to interfere by involving the community.

This means that young men and women were (and are being) denied comprehensive and mature information on sexual issues. As a result, studies indicate that this groups in many part of the world learns about sex not from schools and families but instead from their friends, other peers, books, magazines, video films and other mass-media (McCouley and Salter, 1995:18 De La Sale University Centre for urban Studies, 1979; in Mekonnen, 1991:97).

Furthermore, silence that surrounded the epidemic is giving ways to the increased realization that HIV/AIDS is now the greatest threat to the economic and social well being of African countries (SAfAIDS News, 1999:12). So, just as Jesus broke through the social and cultural barriers of His time to reach out with compassion, love, and hope to people in great need, schools are now called to respond in the same way to the crises of AIDS epidemic.

However, much of the information adolescents hear from these sources is misleading, incomplete, and wrong (Dockrell and Dockrell 1995:44). For instance, the research result in Uganda indicated that 60% of the population had first heard about AIDS from friends. However, what they know about it was full of misconceptions and myths about AIDS (Okware, 1995:33-36).

The participation of the community in school AIDS education programs is very low in developing countries. In U.S., for example, of the 100 rural school districts, only

45% involved parents, students, and community members in program development (Helge and Paulk, 1989:30-35).

Therefore, it should be recognized that community's involvement in school program on HIV/AIDS is very important for many things. It increases knowledge and understanding about HIV/STDs among the community. It increases the likelihood of the program being widely accepted. It increases the likelihood of the message about AIDS being consistent in home and at schools. It facilitates communication between parents and students (WHO 1992:18).

In Ethiopian context, the needs assessment report of the 1995 revealed that the majority of the sampled community members responded in favour of school AIDS education program in primary schools (Getachew *et al.*, 1995:38). However, their participation program development and implementation is not yet identified.

However, from their responses, it could be inferred that they had recognized the threat posed by the epidemic and have favoured school AIDS education programs. Experience tells as that, still they find it difficult to discuss sexual issues with their children. In addition, they are happy if schools take on the responsibility. Still their involvement is crucial. So schools are expected to participate them in the programs.

2.6.4 Evaluation of School AIDS Education Programs

Successful program development cannot occur without evaluation. Evaluation gives direction to every thing that we do. It is a process we used to identify needs.

It is a process to set priorities among needs and translate program objectives or modification of the existing objectives.

Furthermore, evaluation is a process used to identify and select among program approaches, organization, staff assignment, material and equipollents, activities and schedule, and other structuring choices in order to build a program that has a likelihood of success. It is a process used to monitor and adjust programs as they are implemented. It is a process used to determine whether a program is resulting in desired outcome, and why the outcomes are as they are.

To improve school health education on AIDS, such evaluation is very instrumental. To this end, evaluators need to determine pre-program levels of knowledge, beliefs, and behaviour among students and obtain evidence of the impact of the program.

Far from being an optional extra, evaluation should be an integral component of the school AIDS education programs. It should provide program coordinators with information relevant to other aspects of national AIDS prevention. It should also control program as well as the effectiveness of the school programs (WHO, 1992:28).

A minimum evaluation might include standardized test to be given to students with question on knowledge, and possibly on attitude and practices. Evaluation strategies can also make use of in-depth interview, focus- group interview, and objective indicators that may show that program objectives are being met. (WHO, 1992:29). Process evaluation in particular, should provide answers such question

as: is the program being implemented as planned? Are teachers being trained and is the training effective? Is significant change in behaviour observed among the students? Etc.,

In the following section, the procedures followed to achieve the purpose of the study were discussed.

CHAPTER THREE

III. RESEARCH DESIGN AND METHODOLOGY

In order to realize the objectives of this study, survey of the status of AIDS education across four school subjects was conducted by using Content Analysis Research methodology. The implementation practices and students' awareness level were studied by using Survey Research Designs. In the following sections, the sources of data, sampling procedures, instruments used, and methods of analysis for the two phases of the study were discussed.

3.1 Survey of AIDS Education Objectives and Contents Across School Subjects

3.1.1 Sources of Data

In order to investigate objectives and contents of AIDS education in the school teaching materials, the main sources of data were school teaching materials designed for grades 5-8.

3.1.2 Sampling Procedures

From the current school teaching materials, three of them were purposively selected and analyzed. The following table indicates these school subjects with their respective grade levels.

Table 1: Lists of School Teaching Materials Surveyed for Objectives and Contents of AIDS Education:

No	Teaching Materials	Grades
1	Health and Physical Education	5-8
2	Science	5-8
3	Social Studies	5-8

The chief reasons for focusing on these subjects were that, MOE has already recommended General Sciences for grades 5 and 6, and Biology for grades seven and eight for content of AIDS education. The same issue is also expected to be integrated into Social Studies courses, particularly with population and Family Life Education. Health and Physical Education curricula and other sources in schools were also assessed for the same reasons.

3.1.3 Unit of Analysis

Objectives and contents addressing AIDS issues were identified and their coverage in each sampled courses along the grade levels were assessed. The congruence of the objectives and the contents were also determined.

For these purposes, the unit of analysis and the measuring units (categories) were identified. All topics addressing AIDS issues in the sampled curricula were the taken for analysis. In each school subject, paragraphs were taken as the units of analysis. It was also suspected that the issue could be integrated in the school subjects at sentence or phrase level in the different chapters. So, every chapter suspected for the integration the issue were thoroughly examined.

Experts and the researcher in collaboration coded the theme of each paragraph under the four-category recommend by WHO and MOH 1996 AIDS control team. The categories used are the following.

Table 2: Category Suggested by WHO and used for the present study for Analyzing the school subjects:

Category	**Description**
Category one	Nature of AIDS
Category Two	Modes of HIV Transmission
Category Three	AIDS Prevention
Category Four	Care for AIDS Patients

N.B. Each of the four categories has its own discrete sub-categories (See Appendixes E for the detail).

To analyze these school subjects, orientation was given for three postgraduate of Biology Department to code the contents. Besides, the researcher made an

examination of the methodologies suggested in the materials and the evaluation techniques.

3.2 Research Design Followed for School Survey

Very often, content analyses are only a part of larger research efforts (Budd, 1967). The information revealed by the procedure will only concern the availability of symbolic information. Hence, in order to get insight into whether what is integrated in the curricula are being properly put to practice and whether the content serves mere strategic purposes, or if other school programs are addressing the issue, 10 schools were observed.

The aim, here, was to identify how much teachers were acquainted with the integrated AIDS education, how far the school are involving the students, the community, and different responsible social groups, how AIDS issues are being addressed through co-curricular activities. More importantly, how much the students are aware of AIDS epidemic was assessed. To achieve this goal, the following procedures were employed.

3.2.1 Sources Of Data

This study was carried out in two selected zones of the Oromia region-Eastern Wellegga and Jimma Administrative Zones. The following schools were purposively selected from the two zones.

Table 3: Distribution of Schools Selected for Data Sources;

Eastern Wellega		Jimma	
Urban schools	Rural schools	Urban schools	Rural schools
Biqiltuu Leeqaa	Chingii	Jireen Kutir Hulet	Haro Primary school
Burqaa Beekumsaa	Diggaa Kolooboo	Jimmaa Primary school	Yabbuu Primary School
Kibba Waachaa	Qumburii Ballachoo		

In these schools, the primary sources of data were students, teachers, and club coordinators. In addition, 14 parents and 10 Anti-AIDS clubs as well as one coordinator of health education departments of the region were used as additional data sources.

Furthermore, the researcher made observations of school implementation practices. Working documents of the region on the issue under investigation were analyzed. Schools written sources were also observed.

3.2.2 Sampling Techniques

3.2.2.1 Students

By using random sampling technique, representative students of grades 6-8 were chosen from each school, each grade, and each sex. Test was administered to

these 600 students (ten males and ten females from grades 6,7 and 8 of the ten schools).

3.2.2.2 Teachers

From the selected schools, 30 teachers teaching the sampled courses were taken for the purposes of identifying whether they have the required training (orientation), their attitudes towards teaching AIDS education, the problems encountering the implementation processes, and other related issues. .

3.3 Instruments for Data Collection

For data collection, coding-sheets, tests, interview, and questionnaires were employed. The coding sheets are adapted from WHO/MOH works. Tests were administered to sampled students of the schools.

Initially, the test items were taken from works of WHO. One doctor in medicine and one Science educator in Addis Ababa University have independently categorized the items into the four major categories. The categories were knowledge of nature of AIDS, knowledge of its modes of transmission, knowledge of preventive techniques, and knowledge of the importance of care for the victims.

In addition, knowledge items were rated as true and false (and latter on changed into 'yes' and 'no'). Where the responses to an item was rated as an option, by any of the experts, that was modified and in some cases, dropped (Example, AIDS is a

punishment from God). The final 18 knowledge questions that were used for the data gathering are those, which received unanimous true or false responses from the judges.

The same procedure was followed for the attitude question. Finally, two postgraduate students in Addis Ababa University (those who have expertise in the language) in collaboration with the researcher translated all the items into Afan Oromoo.

As mentioned above, before using all the instruments for the actual purpose, pilot study was conducted in two-second cycle primary schools. Using Cru Bach Alpha reliability test tested the reability of the test items. The average of reliability of the tests was found out to be 0.78 during the pilot study. Then revision was made by the researcher and the by experts for the actual study.

The interview was used for it was expected to yield rich materials and could put flesh on the bones of the questionnaires. In this paper, the interview focused on the general school Anti-AIDS club experience, problems encountering, and related relevant issues demanding oral responses.

Observation was also made to check if observable indicators could be sensed in the schools that might witness the successes or the failures of the objectives. During this, the interviewer used tape recording to check the notes were accurate. The questionnaire, are still developed from those proposed by WHO (1994)

3.4 Methods of Data Analysis

Data obtained from the potential sources were analyzed one by one. The results of the analysis of school subjects were presented nearly qualitatively. Data from school survey were discussed both qualitatively and quantitatively. The frequency of responses on test results were displayed and discussed. Percentage and T- test were used for analysis of students test scores. T- test was used to compare the mean values of sexes and settings. Based on the four categories used in content analysis, the area in which the students are deficient and the focus of the available content were compared. The attitude questions were also discussed. Finally, the data were triangulated and conclusions drawn.

CHAPTER FOUR

IV. PRESENTATION AND ANALYSIS OF DATA

In this chapter, the data gathered through the different instruments are discussed. First, results of survey of school subjects for content of AIDS education is presented. Data obtained from the school implementation practices are followed. In the end, the evaluation of students' awareness level is displayed and discussed.

4.1 Survey of School Curricula for Objectives and Contents of AIDS Education

The 1994 New Education and Training Policy of Ethiopia required regional primary school curriculum. This period was the time when public concern about AIDS was peaking. Therefore, Ministry of Education (MOE) has recommended the integration of AIDS education into the existing school subject.

Endorsing the recommendation, one document from the Oromia Education Bureau indicates that AIDS education is to be incorporated into the different school subjects. The courses selected by the region for the inclusion were Science/Biology, Social Studies, Health and Physical Education and Language Course. In addition, it has recommended the significance of school co-curricular activities. The experience of the

region regarding the utilization of clubs for teaching AIDS issues was also emphasized.

Taking the recommendation of the MOE and the region, the availability of AIDS education objectives and contents in the curricula were examined. For this three courses were selected and examined in this section.

In the following sections each of the above courses were separately surveyed for objectives and contents of AIDS education.

4.1.1 Examination of Grades 5-8 Health and Physical Education Curricular Materials for Objectives and Contents of AIDS Education

In the Education Policy of Ethiopia, one of the major goals of education is to produce a healthy citizen. Undoubtedly, such a noble objective could effectively be achieved in courses of Health and Physical Education. Current issues like AIDS disaster, which could possibly be addressed through school, are likely, to be integrated especially in Health and Physical education. It was on this base that the teaching materials were analyzed. The following table indicates the result of survey of the material.

