THE EFFECT OF EDUCATION ON STUDENTS KNOWLEDGE, BEHAVIOR AND PRACTICES ABOUT HIV/AIDS IN SELECTED HIGH SCHOOL OF ADDIS ABABA

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The Effect of Education on Students Knowledge, Behavior and Practice on HIV/AIDS in Selected High School of Addis Ababa

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A Thesis paper Submitted to Indra Gandhi National Open University (IGNOU) In Partial Fulfillment of the Requirement for the Master of Degree in Social Work (MSW)

Thesis advisor

Dessalegn Negeri (PhD candidate)

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Declaration

I hereby declare that the dissertation entitle THE EFFECT OF EDUATION ON STUDENTS KNOLWEDGE, BEHAVIOR AND PRACTICES ON HIV/AIDS IN SELECTED HIGH SCHOOL OF ADDIS ABABA submitted by me for the partial fulfilment of the MSW to Indira Gandhi National Open University, (IGNOU) New Delhi is my own original work and has not been submitted earlier, either to IGNOU or to any other institution for the fulfilment of the requirement for any other programme of study. I also declare that no chapter of this manuscript in whole or in part is lifted and incorporated in this report from any earlier work done by me or others.

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Certificate

This is to certify that Mrs Woinshet Mengiste Demissie student of MSW from Indira Gandi National Open University; New Delhi was working under my supervision and guidance for her Project Work for the Course MSWP-001. Her Project Work entitled KNOLWEDGE, BEHAVIOR AND PRACTICES ON HIV/AIDS IN SELECTED HIGH SCHOOL OF ADDIS ABABA , which she is submitting, is her genuine and original work.

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Abstract

The purpose of this study is to assess and analyse the effect of education on students' knowledge, behaviour and practice in relation to HIV/AIDS in Medehanialem High School Preparatory Class in Addis Ababa City Administration. The study focuses on assessing the effect of general and HIV/AIDS related education on their understanding, behaviour and practice specifically curving the multifaceted impacts of the pandemic. The methods of the study were quantitative where primary and secondary sources of data were used. To collect the necessary data, the researcher employed structured questionnaire, focus group discussion and document analysis as major techniques. In this regard, interview guides and questionnaires used as main instruments for data collection. In the course of analysis, students' knowledge on the ways HIV transmission, risk behaviours and prevention measures was expressed. As having multiple sexual relationships is the principal way of virus transmission. On the other hand, the students understanding in relation to the modes of HIV transmission was found to be low besides there is a room for further education in a manner to change the students' behaviour and practice. It was concluded that education has significant positive effect on students 'knowledge, behaviour and practice in relation to their efforts in the prevention, care and support for people infected or affected by HIV/AIDS. In this regard, the researcher suggests a number of relevant areas of interventions that would contribute to the existing efforts of the government, civil society actors and the school communities to improve students' knowledge, attitude and practice pertaining HIV/AIDS. By and large, the school-based anti-HIV/AIDS clubs could play

pivotal roles in awareness raising and sensitization of students, teachers and other staffs at school on HIV/AIDS if adequate supports are provided for them.

Key words: HIV/ADS, Education, Knowledge**,** Behaviour and Practice.

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TABLE OF CONTENTS

List of Tables

Acronyms

AIDS	Acquired Immune - Deficiency Syndrome
ANC	Antenatal Care
ARDs	Anti-retroviral Drugs
ART	Antiretroviral treatment
ARV	Anti-retroviral Viral
CIS	Community Information System
DHS	Demographic and Health Surveys
FDRE	Federal Republic of Ethiopia
FHAPCO	Federal HIV/AIDS Prevention and Control Office
FMoH	Federal Ministry of Health (Ethiopia)
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GOE	Government of Ethiopia
HAART	Highly Active Antiretroviral Therapy
HAPCO	HIV/AIDS Prevention and Control Office
HIV	Human Immuno – Deficiency Virus
HMIS	Health Management Information System
HSDP	Health Sector Development Plan
IDU	Intra Drug Users
IGAD	Inter-Governmental Authority on Development
MARPs	Most-at-Risk and/or Highly Vulnerable Populations
MDGs	Million Development Goals
MOH	Ministry Of Health
MSM	Men Sex with Men
MTCT	Mother to Child Transmission

NAC	National Aids Council
NCPI	National Commitment and Policy Instrument
OSSA	Organization of Social Services for AIDS
OVCs	Orphans and Vulnerable Children
PLHIV	People living with HIV
PMTCT	Prevention of mother-to-child transmission (PMTCT)
SPSS	Statistical Package for Social Sciences
STI	Sexually Transmitted Infection
WHO:	World Health Organization
UNAIDS:	United Nations Program for AIDS
UNDAF	UN Development Assistance Framework
UNGASS	United Nations General Assembly Special Session
UP	Universal precautions
VCT	Voluntary Counselling and Testing