Table 4: The Availability of Objectives and Contents of AIDS Education in Health and Physical Education Curricula of Grades 5-8:

Level of Measurement	Grades	Categories			
		1	2	3	4
At course level	5	Nell	Nell	Nell	Nell
At course level	6	Nell	Nell	Nell	Nell
Only Sub-section in a chapter	7	Available	Available	Available	Nell
At course level	8	Nell	Nell	Nell	Nell

As table 3 indicates, grade 5, 6, and 8 H.P.E curricula are neutral of AIDS education (objectives and) contents even at word level. It is only at grade seven that few (at sub-section level) objectives, content, teaching methods, and evaluation mechanisms were incorporated.

From the objectives stated in the teacher's guide of the grade seven, four of them were found addressing AIDS issues. These objectives were translated from Afan Oromoo into English and presented as follow.

- Tell the nature of AIDS;
- Explain ways of HIV transmission;
- Do different activities to protect themselves from HIV/AIDS;
- Know the symptoms of HIV/AIDS;(Grade 7 H.P.H Syllabus)

When compared with the recommendation of WHO, these objectives are deficient. In fact, not all objectives of teaching about AIDS education are expected to be available

in one course. They were expected to be integrated in the remaining courses designed for the successive grade levels. Still, however, the above objectives by themselves are not comprehensive, relevant and clear.

Two of them are particularly vague, unfocused and unachievable. Objective stated on number four is general and not important. Where different issues are competing for school time and resource and few pages are deserved for AIDS topics, comprehensive and clear objectives were expected.

In general, the objectives included in the teacher's guide are deficient when compared with those recommended by WHO. Knowing the symptom of HIV/AIDS, for instance, does little to the student in relation to other pertinent issues. Culture-sensitive and age-specific topics that are very close to the students should have been included in the school curricula.

Table 5; Categorization of contents of AIDS Education in the Grade 7 H.P.E. Curricula:

Category	Paragraphs
One	1,2,4,5,
Two	2
Three	3
Four	None

The contents selected to realize the 'objectives' were also very few and general. In addition, there is little congruence between the objectives and the contents. There is no content selected to achieve objectives stated on number 3 and 4. The two contents

stated in the curricula are for achieving the objectives; (1) *the meaning of AIDS, (2) its transmission routes, and methods of preventing HIV infection.*

Local cultures that are reported by teachers and parents to put adolescents to the risk of HIV infections were missing. The contents were also compound. That is, where the transmission and protection were to be discussed separately, presenting them together made the presentation shallow.

The teaching methods suggested in the teacher's guide were:

- Asking prior knowledge of students about HIV/AIDS;
- Explaining the nature of AIDS and encouraging the students to participate in question and answer;
- Explaining protective measures;
- Conducting group work; and
- Inviting experts. (Grade seven H.P.E Syllabus).

It is clearly indicated that most of these methods are teacher-dominated. Teachers' questionnaire also revealed this fact. Where the students are expected to discuss and personalize the causes and consequences of AIDS, the curricula have only encouraged verbal presentation of teachers. The teachers have also reported that because of the large class size, the few student-centered methods suggested above are unpractical in actual classroom setting.

The evaluation mechanisms suggested in teachers' guide were also oral questions, discussion, and group work.

To sum up, grades 5, 6 and 8 curricular materials of Health and Physical Education are neutral of HIV/AIDS education. However, it is expected that shallow presentation made in grade seven have to be emphasized in the remaining grade levels.

4.1.2 Results of Analysis of Grades 5-8 Science/Biology Curricular Materials for Objectives and Contents of AIDS Education

Infection with the human immunodeficiency virus (HIV) is urgent problem worldwide. Scholars confirmed that sexual intercourse is the predominant mode of transmission for the infection. Because of this, Science/Biology courses are more sensitive for accommodating contents of AIDS education. Therefore, the above curricular materials were assessed. Here are the findings of the analysis.

Table 6: Analysis of Grades 5-8 Science/Biology Curricular Materials for Contents of AIDS Education:

Levels of measurement	Grades	Categories			
		Category one	Category Two	Category Three	Category Four
At Course level	5	Nell	Nell	Nell	Nell
At sub-section level in a chapter	6	Available	Available	Available	Nell
At Course level	7	Nell	Nell	Nell	Nell
At sub-section level	8	Available	Available	Nell	Nell

In the 1996 Science syllabus of grade 5, objectives relevant to sex education were totally missing. Therefore, in student text, no content, teaching methods, and evaluation mechanisms were found and analyzed.

Grade six-science syllabus (that of 1996), however, had some objectives and respective contents dealing with human reproductive system. From the 94 specific objectives, 19(20.2%) of them addressed human reproductive issues. From these, four (21%) of them are about human sexual health of which only one is about AIDS. These are translated and presented as follows:

At the end of the unit, the students are expected to:

- Discuss about the major sexual health problems in Ethiopia;
- Tell the problems of teenagers' pregnancy, unwanted pregnancy, and circumcision of females;

- Discuss about the common sexually transmitted diseases in Ethiopia and tell how to avoid them; and
- **Tell the problems (dhibee) of AIDS and how it is transmitted**. (Grade 6 Science Syllabus).

As it can be seen, the objective that addresses AIDS issues very general and compound. Telling the problems and how it is transmitted should have been separately treated. This could be one indication of the status of AIDS education in the school curricula. In the corresponding student text, there are nine chapters to be covered in the two semesters. From these, only one chapter was found dealing with man's sexuality. Form the 60 paragraphs that discussed about human sexual issues, 35(58.3%) paragraphs were found dealing with human reproductive system. From the 35 paragraphs, forty (40%) are about sexually transmitted diseases. Eleven paragraphs of the 40 paragraphs, which accounts of 78.6%(only in this section), are about the general nature of HIV/AIDS issues and the difference among AIDS, HIV, and other STDs.

Table 7: Categorization of the 40 Paragraphs on AIDS Education available in Grade 6 Student's Textbook.

CHAPTER 1	**Paragraphs dealing with the categories**
Categories	
Category one	1,8,9, 10,11
Category Two	2, 3, 4, 5
Category Three	6, 7
Category Four	None

From the 11 paragraphs, five (45.4%) of them were devoted to the explanation of **nature** of AIDS. Four (36.4%) paragraphs are about **routes** of HIV/AIDS transmission. Sexual intercourse, blood transfusion, and mother-child transmission are the three modes of HIV transmission given room in the textbook. Two (18.2%) paragraphs are about he **preventive technique** (only lists of the common precautions). There were **no** contents and as well objectives that discuss the importance of care for people living with the virus. Students' test score also showed deficiency on this category (see page 92).

The corresponding contents of STDs included in the syllabus to realize the stated objectives are "Sexually Transmitted Diseases" and "The Connection between HIV/AIDS and the other STDs." Under the later topic, there are lists of the local names the common sexually transmitted diseases. The coverage given to HIV/AIDS crisis (one paragraph) was not different from the shallow explanation given to other STDs that are relatively curable. This clearly indicated that special attention was not given to the crisis of HIV/AIDS in the curriculum and the status of the issues in the curriculum is relatively low. The contents suggested by WHO were not adopted and included in the curricula.

In the syllabus, the teaching methods suggested to teach topics of sexual issues, including HIV/AIDS, are inviting experienced experts, organizing students into small groups and encouraging them to discuss, argue, etc. and letting them to explain the relationship between AIDS and other STDs.

The teaching methods (traditionally called *teaching aids*) suggested in the teacher's guide are charts that shows statistical data on child pregnancy, STDs, and HIV/AIDS; written materials, newspapers, different bulletin, and journals. However, during school observation, some of these materials are absolutely lacking, particularly in rural schools.

The evaluation technique supposed to be used in syllabus was completely different form what the teachers reported. In the syllabus, under the column 'Evaluation', the written statement reads "**Walaloo fi barreeffama itti gaafatamummaa, amalaa fi naamusa saalummaa gaarii irratti akka barreessan gaafachuu**." The translation of this statement is 'Asking students to compose poem and prose that demonstrate sexual responsibility, and good attitude on sexuality'. Although this a bit appreciable than what was included in the courses discussed earlier, still their practicality is suspected taking into consideration teachers' responses.

It is amazing, hence, to see the discrepancies between what course designers have suggested and what schoolteachers are using. Had different applicable and appropriate techniques of evaluation been included in the syllabus, the teachers would have got chances of selecting from the package and using them in their local context. It does not wonder, hence, to see teachers use the traditional pen-and-pencil evaluation system, where the matter under consideration demands the balanced demonstration of good understanding, skills, and attitudes.

Teacher's guide, in which a few AIDS education contents were found, is also not real guide to teachers with insufficient training. They put forward little on how teachers could create an environment of support for an AIDS education programs. No detail facts about HIV/AIDS and its transmission were included for teachers as a reference. Above all, teachers should have been advised to consider the local traditional practices of ear-piercing, sexual abuse, cultural understandings of gender issues, being young, sexuality issues, and relevant contextual issues.

For this reason, course designers should have suggested a range of interactive activities such as role-playing, discussion and brainstorming. However, the most frequently mentioned teaching method was teacher's presentation of factual information.

Grade 7 Biology syllabus and the corresponding student textbook, as it is in grade five, were also found neutral of AIDS education. The few issues raised in grade six were not reinforced in the successive grade levels.

Grade 8 Biology textbook has six chapters (covered with in 168 pages). From these, one chapter (16.7%), which is exhausted within 13 pages (7.7% of the total page coverage), was devoted to issues of human sexuality. That is, in chapter one, sub-section 1.4 entitled "reproductive system" (Sirna Hormataa). In chapter 2, from the sub-title "Man and Disease" (pp. 49-83), little room was given to STDs. Only **one** sentence was found describing that HIV/AIDS is among STDs. In fact, students were requested to report on how HIV is transmitted and how to avoid the infection. This

might make the students active participants. On page 44, one paragraph repeated the discussion of the nature of HIV/AIDS. At this point, too, students are expected to report on the transmission modes and methods of prevention.

At this level, more often than not students were expected to report on how HIV/AIDS is transmitted and how to keep away from the infection. Perhaps this was preferred due to the fact that little attempts was made to base the few AIDS education objectives and contents in the contexts of local risk situations that place adolescents to the risks of contracting HIV/AIDS. Hence, teachers preferred to rush for 'the basics" by the shallow invitation of student report.

Actually, since most education in our school system takes place in the classrooms, supportive environment beyond the school context is enviable. On top, it is logical that the students at this level are relatively grown-up and can assume the responsibility. In addition, one should know that it is a period of sexual maturity for the students. For these reasons, repetitive skill rehearsal through role-playing, drama, discussion etc. should have been recommended. However, the students were expected to merely repeat factual knowledge that they are good at (see their knowledge base in the following sections). The objectives can be repeated at other grades if we use chronological program, but students activities were expected to have variety and to be demanding based on their maturity levels.

Furthermore, abstinence was advised to be the best option for avoiding unwanted pregnancy among the various preventive techniques in the text. Nevertheless, it

seems that the abstinence-only approach ignores the developmental diversity in young people's sexual health, and marginalize, and perhaps alienates those who for whatever reason, do not take up the 'no sex" option instead of other preventive techniques.

The other major issue examined was the time allotted for the teaching-learning process of AIDS education contents in the above curricula. Form the 126 periods allotted to cover the whole course of Grade 6 Science, 12 periods was allocated for the unit 2. The respective periods allocated for the nine units of the courses were 14,12,18,20,14, 12,22,20 and 12. The highest period was allocated to the unit that deals with compound (22) physical objectives (20) and producing objects (20) the minimum time is for human reproductive system, space, and the surrounding (12 periods each).

In addition, there is often a need for repetition and extension over number of years; so that particular aspects are presented to students at the time they are best able to understand them. However, contents of sex and AIDS education were not reasonably repeated and had variety in the four grade levels. Still, it would have been better to consider the type and feasibility of AIDS issues rather than tracing the same topics in different courses designed for the grade levels.

In general, the amount of time allotted for learning the broad and sensitive issues of human reproductive system where AIDS education is incorporated, is very limited. This could also indicate the low status of AIDS education in the curriculum of the level.

In fact, many factors determine the optimum amount of school time that should be given to AIDS education. Obviously, however, preventive education is a process that often involves extensive amount of school time, especially when skills need to be learned and practiced.

Presumably, since the inclusion of skill rehearsal, which is pivotal to success of sexual health HIV/AIDS education programs, is missing in all curricula, the course designers might be misled to assume that the 12 periods are enough for information dissemination. However, in improving young people's confidence with, and acquittal of, sexual negotiation and communication, the risk groups should have got ample time to personalize the consequences of unsafe sexual practices.

To sum up, form the ongoing discussions, one can understand that little attention was given to the issue under discussion in the level. Where other courses are neutral of topics dealing with sexuality and the issue is of high priority, only grades 6 and 8 curricula have treated very few contents of AIDS education within 12 periods. This 12 period is for the whole unit. It can be imagined that the time-share for the AIDS contents integrated in this unit is so low. In addition, the integrated HIV/AIDS contents focus on, dissemination of information.

4.1.3 Presentation of survey Result of Grades 5-8 Social Studies Curricula for Objectives and Contents of AIDS Education.

Social Studies courses are expected to give much coverage to dissemination of information, skills, and attitudes on population issues. The current population expansion and the degradation of natural resources and the problems it is posing should (among others) be taught to schoolchildren. AIDS, among the major population problems, should be dealt with in the courses in relation to demographic and economic problems. The working plan mentioned so far also suggests the integration of AIDS education into this course.

The survey of the curricula, however, showed that there is **no single word** written about human sexual issues or about AIDS. Only in grade 5 Social Studies that demographic information on birth rate, death rate and related issues were treated.

Table 8: Comparison of Objectives of School AIDS Education Suggested by WHO (1994:17) and Those Available in Biology and H.P.E. Syllabi of Second Cycle Primary School of the Oromia Region.

At the end of the Program, students will be able to	Available	Not Available	Enough	Not enough
1. Differences among STD, AIDS, and HIV;	✓			✓
2. Identify ways of transmission of HIV;	✓			✓
3. Identify ways in which HIV/STDS are not transmitted;		✓		
4. Rank methods of HIV/AIDS prevention for effectiveness;		✓		
5. Identify sources of help in the community;		✓		
6. Discuss reasons for delaying sexual intercourse;		✓		
7. Respond assertively to pressures for sexual intercourse;		✓		
8. Discuss reasons and methods for having protected sex if/when sexually active;		✓		
9. Respond assertively to pressures for unprotected sex;		✓		
10. Identify ways of showing compassion and solidarity towards people with HIV/AIDS;		✓		
11. Care for people with AIDS in the family and community.		✓		

As observed in the table, most of the objectives of school AIDS education that WHO deduced from experience of many countries were lacking in the case of the survey of school teaching materials made so far. Those, which are available, are not precise, relevant and situated. Furthermore, the objectives available were merely repeated in the different grade levels and courses. Still, the objectives only focused on knowledge

aspect of the cognitive domain. The attitude and skill domains were totally missing (see section 2.2.1.3 for detail).

To sum up, the examination of school subject, indicated that clearly defined and wide-ranging objective of school AIDS education were nearly lacking in the level under investigation. In addition, there was no attempt made to conceptualize the objectives, contents, and teaching methods of AIDS education. Little is done to determine which aspects of AIDS should be integrated in which school subjects, and which should be in other school programs. Still minute effort was made to integrate AIDS education in all relevant school subjects and involve teachers in delivery of the education with fitting qualification.

The sequence and depth of the available issues of AIDS education were not well considered. The integrated issues are superfluous and insensitive to local behaviors of the adolescents. They were merely repeated in the school subjects and in the co-curricular activities. These indicate that the region was not properly implementing the integration approach recommended by the MOE. However, it was repeatedly underlined that AIDS education programs appear to have greater impact if they are given before the on set of sexual activity and sufficiently integrated in the school programs. It has been suggested that it may be easier to establish the desired patterns of behavior from the beginning of sexual involvement rather than trying to change pre-existing behavior.

The interview with the curriculum department of the region shown that science course is the most appropriate subject (see Appendix C question 4). This is the same as Tanzanian approach (Kateda and Sawaya, 1994). If the region made such decision, the subject must have accommodated all the relevant goals, contents, teaching methodologies, and evaluation techniques. Still a maximum opportunity for reinforcement is to be offered by a program integrated within the courses at the different levels based on the maturity levels of the students. In the two syllabuses, however, scattered, incomprehensive and unfocused objectives and contents of AIDS education were found. Such broad integration may result in the important area (taboo issues, for example) being left out.

The second course was health and physical education. Nevertheless, subject teachers of this course have reported the irrelevance of AIDS content in the course. As the teachers reported, such issues have no connection Health and Physical education, but should be dealt with in science subjects. This could be attributed to lack of awareness of the objectives of the course.

Lastly, the programs did little hearten open discussion, communication skills, and assertive skills about sexuality in general to successfully live in the world of AIDS. The cultural and religious values of the community; local data regarding the prevalent modes of transmission of HIV/AIDS in particular, current and future risk among adolescent of contracting HIV/AIDS; the different between urban and rural students should have been clearly discussed in the school curricula.

In the following section, the results of school survey on the implementation practices were presented.

4.2 Analysis of Data from School Survey on Implementation Practices of AIDS Education Programs

In this section, the results of school survey on the implementation of AIDS education programs were presented. The responses of teachers, club coordinators, student peers, and parents were sequentially presented and discussed.

4.2.1 Presentation and Analysis of Teachers' Responses on the Implementation of AIDS Education

No matter how sound curriculum is prepared and good support input is available, it is the teacher who plays detrimental role in putting the plan to practice. It is only when the teacher brings the designed curricula and the students together and the students interact with the designed curriculum that the desired change be observed.

Particularly, in the case of school health education on AIDS and other STDs that dominantly involves sensitive (taboo) issues, only effective teachers, who are knowledgeable, interested, concerned, respectful of students and family values with sufficient training are required (see the quality of teachers to teach school Sex and AIDS education discussed so far).

As indicated in the limitation section, the researcher was unsuccessful to observe how teachers are dealing with AIDS issues in the classroom setting. However, teachers' Feedback forms, adapted from works of WHO, were used to capture school teachers' experiences.

Table 9: Background Information of Teachers and Club Coordinators Responded to the Questionnaire.

Qualification	**Teachers**		**Club coordinators**		**Total**
	Male	Female	Male	Female	
College Diploma	4	1	0	0	5
12 +TTI	16	5	9	1	31
12+1	2	1	0	0	3
12 and below	1	0	0	0	1
Total	**23**	7	**9**	**1**	**40**

As stated in the 1994 Education and Training policy, for a teacher to teach in the second cycle primary school, he/she should have a minimum qualification of college diploma. However, as table 7 revealed, only five teachers of the 30 respondents have the required qualification. None of the club coordinators was up to the standard of the level. However, they are expected to assume major responsibility of teaching the crisis of AIDS. This is expected to have a potential influence upon the quality of teaching subjects in which limited AIDS contents were integrated.

From the ten schools, 30 subject teachers have completed the survey questionnaire. During content analysis, it was found out that only grade six science, grade eight Biology courses, and Grade 7 Health and Physical Education were found accommodating limited AIDS education contents. Therefore, in most case responses of teachers who are not teaching AIDS contents were technically excluded. For instance, these teachers have reported on the method of teaching they are using. However, question that required teachers experience of including/adding new AIDS education contents, their responses were endorsed.

Teachers' questionnaires were broadly grouped into five major areas. These were the types of orientations the teachers were given to teach the integrated AIDS education contents; the types of teaching methods the teachers were using; how teachers perceived their roles in the efforts being made to address the massive school population; the existence of systematic evaluation of students progress and problems facing the implementation processes.

Table10; Participation of Teachers in Workshop, Seminar, Training, or Meeting to Implement AIDS Education:

Participation	Teachers						Duration
	Male		Female		Total		
	No	%	No	%	No	%	
Workshop	3	13	2	29	5	17	1-5 days
Seminar	1	4	-		1	3	3 days
Meeting	8	35	2	28	10	33	1 day
Not any	11	48	3	43	14	47	-
Total	23	100	7	100	30	100	

N.B. The total is not accurate for one teacher can experience one or more exposures to the orientations.

As table 10 indicated only 13% of male and 29% of female teachers reported their participation in five-day workshops. One teacher reported his participation in a three-day seminar. 28% and 29% female teachers involved in a one-day meeting conducted by OSSA, ERCA, and Ethiopian Family Guidance Association. 48% of male and 43% of females have no exposure to orientations. These indicate that the effort made to sensitize and keep informed the main change agents was not sufficient.

However, these teachers need to understand what is known about HIV/AIDS and other STDs so that they can give reliable information about them to students and the community. They have to be desensitized particularly on the sensitivity issues related to human sexuality. Training of teachers through pre- and in-service should therefore, should have been provided.

An over view of course description of Jimma Teachers College there was no emphasis given for STD/HIV/AIDS issues. The contents of training suggested by WHO are also completely missing. The Anti-AIDS movement in the college was also very week.

Table 11: The Types of Teaching Styles Frequently Used by Subject Teachers

Methodologies	Number	%
Lecture	12	60
Demonstration	2	10
Inviting resource persons	1	5
Discussion	2	10
Question and Answer	1	5
Drama and role playing	4	5
Total	20	100

As this table indicated, the dominant methodologies frequently used by the teachers were verbal presentations. During school visit, it was found out that teachers were using the traditional methods, to which most teachers in Ethiopian school are addicted to. This could really hamper the success of efforts being made to address AIDS crisis through school system.

Participatory style, which often involves a learner-centered groups process, was missing. In fact, the deductive style that involves the presentation of accurate information in a clear, concise, and systematic way could be a first step in the information dissemination efforts.

The most appropriate approaches to teaching about AIDS and other STDs, however, should be the combination of the deductive and the participatory style. It should focus on the needs of the students; and applicable to their lives.

Table 12: The Frequency of Teachers' Perception of Their Roles in Implementing School AIDS Education:

Roles	Strongly Agree	Agree	Somewhat Agree	Total
Imparting knowledge	14	9	0	23
Modifying behavior	8	6	0	14
Affecting Attitudes/ values	10	17	0	27

Note; The total may not show the number of teachers responded to the question because they rated more than one at a time.

This table indicates that teachers perceived their major role as disseminators of information. However, form the discussion made so far, these teachers have little access to valid sources of information themselves, being largely out of reach of touch with original scientific papers, and having had only little in-service training, the lack of which they lament.

Table 13: The Frequency of Teachers' Responses on the Existence of Systematic Evaluation of Student's AIDS Awareness.

Item	Yes		No		Total
	No	%	No	%	
Is there systematic evaluation students' behavioral change on AIDS issue?	17	85	13	15	

As the above table indicated the majority of the respondents reported that there is systematic evaluation of AIDS awareness in schools. However, when they were required to mention the type of evaluation they have been using, most of them

mentioned the general tests and exams they use to evaluate the achievement of course objective. An over view of the recent test of grade eight biology course revealed that no items of AIDS knowledge questions observed. These showed that there were no comprehensive formative evaluation mechanisms in the schools.

Teachers were requested to report if there is problems operating against the school AIDS education program. The following table showed teachers' ranking of some of the problems working against the success of school AIDS education programs.

Table 14: Teachers' Reports of Problems Facing the Implementation of School AIDS Education Programs.

	Problems	Serious	Some what serious	Not problem
1	Lack of training	11	9	0
2	Shortage of facilities	8	4	1
3	Resistance form the community	0	0	20
4	School organization		4	13
5	Work load	17	3	0

Students in their schools are at risk of HIV infection. Deficiency was observed in AIDS education contents in the courses they are teaching. Still, there were inadequacies of support input (budget and reference materials) by the regional education bureau. Most of the insignificant orientations provided were by other organizations, such as ERCS, OSSA, and FGAE. Additional reference materials relevant to local situation were

supposed to be produced by the schools. However, the teachers were not backed up by the necessary training.

In general, deficiency of training, lack of reference materials, of school overcrowded time, vastness of contents of school subjects, and current students discipline problems were among the listed factors teachers reported to affect the success of the program. However, all of the respondents considered students at risk of HIV/AIDS, and then, emphasized the need for education using various techniques.