Chapter I
Introduction

1.1 Background of the Study

HIV/AIDS has become the leading cause of death in the world, continuing to be a global social and economic problem that causes further threats to the very fabric of our society. As one of the development crises, the HIV/AIDS epidemic is fast spreading all over the world. According to Botchwey (2000), HIV/AIDS is the biggest development challenge that the world has ever confronted; a disease, which is noted as "unique in its devastating impact on the social, economic and demographic foundations of development, which has adverse effects on a nation's progress (UNAIDS/WHO, 2000)

The emergence of the HIV epidemic is one of the biggest public health challenges the world has ever seen in history. In the last three decades, HIV has spread rapidly and affected all section of society. More than any time in history, our world is functioning as 'hot spot' where traditional and modern, old and new, phenomena are flourishing with an increasing intensity and complexity. Such phenomena may have positive or negative social, economic, health and environmental consequences that affect the welfare of humankind directly or indirectly. The emergence of HIV/AIDS is one of the many phenomena that the world has to face. Since its emergence, three decades ago, the pandemic HIV/AIDS is hitting hard, predominantly, the less developed world. Considering the fast spread of the infection, it will continue the devastation for some time from now. Thus, AIDS is not simply a health problem; it is an overall development challenge that poses a threat for the very survival of human race. (World Bank, 2002).

Sub-Saharan Africa is at the center of the epidemic and continues to carry the full effect of its health and socioeconomic impact. Ethiopia is among the countries most affected by the HIV epidemic with an estimated adult prevalence of 1.5%, it has a large number of

people living with HIV (approximately 800,000); and about 1 million AIDS orphans. From the early days of the epidemic, Ethiopia has shown commitment to prevent its spread and mitigate its impact. To this end, it has rallied support from national and global partners, including mainstreaming of HIV prevention programs to public and private sector businesses, and engagement of community-based organizations.

During the earlier years, the government adopted a national AIDS policy, developed, and implemented several effective strategies. Ethiopia is one of the sub-Saharan countries demonstrating more than a 25% decline in new HIV infections. Antenatal Care (ANC) sentinel surveillance data show that prevalence of new infections among pregnant women 15-24 years of age has declined from 5.6% in 2005, to 3.5% in 2007, and 2.6% in 2011. Likewise, Demographic and Health Surveys (DHS) data show that use of preventive methods and the number of people who were tested for HIV and utilizing treatment and care services has increased (Country Progress Report on HIV/AIDS Response, 2012).

The problem is still huge as nearly 800,000 are living with HIV, more are orphaned, and the rate of new infections is declining but still high, and possibly expanding to newer population groups and geographic areas. This calls for a more strong and targeted response while at the same time scaling-up existing interventions among high-risk population groups. Key current challenges, among others, include low utilization of some of the existing services especially PMTCT, emergence of new at-risk population groups (young girls engaged in transactional sex), and low coverage of interventions for Most-at Risk and/or Highly Vulnerable Populations (MARPs), and ensuring quality of available services (FDRE, 2008).

1.1.1 OVERVIEW OF THE AIDS EPIDEMIC IN ETHIOPIA

The main mode of HIV transmission in Ethiopia is heterosexual; however, for infants and children, vertical transmission accounts for 90% of new infections and occurs during pregnancy, childbirth, or breastfeeding (HAPCO, FMoH, 2007b). According to the 2008 Ethiopian UNGASS report, 3.24% and 7.03% of HIV infected pregnant women received prophylactic anti-retroviral (ARV) nationally in 2006 and in 2007 respectively.

The 2011 UN High Level Meeting, at its Political Declaration on HIV/AIDS, set ten targets and commitments, which among others include having sexual transmission of HIV, ensuring that no children are born with HIV infection, increasing access to antiretroviral therapy to 15 million people and halving tuberculosis deaths in people living with HIV, by 2015. The declaration also clearly underscores an urgent need to increase access to HIV services, particularly for those most at risk; and pledges to address gender-related inequalities immediately (World Bank, 2002). The population of Ethiopia in 2007 was estimated at 74 million. Currently, based on projections from the national census of 2007, it is estimated at 83 million, making the nation the second most populous country in Africa.