Above all, the teachers suggested the importance of comprehensive sex education curriculum, the integration of AIDS education in the different school subjects and the strengthening of the co-curricular activities in order of importance. For this, they recommend the importance of training for implementers, the involvement of different social groups and community in managing HIV/AIDS pandemic.

In case the course they are teaching is not sensitive to these factors, the teachers were asked if they had chances of adding new AIDS contents. All of them stated that they strive to cover the basics and some revealed that they are not responsible for doing that. A few depicted that they are incapable of taking such responsibility. Particularly, some of the teachers who responded the absence of AIDS content in the subject they are teaching have said 'why worry since the experts didn't include in the subjects.'

Both teachers and club-coordinators were requested to list local situations that put adolescents to the threat of AIDS. In addition to the obvious routes of HIV transmission, they included in their list films, heavy drinking, males' risk taking behavior, and the liberality of children concerning sexual intercourse the weakness of parents' continuous advice.

In the syllabus and teacher's guides where few AIDS education contents were observed, one of the teaching approaches suggested was inviting knowledgeable local experts. The responses of the teachers indicated that they are not doing that. What they mentioned frequently was the training ERCS, OSSA, ... gave to school Anti-AIDS clubs and schoolteachers in few schools. The justification they propose was that such people are not available in their area.

All of the teachers responded that the family has a special interest to have school to assume the responsibility they fear to handle. As discussed above, however, teachers and program developers hardly attempted to have the voice of parents and their cooperation to maximize realization of the objectives of school AIDS education. Teachers have reported that they are busy to bring children and their parents together discuss about AIDS and wear down the existing taboo nature of sexuality.

It was only in one school (Diga Kolobo) that has invited community leaders and local healers to orient school children about AIDS. Particularly, as Anti-AIDS club coordinator of the school reported, the healers had told to the children that "We have

cure for many diseases. But we couldn't yet get cure for AIDS and avoiding infection is the only solution."

4.2.2 Analysis of School Anti-AIDS Movements

The life of an educational establishment extends beyond the classroom with clubs, involvement of parents, guest speakers and other outside agencies. Particularly, the case of HIV/AIDS epidemic demands the dissemination of information through the different social groups. Currently, co-curricular activities are the major strategy suggested to be used by Ethiopian schools.

In one written document form the Oromia Education Bureau (OEB), the above idea was underlined. The leading objectives of school Anti-AIDS club, according to the document, are; informing children on how HIV/AIDS is transmitted; and enhancing student's awareness about HIV/AIDS. In addition, it focused the importance of stressing on how the students can protect themselves form the infection; teaching how AIDS victims need help; developing the communication skills, self-esteem, relationship skill; making students teach about AIDS."

To achieve these goals, the strategies suggested in the document include;

> Preparing discussion programs; using school mini media to disseminate information; preparing posters, and different written materials, drama, music, etc; involving teachers, health officers, religious leaders community leaders in efforts being made to inform risk groups.

This was really a rational plan if it was implemented through the school Anti-AIDS movements. To check this, ten club coordinators responded to questionnaires and informal interview. From the 10 coordinators there were eight males and two females teachers. Their experience in coordinating school Anti-AIDS club (movement) ranged form 2-8 years.

To begin with, in all schools observed, there were Anti-AIDS movements, which are named and organized differently. In eight schools, there were two students form each section (one from each sex) that is in charge of teaching their school children. Their common name is 'peer educators'. In other schools, the club was organized under Red Cross club. In two schools, the club was working independent of Red Cross Club (Kibba Waachaa and Qumburoo Balachoo). This shows that there is no regularity in the schools in organizing Anti-AIDS education through co-curricular activities.

The first question proposed during the interview was that which required information on how much club coordinators clearly know the objectives of the club (see appendix E item 1). They were requested to enlist the major objectives and the following objectives were enlisted.

- Creating awareness among the school community;
- Teaching how one can protect her/him self-form HIV infection;
- Helping children who lost their parents by AIDS*,
- Keeping environment clean*;

This clearly demonstrates that the program designers and the actual implementers hardly understood each other or there was information gap. The teachers did not repeat the relevant and, clearly worded objectives stated at the regional level. Through the examination of school documents, it was found out that there is no objective that guides the school Anti-AIDS movements. That is why the coordinators enlist some irrelevant objectives by common sense.

The other foremost question posed was how second cycle primary schools has been carried out the Anti-AIDS club activities. Information on this question was obtained through interview with the club-coordinators.

Through the interview, it was found out that the peer educators-approach is being implemented in most schools as follow. First two students form each section and sex is selected. These students are selected based on their relative maturity and communication skills. Training is given to these students by experts form ERCS, OSSA in most urban schools and a few rural schools. Duration of training varies form school to school.

The Content, however, focuses only on acquainting the trainees with how HIV is transmitted and how to protect oneself form the infection. The training also attempts to localize these two areas; little emphasis is given to the importance of helping people living with HIV/AIDS and other issues of HIV/AIDS.

This shows that content of AIDS education that are not balanced in the formal school subjects are still missing in the training and, hence, in the teaching of the student peer educators. That is contents referring to development of positive attitude towards people living with AIDS are missing the curricula and the co-curricular activities. Students' test score on the issue was also very low. However, students of the level should be informed to confront the reality of denial, stigmatization and discrimination against people living with HIV/AIDS.

After receiving the training, these trainees are expected to teach their respective sections. They are supposed to do this during 'free periods' and/or at any exposure to their classmates. There is not fixed school time allocated for the activity. This shows that the program is not reaching the risk groups.

In addition, two 'peer educators' form Qumburoo Balachoo revealed that there was no technical support from their school. Students were not willing to listen to the peers. In other cases, some teachers for make up or other activities mostly occupied the so-called free periods. Peer educators from Diggaa Kolobo, on the other hand, reported that they don't get a variety of materials that could help them hold students attention. Disciplinary problem is very serious in urban schools; where as lack of sufficient training and written source in rural schools.

Experiences of many countries indicate that peer education programs are particularly popular with HIV/AIDS prevention activities. For instance, an evaluation

of 21 peer-based projects in 10 countries, including Ethiopia, found that 81% of the target audiences said they preferred getting information on HIV/AIDS from peer educators. A student peer educator in Zimbabwe for example, said, "With someone of your own age, you will be serious. You will feel at ease. With someone older, you don't want to discuss some things, problems, what is in your heart (Flanagan and others, 1996;). In the case of the Oromia region, however, this was lacking.

In fact, it does not mean that all practices of the Anti-AIDS movement in schools of the region are discouraging. In some schools, there are interesting activities observed. The good example to be mentioned is Diggaa Kolooboo Primary School in Eastern Wellega administrative zone.

In this school, there are 16 sections in the second cycle. From each section, experts from the zonal Ethiopia Red Cross Association trained two students (from each sex). After taking the training, they have taught their classmates about AIDS. Relatively the school follows up the activities of peer educators. The report from the school director and the observation of the works of the members confirmed the statements of coordinators and the students.

In the school, there were leaflets produced by the club members (peers) in Afan Oromoo. This is the objective set by the zonal ERCA realized in this school. The contents of the leaflet are informing the community about the 'history' or AIDS, its transmission routes and techniques of protecting one self form the infection.

Alphabets of Afan Oromoo are also included in the leaflet. The final statements of the leaflet pushes the readers to ask knowledgeable person available in their surrounding about the disease called HIV/AIDS and tell to their friends, and relatives about the deadly disease.

In addition, it was reported that these students have demonstrated an encouraging activities in the local community. During the national polio vaccination week, for instance they gave orientation to those who came to vaccinating their children. They focal point of the orientation provided at this occasion was that "pooliyoon illee talaallii qabaaf dhuftani, garuu dhukkubni talaalliis ta'e qoricha hin qabne Eedsii jedhamu akka jiru baraa". The translation of this statement is that "Polio has vaccine and you came to get rid of it. But there is a fatal disease which has neither vaccine nor cure and you should take care of it."

The other question posed to the club coordinators and teachers was if they were involving the local community in teaching-learning processes. From the 20 teachers responded, only 7 of them have reported that have attempted to involve parents in the implementation of AIDS education. When these people were requested to respond in written form about heir experience, they reported that this is done during parents meeting, at the beginning and end of school year.

Except this, the involvement of parents was lacking. In fact, the above response does not witness the involvement of parents in its real sense. Obviously, however, families are the cornerstones of society. The have special responsibility to educate their

children form a very early age about the realities of HIV/AIDS. Where parents are to be encouraged both as key participants in developing and implementing HIV/AIDS programs at all levels, such experience is lacking in the case of Oromia region.

4.2.3 Available School Written Sources on AIDS Issues

Different AIDS information could be displayed at the every corner of the school compound so that students can observe at every glance. In order to check the available written materials, 10 schools observed. In seven of them there were quotations written in different languages (Afan Oromoo, Amharic and English). Some of the commonly observed posters and school-produced materials attached on walls and trees were:

- If you get AIDS, you will die.
- Eedsiin farra guddinaa ti (AIDS is an enemy of development).
- ኤድስን መከላከል ይቻላል (It is possible to protect oneself form AIDS).
- There is no cure for AIDS.
- Eedsiin wareeraa dhokataa dha (AIDS is invisible worrier).
- ኤድስ የሚተላለፍባቸው መንገዶች (Routes of HIV transmission), and many others.

In the three schools, however, this visible information that the school community make notice of are completely lacking.

In addition, there are different poem observed. Student composed poems were still with repetitive messages. Focusing on how AIDS is transmitted and how it can be avoided. However, the schools did not properly organize students' works and availed them for the school community to read.

4.2.4 Results of Interview with Parents

In every society, the success of any educational program is mostly determined by the involvement of the community. In particular, such involvement is crucial in school AIDS education programs. There are a good number of reasons for this basic assumption. The main modes of HIV transmission being sexual intercourse, parents believe that dealing with sex matters in schools with students will arouse their curiosity and will reduce their reservations about sexual activities (McCousley and Salter, 1995:2).

In Ethiopian context, the needs assessment report of the 1995 revealed that the majority of the community members responded in favor of school AIDS education in primary schools (Getachew et al., 1995: 38). However, their participation in program development and implementation was not identified. The time lapse was expected to bring about some experiences of involving parents in the school AIDS education. It was to identify such experiences that interview was conducted with parents from the sampled zones.

The first question asked was "Should school children learn about sex in schools?"

Although parents were reluctant to discuss the issue, they asserted that the problem existed from the beginning. The interviewer further geared the question to the issue of HIV/AIDS.

Nearly all the interviewed community groups were aware AIDS is a serious health issue to the general community. Interestingly, one respondent stated that in their area it is common to marry once brother's wife in case he died. However, one farmer died of AIDS in his neighbor. Then, the elder of the farmer was asked to marry the widow but he needed the result of blood test and she was tested. Then, seeing the result the man refused marring her. This shows that there is some awareness of AIDS crisis. However, the respondent stressed, heavy drinking in most cases, makes males forget the intention to avoid in the practice.

They reported that it is very serious with heavy drinkers and those who make sexual intercourse with once brother's wife (warsaa). In fact, some perceived that films and some unethical students are pushing more children in urban areas than those in the rural setting.

The other question was "Have you participated in school programs on AIDS education?" This question required information on if the school involved them (gave them orientation, encourage children to ask question on sexual issues,) in school programs. Only the beneficiaries of Diggaa Kolooboo primary school in particular cited that they were invited by their children to go to the school for there was orientation HIV/AIDS crisis. In the year, the school has conducted a one-day orientation session

for children and their parents. More interestingly, local healers were involved (invited) and make speech to the school community that they have cure for all diseases but not for AIDS. However, Nguer et al., (1999:26), stated that community involvement is a key to school AIDS education programs.

Still, additional question proposed for the parents was" Do you know that your child learn about AIDS in schools?" Six of the interviewed parents were from rural setting (except one development Agent). They did not know if the school is doing that and if AIDS education contents are in school subjects or in any other school programs. The development agent (from Jimma zone Haro district) reported that he has participated in workshop to give orientation to the farmers he meets. However, they strongly request the school to provide education to their children and avoid the bad behavior (halalummaa) they learn from the school.

They were requested to report weakness of the school (if any). They underlined the disciplinary problem of students. Almost all of them stated that the school did little to maintain the traditions the society has been ruled by. They added that they were happy had schools given moral education to their children. Most of them stressed that this is the best alternative of all the efforts being made to save the children. They would prefer if older teacher and female teacher involved in the teaching of AIDS and other sexual issues.

They were asked if they could jointly participate in school programs on disseminating AIDS information (Can parents cooperate with schools in the provision of AIDS

education?) They did not agree that they could involve in school programs. They stressed that they have not developed the habit of discussing about sexual issues with their children. So they prefer if some body external to the blood relationship to the children but older than they are have to give education to their children. In addition, they added workload and shy away from such involvement.

The sampled parents were requested to report local behaviors that could put young people to the risk of HIV/ AIDS. They listed sharing sharp instruments for decorating their bodies, teeth, etc, having sexual relation with once brother's wife, heavy drinking and encouragement of male to have multiple sexual partners.

4.2.5 Results of Interview with Health Education Coordinator of the Oromia Region

According to Ato Ajama, a coordinator of Health education department of OEB, the region so far developed 2500 booklets in English and 2500 leaflets in Afan Oromoo. These materials, according to the report were distributed to six senior secondary schools with a student population of 12,228. However, there are no data available on what was done for those in the primary schools.

Constraints reported by the OEB in implementing AIDS education in the cycle were: high mobility and turnover of trained staff; limited financial allocation at the grassroots level; limited finance and transport facilities especially for monitoring and evaluation.

Understanding the awareness level of the students of the cycle is expected to have a great contribution for future education planning. In the following section, this was tested by using knowledge and attitude questions discussed in chapter three.

4.3 Analysis of Students Responses on Knowledge Items

In this section, the results of students' AIDS awareness test is presented and discussed.

Table 15: Characteristics of Students Responded to Test Items:

Grades	Sexes		Total
	Male	Female	
6	100	100	200
7	100	100	200
8	100	100	200
Total	300	300	600

In this section the results of tests of students' awareness level on HIV/AIDS were presented and discussed. Frequency distribution of student responses and comparison of their mean scores were sequentially presented and discussed based on the four categories discussed in chapter three.

A 17 item knowledge questions were administered to the students by the researcher and his assistant. The knowledge questions administered to these students were grouped into four major categories for the sack of specification (see chapter three). Item in category one have tested students' knowledge on the Nature of HIV/AIDS. Those in category two have tested students awareness of the transmission routs of HIV/AIDS. Test items in category three and four have measured the knowledge base

of the students on preventive techniques and care to be given for people living with the AIDS, respectively.

On each category, it was needed to reveal the areas in which the students were deficient. To get this, students test score on each category was grouped into three major areas- excellent, moderate, and poor. In all cases, the extremes and the middle score were taken as a point of categorization.

Table 16: Frequency Distribution of Student's Responses to Questions on the Nature of HIV/AIDS (items 1,9,11,12,and 13):

Items	Responses		Wrong Responses	Total
	Correct Responses			
AIDS is transmitted by a virus called HIV.	No	586	14	600
	%	97.6	2.4	100
There is cure for HIV infections.	No	496	104	600
	%	82.7	27.3	100
AIDS destroys red blood cells of human being	No	515	85	600
	%	85.8	14.2	100
One can recognize a person infected with HIV by how he/she looks.	No	323	277	600
	%	53.9	46.1	100
AIDS is a disease by itself.	No	124	476	600
	%	20.7	79.2	100

As the above table indicated, the majority of the students in grades 6-8 (97.6%) have known that a virus called Human Immune deficiency virus (HIV) causes AIDS. 85% of them in the second place knew HIV virus weakens the immunity system of human body and subjects him/her to death. In the third place, 82.7% of them knew that HIV/

AIDS has neither cure nor vaccine. This contradicts the finding of Agrawal et al., (1999).

However, a significant number of the students (46%) believed that one can identify a person infected with HIV/AIDS by his /her naked eyes. Similarly, the majority of the students (79.2%) perceived HIV/AIDS as disease by itself (not an opportunistic disease).

The following tables summarize the students' knowledge level on the Nature of AIDS.

Table 17: The Frequency of Student knowledge Level on Nature of AIDS;

	Excellent (4 and 5 score out of five)	Moderate (3 and 2)	Poor (1 and 0)	Total
No	290	223	87	600
%	48.2	37.2	14.6	100

Then percentage of student's knowledge level was computed for each category. As it is presented above, 48.2% of all the respondents have an interesting knowledge on the nature of AIDS. 14.6% of them, which is not negligible proportion, however have poor knowledge on the category.

Table 18: Comparison of Students' Knowledge Score on Nature of AIDS

	Mean	SD	T-test	df	*P* Value
Male	.99	.22	-3.218	598	.001*
Female	.95	.22			
Urban	.97	.17	-.225	598	.822
Rural	.97	.17			

This indicated that there is a statistically significant difference between sexes (at .05). That is, males were more aware (mean=. 99) than females (mean=. 95) were. However there is no significant difference between settings (at .05). The table also indicated that the majority had an appreciable level of awareness on the category.

Next, the students' awareness level on the HIV/AIDS transmission routs needed examination. Five questions were asked and the frequency distribution of students' response was displayed in the following table.

Table 19: Frequency Distribution of Students' to Knowledge on the Modes of Transmission of HIV/AIDS (Items 3,4,5,7,14,15):

Items	Responses			
	Correct		Wrong	Total
HIV/AID is mostly transmitted through sexual intercourse.	No	557	43	600
	%	92.8	7.1	100
HIV can be transmitted from mother to the child in her womb.	No	542	58	600
	%	90.3	9.7	100
Sharing needles, tattoos and ear-piercing instruments can transmit HIV infections	No	562	38	600
	%	89.4	10.6	100
Mosquitoes can transmit HIV/AIDS.	No	322	278	600
	%	53.8	46.2	100
HIV/AIDS is transmitted through semen, vaginal fluids, and blood contact.	No	510	90	600
	%	85	15	100
One can get HIV by hugging or touching a person who has HIV/AIDS.	No	518	82	600
	%	86.3	13.6	100

As the table indicated, 92.9% of the respondents correctly answered that the major transmission route of HIV is sexual intercourse. 90.3% of them knew that AIDS could be transmitted from mother to fetus in the womb. 89.3% of them were aware of the

fact that AIDS is transmitted by sharp instruments such as needles, lather, ear piercing and tattooing instruments.

Similarly, 86.4% of them knew that AIDS could not be transmitted by bodily contact (Shaking hands and hugging). 85.1% of them also believed that blood contact, semen, and vaginal fluids have the potential power of transmitting HIV/AIDS.

Surprisingly, however, only 53.8% of the respondents knew the truth that mosquito bits cannot transmit AIDS virus 46.2% of them had the misconceived that mosquitoes transmit AIDS.

Table 20: The Frequency of Students' Knowledge level on Transmission of HIV/AIDS.

	Excellent (5 and 6 out of six)	Moderate (4 and 3)	Poor (2,1, and 0)	Total
No	435	127	38	600
%	72.5	21.7	6.3	100

On category two, however, the majority (75.8%) of the respondents had an excellent score on the six items. The schools were also relatively active on disseminating information on those issues.

Table 21: Comparison of Students' Scores on Knowledge of Transmission Routes of HIV/AIDS:

	Mean	SD	T-test	Df	*P* Value
Male	.99	.22	-3.776	598	.000*
Female	.94.	.24			
Urban	.96	.20.	.629	598	.536
Rural	.97	.17			

As the above table indicated, there is a statistical significant difference between males and females (at .05) on HIV transmission routes. That is, males were more aware (mean=. 99) than female (mean=. 94) were. However, there is no significant difference observed between urban and rural setting (at 05). On this category, too, the students have demonstrated an interesting knowledge level (mean above average).

Knowing the transmission modes (routes) of HIV/AIDS might help the students understand the preventive techniques they should apply. However, the awareness of the children on the specific mechanisms of avoiding HIV infection was needed. As the following table revealed, the majority of the students knew some of the common preventive techniques.

Table 22: Frequency Distribution of Students Responses to Knowledge of Preventive Techniques of HIV/AIDS (items 6,8, 10, and18):

Items	Responses			
	Correct		Wrong	Total
Not sharing sharp instruments can minimize the risk of HIV infection.	No	546	54	600
	%	91.0	9.00	100
By using condoms, one can avoid HIV infection.	No	417	183	600
	%	69.5	30.5	100
One can protect him /herself from HIV/AIDS by abstaining from sexual intercourse.	No	569	31	600
	%	94.8	5.2	100
One can protect AIDS by faithfully living with one sexual partner.	No	526	74	600
	%	87.6	12.3	100

As the table indicates, 91% of the respondents know the fact that not sharing sharp instruments can avoid HIV infection. 69.5% of them know that using condom can protect oneself from the infection. Item 10 was asked to identify students knowledge base on abstinence 94% of the students knew that abstinence is one way of the preventative HIV/AIDS. 87.6% of the respondents answered that remaining faithfully to one sexual partner avoid the transmission of HIV/AIDS.

Table 23: The Frequency of Student's Knowledge Level on Techniques of Preventing HIV/AIDS:

	Excellent knowledge	Moderate knowledge	Poor knowledge	Total
No	490	81	29	600
%	81.6	13.5	4.8	100

Interestingly, 81.6% of the students have an interesting knowledge base on the methods of preventing HIV/AIDS. Only 4.8% of them have low achievement. As it was seen on the awareness level of the students on the transmission routes of the infection, the awareness of the respondents on the preventive techniques was encouraging. Still, however, the remaining percentage (13.5%) is still not negligible.

Table 24: Comparison of Students' Mean Score on Techniques of Preventing HIV/AIDS:

	Mean	SD	T-test	df	*P* value
Male	.98	.15	.708	598	.479
Female	.98	.12			
Urban	.99	.12	.053	598	.053
Rural	.97	.17			

In this case, there is no statistically significance difference observed between male and female (at .05). Very insignificant difference, however, was seen between urban (mean=. 99) and rural (mean=. 97). The same is true in the case of setting. The students, in general, scored above the average.

The available data indicate that HIV cases are increasing at an alarming rate. Therefore, currently, there are many people living with the virus. These people need care from the community in many ways. Content analysis of the school subjects indicated that there is very limited coverage given to the importance of support (Psychological, technical) to AIDS victims. As the following table indicated, students have mixed response on the questions.

Table 25: Frequency Distribution of Students Responses to Knowledge of the Importance of Care and Support to People Living with HIV/AIDS (items 2 and 17):

Items	Responses			
	Correct Responses		Wrong	Total
Children who have HIV virus should be isolated from the healthier once.	No	316	284	600
	%	52.7	47.2	100
People living with HIV/AIDS need care and support	No	29	571	600
	%	4.8	95.2	100

57.7% gave correct answered that children living with HIV virus could live with other students. However, the remaining 42.2% of them wrongly answered that students

57.7% gave correct answered that children living with HIV virus could live with other students. However, the remaining 42.2% of them wrongly answered that students living with HIV/AIDS should be isolated from the " healthy" ones. This could reflect the fact that the students have no self-confidence on living together with people living with the AIDS virus and at the same time avoid contracting the virus. The depth of knowledge the students had demonstrated on the three categories discussed in the preceding sections might, hence be expected to be very shallow. The majority (95.2%), however, believed that people living with the virus need care and support from the society.

Table 26: The Frequency of Student Knowledge Level on the Importance of Care for victims).

	Excellent	Moderate knowledge	Poor	Total
No	158	346	96	600
%	26.3	57.7	16	100

An irritating test score was observed on the student's knowledge base of the importance of care for people living with HIV/AIDS. Only 26.3 % of respondent had believed that the victims need support in many ways. In fact, the majority (57.7%) had moderate knowledge. 16% of them, however, believed that HIV positive people should be forced to live away from the normal people.