Ethiopia has nine regional states and two city administrations. The Regional States and City administrations are subdivided into 817 administrative woredas (districts) which are further divided into kebeles, the smallest administrative unit. Ethiopia is one of the countries with the lowest per-capital income, estimated at 390 USD per annum. It is estimated that 32.7% of the population live below the absolute poverty line. Health is at the center of the national program for Accelerated and Sustained Development and Ending Poverty (PASDEP). The country has endorsed a Health Sector Development Plan (HSDP), which focuses on prevention and mitigation of priority health problems such as HIV/AIDS, tuberculosis, malaria, diarrheal diseases and common childhood and maternal illnesses. Since 1997/98, three cycles of HSDPs were developed and implemented; and currently the

country is implementing the fourth plan. To expedite the implementation of the Health Sector Development Plan (HSDP), the government launched the Health Extension Program in 2003 to deliver a package of basic and essential healthcare, including HIV preventive services. To date, more than 30,000 health extension workers have been deployed (FMOH, 2012).

The central statistical authority estimates the 1998 population of Addis Ababa at about 2.4 million persons, with a population growth rate near 2.9 percent per year. Much of the population growth in the city still stems from migration from the countryside and smaller urban areas. Unemployment is high and incomes are low. The city is also characterized by substandard housing conditions, high infant and maternal mortality rates; inadequate health service of sex workers aggravates the spread of HIV and other sexually transmitted diseases. The virus that causes AIDS has already infected and is infecting many people in Addis Ababa. An estimated one of every six adults is currently infected or around 17 percent of the entire adult population of Addis Ababa (Addis Ababa City Administration Health Bureau, 1999).

The school system is a unique tool for spreading information and increasing HIV/AIDS awareness. The education system is an existing structure with the potential to reach not only staff and pupils, but also their families and communities. However, HIV/AIDS also represents a severe threat to the education sector. This study is thus, designed to show the impact of education on HIV/AIDS, and with emphasis on knowledge, behavior and practices of students in selected high school in Addis Ababa.

1.2 STATEMENT OF THE PROBLEM

HIV/AIDS and its devastating impacts like parental death and the induced orphan-hood are serious development challenges. Ethiopia is one of the countries affected by HIV/AIDS in many respects. In absence of any other option, education remains the social

vaccine that has no substitute. Higher education has a central and strategic role to play towards a sustainable and effective response to the pandemic both in terms of workplace intervention as well as through educational, research and outreach programs. Higher education is not there just to service the economy and society, as it exists, but also to shape it into what it could and should be. Overall, encouraging results were achieved in HIV/AIDS awareness sustained prevention efforts through education in the schools' HIV/AIDS club.

From this perspective, this study is intended to give responses to the following basic questions:

- What roles can education play to minimize the transmission of HIV/AIDS?
- What is the extent of the students' knowledge on HIV/AIDS?
- What is the extent of the students' behaviour on HIV/AIDS?
- What is the extent of the students' practice on HIV/AIDS?

1.3 OBJECTIVES OF THE STUDY

The overall objective of the study is to assess and examine the impacts of education on students' knowledge, behaviour and practice of HIV/AIDS in in Medhanialem Preparatory School. More specifically, it is look in to:

1) The prevailing knowledge of students pertaining to HIV/AIDS in Medhanialem Preparatory School.
2) The prevailing behaviour of students pertaining to HIV/AIDS in Medhanialem Preparatory School.
3) The prevailing practice of students pertaining to HIV/AIDS in Medhanialem Preparatory School.

1.4 SIGNIFICANCES OF THE STUDY

HIV/AIDS does not strike the population equally. The latest years have shown that young people are disproportionately affected although there are few infections among children between the ages of 5-18 in Addis Ababa City (Addis Ababa City Administration Health Bureau, 1999). The studied students' age in Medhanealem Preparatory School falls under this age group. Due to different reasons they are most likely to be exposed to this epidemic. The education given to these students should have imparted the right information, to the extent that they change their behaviour and practice in relation to HIV/AIDS. Therefore, the findings of this study will provide a clue to the education system for further research and discussion on the issue and impact of education on HIV/AIDS in general and the change on knowledge, behaviour and practices on HIV/AIDS in particular will make the study significant. In addition, it is anticipated that the study will add some knowledge and enrich the existing literature on the issue under study.

1.5 DELIMITATION OF THE STUDY

The study was conducted in Medhanealem Preparatory School which is found in Gulele Sub City, Addis Ababa City Administration. Both grade 11and grade 12 students participated in the study. The study is delimited to cover only one public high school. Therefore, it would have been more representative if it included more sample high schools.