The content analysis of school subjects, the interview with teachers and Anti AIDS movement coordinators also revealed that the current educational interventions the

Table 27: Comparison of Students' Tests Score on the Importance of Care and Support for People Living with HIV/AIDS.

	Mean	SD	T-test	df	*P* value
Male	.86	.35	-3.460	598	.001*
Female	.75	.43			
Urban	.77	.42	2.427	598	.016
Rural	.84	.36			

As this table revealed, male students were more considerate than female students were. There is also a statistically significance difference observed between the two sexes (at .05). In the case of setting, rural students were more considerate (mean=. 84) than urban students were (mean=. 77). This indicates that females were not aware of ways in which HIV is not transmitted.

Table 28: Gender Bias on the Transmission Routes of HIV/AIDS (Items 7 and 8).

Sex	Setting	Responses			
		More biased (those who rated 4and 5 attitude scales)	Less biased those who rated 1 and 2 attitude scales)	No response	Total
Male	Urban	47(31.8%)	32(21.6)	69(46.6)	148
	Rural	48(33.6%)	38(26.6)	57(39.9)	143
Female	Urban	56(35.9)	49(31.4)	51(32.7)	156
	Rural	37(24%)	49(32)	67(43.8)	153
Total		188(31.3%)	168(28%)	243(40.7)	600

In this case, two items were proposed. The first item reads, as "Males are more responsible from the propagation of HIV/AIDS." The second one was" Females are more responsible for the propagation of HIV/AIDS "Students with higher ratings (Agree and strongly agree) were categorized as " more biased" and the opposite extremes as " less biased".

As the table indicated, 31.3% of the students were biased that one sex is more responsible for HIV transmission that in the other. 28% were less biased on gender responsibility. The remaining 40.7% have not rated either of the alternatives.

Table 29; Comparison of Students' Mean Scores on Gender Bias on HIV Transmission Modes:

	Mean	SD	T-test	df	*P* value
Male	3.16	1.11	.525	598	.600
Female	3.21	1.00			
Urban	3.15	1.04	.800	598	.424
Rural	3.22	1.07			

As the table indicated, there were no statistically significant differences between sexes and setting (at .05) students' score is also not satisfactory.

So far, it was indicated that the students of the cycle have satisfactory knowledge base. At this stage, their self-confidante on protecting oneself from the infection was tested.

Table 30: Students' Self-Confidence on Protecting Themselves from HIV/AIDS Infection.

Sex	Setting	Responses			
		More confident (5 and 4 attitude scale)	Less confidence (1 and 2 attitude scale)	No response	Total
Male	Urban	107(72.3%)	9(6.1%)	32(21.6%)	148
	Rural	104(72.7%)	8(5.6%)	31(21.7%)	143
Female	Urban	115(73,7%)	5(3.2%)	36(23.1%)	156
	Rural	106(68.8%)	7(4.5%)	40(26.7%)	153
		432(71.9%)	29(4.82%)	139(23.3%)	600

From the table it is observed that 71.9% of the students were more confident to protect themselves from the infection. 4.8% of them were less confident. This indicates that 28.3% of the respondents need careful counselling on how HIV is transmitted and not.

Table 31: Comparison of Students' Mean Score on Self-Confidence to Protect Themselves from HIV Infections:

	Mean	SD	T-test	df	*P* value
Male	3.91	.86	.857	598	.392
Female	3.97	.84		598	
Urban	3.94	.85	-.093	598	.926
Rural	3.15	1.04		598	

As the above table displayed, the majority of the respondents all grade levels have the confidence to protect themselves form HIV infection. No significant differences were observed between the sexes and settings.

Table 32: Students Attitudes Towards People Living with HIV Virus.

Sex	Setting	Responses			Total
		Favorable attitude	Unfavourable attitude	No responses	
Male	Urban	65(43.9%)	31(20.9%)	52(35.2%)	148
	Rural	76(53.14%)	13(9.1%)	54(37.8%)	143
Female	Urban	77(49.4%)	26(16.7%)	53(33.9%)	156
	Rural	64(41.6%)	74. (54%)	82(53.9%)	153
Total		282(46.9%)	77(12.8%)	241(40.3%)	600

46.9% of the respondents have favourable attitude towards people living with HIV virus 12.8% of them, however, had negative attitude towards the victims. The attitudes of the remaining 40.3% were not identified. There was confusion among these students on the importance of care and support.

Table 33: Comparisons of Students' Mean Score on Attitude Towards People living with HIV Virus.

	Mean	SD	T-test	df	*P* Value
Male	3.47	1.18	.521	598	.603
Female	3.52	1.10		598	
Urban	3.49	1.18	.160	598	.873
Rural	3.15	1.09		598	

However, the comparison of their mean score indicated that there were no statistically significant differences observed.

Table 34: The Frequency of Students Responses on Precaution form Contracting HIV Virus;

Sex	Setting	Responses			
		More cautious	Less cautious	No responses	Total
Male	Urban	136(91.9%)	_	12(8.1%)	148
	Rural	134(93.7%)	_	9(6.3%)	143
Female	Urban	131(84%)	2(1.3%)	23(14.7%9	156
	Rural	231(85.7%)	_	21(13.7%)	153
Total		533(88%)	2(.33%)	65(11%)	600

This table demonstrated that the result of four attitude questions under the above category (precaution). The questions concerned if one can identify HIV positive people by his/her naked eye; if there could by students infected with HIV in their schools; whether it is good to share sharp instruments with close friends; and if blood testing is

important before marriage. As the table revealed (88%) of the students were more aware of the precaution. 11% however did not respond to the items.

Table 35: Comparison of students' mean score on precautions

	Mean	SD	T-test	df	P value
Male	4.31	.61	-.739	598	.000*
Female	4.11	.64		598	
Urban	4.15	.65	2.195	598	.029*
Rural	4.27	.63		598	

This showed that males were more careful than females were. Students in the rural setting were also more careful than those in the urban setting.

Table 36: The Frequency of Students Responses on Feeling at Risk of HIV infection (I fear that I could be infected with HIV/AIDS).

Sex	Setting	Responses			Total
		Agree	Disagree	No responses	
Male	Urban	76(51.35%)	52(35.1%)	20(13.5%)	148
	Rural	70(49.3%)	57(40.14%)	15(10.6%)	142
Female	Urban	64(41.3%)	58(37.4%)	33(21.3%)	155
	Rural	63(40.9%)	59(38.3%)	31(20.8%)	153
Total		273(45.6%)	226(37.7%)	99(16.7%)	598

45.6% of the respondents have shown their fear to HIV infections. 37.7% have reported no fear of contracting the virus. The remaining 16.7% have no responses to

the issue. As discussed earlier, relative fear could be a sign of precaution. No fear could mean no precaution to the risk practices or more confident to protect oneself.

Tables 37: Comparison of Students' Means Score on Feeling at Risk of HIV Infections.

	Mean	SD	T-test	df	P value
Male	3.21	1.47	-.401	598	.001*
Female	2.92	1.51		598	
Urban	3.07	1.47	-.220	598	.826
Rural	3.05	1.53		598	

Although relative anxiety is important to protect oneself from the infection, on the other hand, it might have led the students to isolate people living with HIV/AIDS.

Table 38: Students Rating of Radio and School as the Major Source of Information about HIV/AIDS.

Sources	Urban		Rural	
	M	F	M	F
Radio	64	75	81	72
	84.2%	92.6%	93%	93.1%
School	69	66	72	72
	93.2%	89.2%	93.5%	93.5%

Currently, it seems that mass media are becoming the major sources of information dissemination HIV/AIDS crisis. The above table indicated that 84.2% of males and 92.6% of females in the urban setting rated radio as the major source of information.

Again, 93% of male and 93.1% females agreed that radio has helped them to get the information. Although the difference is not significant, more students in the rural areas than those in the urban settings reported radio as major source of information.

This study has a strong curiosity to identify to what extent students attribute their knowledge base to schools. The above table demonstrated that 93.2% of males and 89.2 of female students in the urban setting reported school as the major source of AIDS information. In the rural context, 93.5% of males and the same percentage of female students attributed to the above source.

Table 39: Students' Rating of Written Materials and Anti-AIDS Club as Major Sources of AIDS Information.

Source	Urban		Rural	
	M	F	M	F
Written Materials	57	66	47	39
	77%	76.7	54.6	55.7
Anti-AIDS Club	68	73	79	63
	89.5%	83.9%	94.04%	90%

Out of the other source of information, written materials such as magazine, leaflets, posters newspaper, etc are expected to disseminate information about AIDS. As the above table indicated, 77% of males and 76% of females in the urban setting rated them as sources of information. As teachers, Anti-AIDS club coordinators reported, relatively such materials were lacking in the rural schools. Students' rating also confirmed the finding that only 54.6% of males and 55.7% of females in rural settings reported that written sources was their major source of information.

Table 40: Students Ratings of Family and Peer-groups as the Major Sources of Information on HIV/AIDS:

Major Source	Urban		Rural	
	M	F	M	F
Family	51	70	39	40
	69.9%	80.5%	47%	61.5%
Peer	37	48	69	48
	48.7%	54.5%	73.4%	69.6%

As the above table indicated, 69.9% of males and 80.5% of females in the urban setting rated family as the major source of AIDS information. On the contrary, in the rural setting, only 47% of males and 61.5% of females reported family as a major information source about AIDS.

The table also revealed that only 48.7% of male and 54.5% of females in the urban setting strongly agreed peers to be the major source of information. In the rural setting, relatively, more number of males (73.4%) than females (69.6%) rated peer as the major source of information.

The above table, in general indicated that more student in the urban setting get advice from their families than those in the rural setting were. On the other hand, more students in the rural setting get AIDS information from their friends than those in the urban setting were.

So far, the results of survey of school subjects and schools implementation as well as students awareness level were presented.

The examination of school subjects indicated that limited (when compared to the threat it is posing to the society) AIDS education contents were integrated into two school subjects. However, they not appropriately integrated in the subjects. If the infusion approach is to be used, Math teachers for example, could have presented the statistical trends of HIV/AIDS. Teachers of Social Studies could have addressed the social dimensions of AIDS in the community. Teachers of Biology could have presented the biomedical aspects of HIV/AIDS/STDs. Teachers of religious studies can debate family values. Health education teachers can address prevention, and art/drama teachers could have proposed AIDS theme for the production of plays or posters (WHO, 1992).

In addition, in some countries, the social sciences are perceived as having an important potential in understanding the present threats posed by AIDS as well as the further spread of HIV (Ergas, 1987; and Institute of Medicine, 1987; in Connate, 1988:211).

In the Oromian contexts, however, the program was integrated only into science and Health and physical education subjects and in the form of co-curricular activities. Such a program might be recommended because of an increasing number of social issues competing for school times. It may, however, result in the important points being left out; each teacher may assume that some areas are someone else's responsibility (see the responses of H.P.E teachers responses).

In fact, having a common element running through different subjects creates an opportunity for communication and coordination among school staff. However, according to WHO, an infusion approach is only recommended for mature school systems with well-trained teachers and an effective monitoring system, which seems weak in our cases.

The implementation practices were also entangled with some problems. The students were, however, demonstrated an appreciable knowledge base on the issues of AIDS.

In the following section all the data gathered through the different instruments were brought together. From the finding, relevant and applicable recommendations were forwarded for the Oromia Education Bureau, and the different governmental and Non-governmental organization endowed with the responsibility of funding and implementing the program through all possible means.

CHAPTER FIVE

V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 SUMMARY

School based HIV/AIDS preventive efforts have the potential to reach the huge number of young people currently enrolled in the elementary school of the Oromia Region. In order to determine the status of HIV/AIDS education programs in the second cycle primary schools of the region, examinations of school curricula were made. Survey of the implementation practice of school AIDS education programs and test of students' awareness level was carried out. To achieve these goals, the researcher adopted the following research strategies.

-to conduct survey of objectives and content of AIDS education across school subjects (Science / Biology, Health and physical education, and Social Studies);

-to conduct survey of school to obtain data on how teachers, school Anti-AIDS club coordinators, parents, and course designers are accomplishing their roles;

-to conduct surveys of students' awareness level and attitudes concerning the different aspects of AIDS crisis and its consequences and deduces its curricular implications.

To achieve these goals, the research formulated the following leading questions;

1. What is the status of HIV/AIDS education in the second cycle of Oromia primary school curriculum?
   1.1 To what extent are objectives of HIV/AIDS education integrated in the different curricular materials?
   1.2 Are contents of AIDS education available across the school teaching materials of the cycle?

(2). Is there any barrier operating against the implementation of AIDS education program in the level?

(3). What is the students' awareness level concerning the nature of AIDS, its mode of transmission, method of prevention, and care for the infected?

To answer these questions, survey of school curricula, survey of school implementation practices, and testing of students' awareness level were conducted. To analysis the four curricula for objectives and contents of AIDS Education, Coding sheet that is categorized under Nature of AIDS, Modes of HIV Transmissions, Methods of Prevention, and Care for people living with HIV/AIDS was adopted from works WHO. The analysis was made by subject experts and confirmed by the researcher.

For teachers, club coordinators, and students, the researcher used questionnaire technique for two main reasons; namely, to achieve a large sample size and increase the validity of the findings; and to encourage honest responses given the sensitivity of the subject. It was felt that neither the teachers nor the students would wish to admit gaps in their knowledge face to face.

Pilot study was conducted to test these instruments. Students' questions were of three types: knowledge question that had three possible answers 'Yes', 'No', and 'No response'. Experts grouped these questions into four major categories. These are knowledge of Nature of AIDS (Items 1,9,11,12,13); knowledge of Transmission routes of HIV/AIDS (Items 3,4,5,7,14,15; knowledge of Preventive techniques (Items 6,8,10,16 and 18); and knowledge of Care for victims (Items 2 and 17).

The students answered attitude questions by using five scales. The attitude questions were also categorized under four categories by experts. These were; Feeling at risk of HIV infections (Item 9); Attitudes towards precautions to HIV infection (Items 3,6,10, and 15). Attitude towards people living with HIV /AIDS (Items 2 and 4); students self-confidence (Items 5 and 12); and Gender bias on HIV transmitter, (Items 7 and 8).

In addition, the students have rated the different sources of information for AIDS. Some questions were also tested students' decision-making skills. Demographic data such as sex, residence and grade level were also collected. By systematic

random sampling techniques, ten schools were chosen. 30 teachers teaching the above four school subjects have filed Feedback Form. From each school, Anti-AIDS (Red cross) club coordinators have filled an item question. Interviews were conducted with club coordinators, student peers, and parents.

Analysis of data included frequency tabulations and comparison of students' mean score by using T-test. T-test was used to check if there were statistically significant differences between sexes male and female and urban and rural.

Regarding the first question, it was found out that objectives and contents of AIDS education integrated in the school curricula are in adequate. All the core objectives of school AIDS education suggested by WHO were not situated and systematically included in the different relevant school subjects.

When compared with the objectives recommended by WHO, relatively insufficient objectives and contents of the issues were found in grade 6 Science and grade 7 Health and Physical Education courses. Insufficient in this case is also mean when it is compared with the danger the pandemic is putting to the young people. These objectives and contents were by themselves not comprehensive and balanced. They are only on the first three categories-Nature of AIDS, Its modes of transmission, and Preventive techniques. Although these areas are the major once, the importance of creating awareness on the students on the need for care and support for people living with the virus shouldn't be under emphasized.

This shows that AIDS Education objectives and contents were not sufficiently integrated into the school subjects. This in turn depicts that the working document of the region and the recommendation of MOE were not properly implemented in the cycle. The few contents were simply adopted from broad worldwide approaches.

To answer the second question, survey of the development and implementation of school HIV/AIDS education was made. The result indicated that the students, parents, and community leaders were not actively involved at the development stage. At the implementation phase, too, the participation was found out to be unsatisfactory.

Teachers and club coordinators were not getting sufficient training and orientation to successfully accomplish their tasks. As a result, they are using the traditional teaching methods (teacher-dominated) that are hardly applicable to teaching of AIDS education and sexual issues. Some believe that the issue is the concern of someone else. They were not involving parents and local healers in the teaching learning processes and in co curricular activities. They were also not supplementing the deficiencies in the curricula.

Teachers have attributed the lack of active participation of the students to shortage of school time even for the basics and class size. However, the basics are learnt only when the children are healthy. The key to progresses setting priorities and

phasing in intervention. Therefore, prioritizing life issues, particularly that of the fatal disease AIDS shouldn't be under emphasized in the education sector.

Parents were well aware of the danger being put to young people of the community. As a result, they strongly supported school AIDS education programs. Acosta (1992:45), in line with this, reported parents' perception of the appropriateness of AIDS education topics for their eight grade school children. They didn't agree they could participate in the process of disseminating knowledge of AIDS issues through the school, however. At the regional level, the educators and curriculum planners were not good at encouraging community's participation for the success of the program

The evaluation of students' awareness level on HIV/AIDS, however, indicated that they have demonstrated an encouraging knowledge base on the Nature of AIDS, its transmission routes and Preventive techniques. Through content analysis, it was found out that the few objectives and contents focused on the first three categories.

The students have poor knowledge of the importance of care and support for people living with the virus. Analysis of school curricula also showed that there is not objectives and learning experiences addressing the issue. The co-curricular activities were also found weak on creating awareness on the students on the specific issue.

Most of the students rated that they learn about HIV/AIDS from school and media. As we frequently hear, media have been giving information on the importance of care for victims in addition to the other area. However, the students didn't score well on the fourth category. This could show that schools are more effective sources of information than the others. Scholars, such as Dockrell and Dockrell (1995:44) also stated that much of the information young people get from peers media etc is "misleading, " " incomplete" and " wrong"

At this point, it seems that they want to emphasize the effectiveness of targeted intervention instead of the all at once information dissemination approach. Provision of general information regardless of the differences in need, maturity, experience, predisposition, etc would be less effective. Young people are developmentally heterogeneous and not all can be reached by the same technique. This implies the importance of targeted intervention through school curricula.

5.2 FINDINGS

From the discussions made so far, it is possible to conclude the following;

5.2.1. When compared with the objectives, contents and learning experiences suggested by WHO, inadequacies of AIDS education observed in the contents of curricula.

A). Only a few AIDS Education objectives and contents were found in grade six Science and grade eight Biology courses and seven Health and Physical education curricular materials.

B) . The available objectives and contents focused on the first three categories: Nature of AIDS, its Modes of Transition, and Methods of Prevention. The fourth category was completely missing.

5.2.2 The participation of the risk groups (the adolescents), parents, community leaders in the development and implementation of the program is lacking. Parents were, however, found supportive to the provision of AIDS education through schools.

5.2.3 The provision of orientations and training for teachers on how to implement AIDS education was not satisfactory. On the other hand, additional references for the teachers and students were not available in schools.

5.2.4 The effort made to reach the risk group through students' peers was absolutely in appropriate. Evidence from WHO Adolescent Health Program research studies undertaken in 11 African countries, however, indicated that peer information and pressure contribute significantly to their decision making on sexual matters (Were, 1996:14).

5.2.5The support being given to Anti-AIDS club was so meagre to accomplish the activities of club. The schools were required to organize different school programs, but the finance to run that programs was lacking.

5.2.6 In spite of these limitations, students have demonstrated an encouraging awareness level of factual knowledge about nature of AIDS, its modes of transmission, and methods of prevention.

A). There is a statistically significant awareness difference between male and female on knowledge of nature of AIDS (Male =0.99; Female=. 95). However there is no difference between settings.

B). There is a statistically significant awareness difference between the two sexes on knowledge of the transmission modes of HIV/AIDS (Male=. 99; Female=. 94).

C). There is no statistically significant awareness difference between male and female but between urban and rural (urban=. 97; rural=. 94).

In general, males are more aware about AIDS than females are. This signifies females should be motivated to know more about the issue to save the community.

This shows that other sources of information have contributed. However, the students' were poor concerning the fourth category (care and support for victims).

The skills and practices, however, in case were not toughly investigated by this study.

The research believes that knowledge is essential for change (behavioral change). Knowledge alone, however, may not be sufficient to bring about that change in a real sense of the word. Logic would suggest that repeated, systematic and targeted educational intervention that actively involves the audience is likely to be more effective in the areas of sexuality.

Similar study conducted by Aggleton, Homans and Warwick (1993) evaluated the effectiveness of school AIDS education and concluded, "the current approaches are largely ineffective". In the present study, although inadequacies of AIDS education objectives and contents were observed and the implementation processes have manageable problems, it would be safe to conclude that appreciable efforts are being done through schools,

5.3 RECOMMENDATIONS

Base on these findings, the researcher forwards the following possible recommendations for the Oromia region.

5.3.1. The objectives, contents/learning experiences, and the evaluation mechanisms available in the current school subjects were relatively deficient. Therefore, clear and precise objectives that lead the whole program should be stated and integrated into the school subjects. The corresponding contents should be carefully selected and organized. In all cases, functional knowledge, relevant skills and motivation should be emphasized.

5.3.2. AIDS education objective and contents should be included in all relevant school subjects to reinforce one another. It is only then that all teachers assume teaching about AIDS among their responsibility.

5.3.3. The school AIDS education programs should employ interactive teaching methods that allow participants to observe, communicate, and negotiate with each other and internalize the cause and consequences of involving in risk sexual activities. These are expected to yield greater effectiveness in achieving delays in initiation of intercourse or protected sex. Trained teachers must teach such programs.

5.3.4. Successful program development and implementation cannot occur without evaluation. Logic and common sense wouldn't guarantee the validity (suitability) of the curricula in the actual setting. With many competing social problems for school time and resources, therefore, it is imperative that regional curriculum designers and implementers should conduct rigorous needs assessment, find out factors that are affecting the success of AIDS educational programs, conduct continuous assessment of the awareness level of the students and find out what works and what doesn't.

5.3.5. Awareness creating educational programs should be continuously carried out in schools. Particularly, the students had little knowledge of how HIV/AIDS doesn't transmit and this might led them to have the feeling of discriminating people living with the virus. Although this might be the function of lack of functional knowledge, the absence of curricular contents on the importance of care and support is expected to contribute a lot. Thus the integration of a balanced AIDS education contents should be focus for the future.

5.3.6. The teachers need to understand what is known about AIDS and local risk behaviors the add fuel to the expansion of the virus. Still some things are unusable in the society and teachers should be desensitized to freely deal with the adolescents about sexuality in general. Hence, it is imperative to familiarize teachers with the crises of AIDS and how to influence risk groups so that they can live in the world of AIDS successfully.

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APPENDIX A

ADDIS ABABA UNIVERSITYSCHOOL OF GRADUATE STUDIES
FACULTY OF EDUCATION DEPARTMENT OF
CURRICULUM AND INSTRUCTION
INSTRUMENT FOR DATA COLLECTION

QUESTION TO STUDENTS

The purpose of these questions is to obtain information about your knowledge, attitudes, and skills with respect to the nature and prevention of HIV infections. As well, you are asked to describe some of your intentions in the near future. The information you provide will be used to improve school Sex and AIDS education programs.

We encourage you to answer all the questions because you responses are important to this study. Your answers are kept confidential. No one will know how you answered the questions. You are also asked not to write you name.

Thank you.

General Information

Location:

Your Zone (1)_____

District (2) _____

- ❑ 3. Urban
- ❑ 4 rural

School name _____

Grade

- ❑ 6
- ❑ 7
- ❑ 8

Sex

- ❑ 9 Male
- ❑ 10 Female

Age_____

Section One: **Knowledge Questions.**

Direction:

Please read each of the following questions carefully. Then mark with( ) your responses on the space provided. Please attempt all questions.

No	Item	Yes	No	Not sure
1	AIDSIS transmits by a virus called HIV.			
2	Children who have HIV virus should be isolated from the healthier once.			
3	HIV/AID is mostly transmitted through sexual intercourse.			
4	HIV can be transmitted from mother to the child in her womb.			
5	Sharing needles, tattoos and ear-piercing instruments can transmit HIV infections.			
6	Not sharing sharp instruments can minimize the risk of HIV infection.			
7	Mosquitoes can transmit HIV/AIDS.			
8	By using condoms, one can avoid HIV infection.			
9	There is cure for HIV infections.			
	HIV is not transmitted by protected sexual practices.			
10	One can protect him/ herself from HIV/AIDS by abstaining from sexual intercourse.			
11	AIDS destroys red blood cells of human being.			
12	One can recognize a person infected with HIV by how he/she looks.			
13	AIDS is a disease by itself			
14	HIV/AIDS is transmitted through semen, vaginal fluids, and blood contact.			
15	One can get HIV by hugging or touching a person who has HIV/AIDS.			
17	People living with HIV/AIDS need care and support			
18	One can protect AIDS by faithfully living with one sexual partner.			

Section Two: **Attitude Questions**

The purpose of this question is to identify students' attitudes towards HIV/AIDS. The valid responses you give are very helpful for improving school AIDS education programs. So you are kindly requested to provide valid responses. Your answers are confidentially kept.

INSTRUCTION: Please read each statement carefully. Then put ( ) under either of the five categories given based on your understanding.

No	Item	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
1	HIV is transmitted by sexual intercourse.					
2	It would be all right with me to be in the same classroom with someone who has AIDS.					
3	A health looking person is free form HIV/AIDS.					
4	People with AIDS should be forced to live far away from other people.					
5	HIV/AIDS is an infection from which I can protect myself.					
6	I believe that students of my school can have AIDS virus.					
	A person can be injected with a syringe occasionally without the risk of being infected with HIV.					
7	I believe that males are more responsible for HIV transmission.					
8	I believe that females are more responsible for HIV transmission.					
9	I fear that I could contract AIDS virus.					
10	I would feel comfortable sharing sharp instruments with my close friends.					
11	To avoid HIV infections, I would not involve in per- marital sex.					
12	I don't fear AIDS for it is not different from other deceases					
13	In the future, I will be tested of HIV/AIDS before marriage.					
13	Using condoms has a hundred percent reliability of protecting oneself from HIV/AIDS.					
14	I am convinced that having sex before marriage is dangerous.					

Section Three: Question to Students

The purpose of this interview is to obtain information on student experience of school AIDS education programs. It we further expect to extract school experiences and student's perception of AIDS issues. To this end, your valid responses will have a great importance for the improvement of school AIDS education programs.

Thank you in advance.

1. Do you learn about sexual issues in schools?
   - ❑ Yes
   - ❑ No

2 What have you learned about HIV/AIDS?

_____

3 Are there difficulties that might make you liable to HIV infections?
   - ❑ Yes
   - ❑ No

4 If your answer is 'yes', what are the obstacles that could make it difficult for you or others to avoid risks of HIV/AIDS?

_____

5 What are the important things you can do to protect yourself and others against HIV/AIDS?

_____

6 To what extent did the following sources of information helped you to hear about AIDS?

	Sources of information	How much did they help you?					
		5	4	3	2	1	
A	School						
B	Radio						
C	Peer						
D	Family						
E	Written Materials						
F	Anti- AIDS club						
G	TV						
H	Healthy Personnel						

APPENDIX B

Interview with parents

The purpose of this interview is to obtain information from parents on school AIDS education programs. The information is helpful for the improvement of school programs. Hence, you are kindly requested to give valid responses.

Thank you in advance.

1. Should school children learn about sex in schools?
   - ❑ Yes
   - ❑ No
   - ❑ Not sure
2. Should your children learn bout AIDS in schools?
   - ❑ Yes
   - ❑ No
   - ❑ Not sure

   Why_____

   _____
3. Do you talk about AIDS with your children at home?
   - ❑ Yes
   - ❑ No
   - ❑ Sometimes

   Why?

   _____
4. Do you know that your child learn about AIDS in schools?
   - ❑ *Yes*
   - ❑ *No*

5. If your answer is 'Yes", are satisfied with school programs on HIV/AIDS?
   - ❑ Yes
   - ❑ No

In what way?

_____

_____

6. What (if any) is there weakness of school programs on AIDS education?
   - ❑ Yes
   - ❑ No
   - ❑ I Don't know

   Name.

   _____

7. Can parents cooperate with schools in the provision of AIDS education?
   - ❑ Yes
   - ❑ No
   - ❑ Not sure

8. Have you participated in school programs on AIDS education?
   - ❑ Yes
   - ❑ No
   - ❑ Sometimes

9. In your opinion, what are the local practices that could put adolescents to the risk of contracting HIV/AIDS? Would you list them?

   _____

10. Who should teach children about sexual issues and STDs, including HIV/AIDS? Name them.

APPENDIX C

Interview with Health Education Coordinator of the Oromia Region

1. Is it appropriate to provide sex education to students in the second cycle primary school of Oromia region?
   - ❑ Yes
   - ❑ No
2. Is it appropriate to provide AIDS education to these students?
   - ❑ Yes
   - ❑ No
3. Have you officially included sex education into school subjects?
   - ❑ Yes
   - ❑ No
4. Have you included HIV/AIDS education into school subjects?
   - ❑ Yes
   - ❑ No

   Would you mention the school course in which HIV/AIDS issues are included?

   _____

5. Have you identified local adolescent behavior that could put them to the risk of AIDS?
   - ❑Yes
   - ❑No

   5.1 If your answer is 'yes', would you mention some of them? _____

   _____

   5.2 If your answer is 'No', would you mention the reasons?

   _____

   _____

6. Who can ensure that adequate resources, both human and material, are available to develop, implement and evaluate the program?

_____

7. Did the community get involved in AIDS education program development and implementation process?
   - ❑ Yes
   - ❑ No

   7.1 Would you mention some of the techniques you have used (if any) to involve the community?

   _____

8. Have you evaluated the success of school AIDS education programs?
   - ❑ Yes
   - ❑ No
   - ❑ I don't know

9. If "yes", what were the strengths and weaknesses?

_____

_____

If you have other comments would you add them?

_____

_____

Thank you.

APPENDIX D

Teachers Feedback Form

The purpose of this checklist is to obtain information about school AIDS education programs. Your valid and objective responses are very important for the success of the programs. So you are kindly requested to provide dependable information that would help the improvement of school AIDS education programs.

Thank you in advance.

General information:

Your Zone (1) _____

District (2) _____

School name (3) _____

Sex

- ❑ Male (4)
- ❑ Female (5) _____

Years of services _____

Subject you teach_____

Grade level you teach _____

Average number of students in your class _____

Qualification _____

DIRECTION: Please fill in this form by ticking "Yes" or "No" and add comments.

1. Are there objectives and contents of sexual issues in the subject you teach?
   - ☐ Yes
   - ☐ No
2. Do have the right to include such issues in the course if you feel it is deficient?
   - ☐ Yes
   - ☐ No

   Why? _____
3. Are the student activities included for AIDS education clearly described?
   - ☐ Yes
   - ☐ No

   Specify. _____
4. Are objectives of AIDS /STDs issues clearly described?
   - ☐ Yes
   - ☐ No

   Please specify.

   _____
5. Are the activities (if any) relevant to the students you teach?
   - ☐ Yes
   - ☐ No

   In what way? _____
6. Is student's participation satisfactory?
   - ☐ Yes
   - ☐ No

   In what way? _____

   _____

7. Is the teacher's guide helpful for teaching STDs/HIV/AIDS issues?
   - ❑ Yes
   - ❑ No

   Please specify.

   _____

8. Is it difficult or ease for you to deal with the topics in he curricula?
   - ❑ Difficult
   - ❑ Ease

   Comment

   _____

   _____

9. Did you receive any training, workshop, seminar, etc. to teach AIDS education in your school?
   - ❑ Yes
   - ❑ No

   Would you specify?
   - ❑ Workshop
   - ❑ Seminar
   - ❑ Meeting
   - ❑ Training

   9.1 If you have participated in any of the above orientations would you specify its (their) duration?

   _____

10. Was there resistance or support from parents (community) to teach their children about sexual issues and about AIDS?
    - ❑ Support
    - ❑ Resistance

    Specify_____

    _____

11. Have you involved parents in school AIDS education programs?

- ❑ Yes
- ❑ No

How?

_____

_____

12. Did you receive any comment form parents on AIDS education programs?

- ❑ Yes
- ❑ No

Would you specify it?

_____

_____

13. What is your general evaluation of school AIDS education programs?

- ❑ Excellent
- ❑ Very good
- ❑ Good
- ❑ Poor
- ❑ Very poor

If you have other comments please add.

_____

_____

Thank you for your kind cooperation.

APPENDIX E

CODING SHEET FOR CONTENT ANAYLISIS OF SCHOOL SUBJECTS FOR AIDS CONTENTS.

Categories	HIV/AIDS issues that are to be integrated into school curriculum	Subject	Grade Level			Available	Not available	Not enough
Nature of AIDS	HIV							
	AIDS							
	Difference between HIV and AIDS							
	No vaccine or cure							
	It is STD							
Modes of transmission	Sexual intercourse							
	Blood transfusion							
	Sharing needles and syringes							
	Tattooing							
	Mother to infant							
Ways in which HIV is Not transmitted	Using the same toilet							
	Swimming with AIDS patients							
	Mosquito bits							
	Kissing, touching, and coughing							
	Living in same house							
Methods of preventing HIV	Abstain							
	Be faithful							
	Use condom							
	Decrease sexual partner(s)							
	Don't share sharp instruments							
	Don't share needles and get injection only in the hospital							
	Don't share tattooing instrument							
Cares for HIV/AIDS patients	Don't discriminate AIDS patients							
	Be compassionate with AIDS patients							
	Give emotional support ton the AIDS patients							

(Source: WHO 1992:43)

APPENDIXES-F

Anti-AIDS Club Coordinators Report Form

The purpose of this question is to obtain data on the activities of Anti-AIDS Club in the second cycle primary schools of the Oromia Region. To achieve this purpose, the valid responses you provide are very helpful. So you are Kindly requested to give a dependable data that could contribute to the improvement of school AIDS education programs.

Thank you in advance.

General Information:

Zone_____

Wereda_____

School_____

Subject you teach_____ Qualification_____

Your Experience in coordinating Anti-AIDS club_____

Direction: Please read each of the following statements carefully. Then answer the correct answer. You are kindly requested to provide valid responses.

1. Would you list down the objectives of Anti-AIDS club in your school?

A_____

B_____

C_____

D_____

E_____

F_____

2. Are you interested in coordinating Anti-AIDS club activities?

A. Yes B. No

Comment_____

_____

3. Did you take training (orientation) that can help you coordinate the club?

A. Yes B. No

Please tick next to each alternative.

Type of training	Response		Duration the Training	Sponsoring Organization
	Yes	No		
a. Training				
b. Workshop				
c. Seminar				
d. Meeting				

4. How is students' participation in Anti-AIDS club activities?

A. Excellent B. Very Good C. Good D. Poor E. Very poor

5. Would you list down what students do in Anti-AIDS club? Please write them.

_____

_____

6. Did you involve parents in the activities of the club?

A. Yes B. No

Please would you mention how you did that?

_____

_____

7. Do parents support the objectives of anti AIDS club?

A. Yes B. No

What evidences indicate that? _____

_____

8. Would you mention the kind of support(s) you get form the school?

_____

_____

_____

9. What kinds of support do get form outside sources? Please identify the sources.

_____

_____

_____

10. On what area do you focus in the activities of Anti-AIDS club? On teaching about

A. the nature of AIDS
B. methods of preventing HIV/ AIDS
C. modes of HIV transmission
D. cares that are to be taken for HIV/AIDS victims.

11. Which sex is actively involved in the activities of Anti-AIDS club?

A. Males
B. Females
C. Both

Would you clarify the reason?_____

_____

_____

If you have other comments, please add._____

_____

Thank you for your kind cooperation.

DECLARATION

This thesis is my original work and has not been presented for a degree in any other universities and that all source of materials used for the thesis have been fully acknowledged.

ABERRA MEGERSSA

This thesis has been submitted for examination with my approval as a university advisor.

MAREW ZEWDIE (DR.)