1.6 LIMITATION OF THE STUDY

From data collection to analysis and interpretation the study faced the following limitations. Coverage of secondary data in the study topic was minimal. Data were not well organized and documented regarding the overall education provided on HIV/AIDS in the offices and in the clubs as well. As a result the secondary data had limitations to provide the expected information. Besides, during the FGD some of the students were not genuinely

discussed on the topics. Sometimes they made fun out of it. As a result the researcher couldn't find out the some information.

1.7 OPERATIONAL DEFINITION OF KEY TERMS

For the sake of clarity and consistency in the study, the following definitions are used.

Attitude: an attitude can be defined a positive or negative evaluation of people, objects, event, activities, ideas, or just about anything in one's environment. Positive attitude is the cause of success and happiness and helps you cope more easily with the daily affairs of life. It brings optimism into your life, and makes it easier to avoid worries and negative thinking. If you adopt it as a way of life, it will bring constructive changes into your life, and makes them happier, brighter and more successful. With a positive attitude you see the bright side of life, become optimistic, and expect the best to happen. It is certainly a state of mind that is well worth developing.

Positive attitude manifests in the following ways:

- Positive thinking.
- Constructive thinking.
- Creative thinking.
- Optimism.
- Motivation to accomplish your goals.
- Choosing happiness

Knowledge: it is familiarity with someone or something, which can include facts, information, descriptions, or skills acquired through experience or education. Knowledge is a familiarity with someone or something, which can include facts, information, descriptions, or skills acquired through experience or education. It can refer to the theoretical or practical understanding of a subject. It can be implicit (as with practical

skill or expertise) or explicit (as with the theoretical understanding of an epistemology; the philosopher Plato famously defined knowledge as justified true belief.

Perception: it is the organization, identification, and interpretation of sensory information in order to represent and understand the environment.

Risky behaviour: behaviour of an individual who has more than one sexual partners or family members due to HIV/AIDS induced problems like health problems, income loss, and lack of access to basic needs and services, etc.

Vulnerable: to be in a weakened position to defend oneself against risks of contracting HIV because of structural factors, such as poverty, discrimination or hostile laws.

Voluntary: in the context of HIV testing, being tested out of free and informed choice (not being forced to by employers, health care workers or family).

1.8. ORGANIZATION OF THE STUDY

The study is organized and presented in five chapters. Chapter I and II consist of Introduction and Review of Literature respectively. The Methods, Sampling Technique and Sources of Data and Instruments and Procedure for data Collection are composed in Chapter III. Chapter IV contains Presentation and Analysis of the Data. Summary, Conclusions and Recommendations are organized under Chapter V.

Chapter II
Literature Review

2.1 The Situation of HIV/AIDS in Ethiopia

Ethiopia is one of the Sub-Saharan African countries characterized by absolute poverty with economic, social, political, and natural challenges. In addition, it is also known for terrifying prevalence and alarming spread of HIV/AIDS. This spread worsens the burden of the population as the great majority of the population are exposed to a variety of infectious and parasitic diseases coupled with malnutrition and very low health service coverage, i.e. below 45%, with wide disparities between rural and urban areas and from region to region (World Council of Churches, 2003).

In Ethiopia, HIV infections were first identified in 1984, and the first AIDS cases were reported by 1986. Since then, the number of infections has been increasing to the extent that almost everybody is affected directly/indirectly by the epidemic. It is spreading alarmingly and infected about 1,475,000 out of which (658,000 males and 817,000females) in the country (MOH, 2004). In 1989, the HIV prevalence among adults population is estimated to be 2.7%, in 1997 it increased to 7.1 %, and 7.3 in 2000, but it was 4 .4 % in 2004, of which 12.6 % in urban and 2.6% in rural areas.

However, this decrease in percentage may not indicate that HIV/AIDS infection has been reduced in Ethiopia because there are various factors that may contribute to the low reported incidences. For example, the infected people may not show any of the symptoms of AIDS related illness; people are already sick and dying from AIDS but the family and communities may be in a state of denial and maintaining a state of secrecy; the infected people may not go to the health institutions; prevalence rates is very low in rural communities; etc. (Aster, 2004).

HIV/AIDS is more pronounced in adult age group (15-49), one out of every six adults is estimated to be infected (UNAIDS, 2004). According to World Council of Churches (2003) report, 91% of the reported AIDS cases in Ethiopia were in the age group between 15-49 years. Similarly, the government report indicates that 90% of AIDS cases occur to adults whose ages ranging 20 to 49 (MOH, 1998). The death of this economically active segment of the population leaves the country with long lasting development challenges unless the epidemic is curbed soon.

During the early years of the epidemic, HIV/AIDS was regarded as almost exclusively as a health problem; however, its longer existence revealed its multifaceted impact and considered as a development problem. Besides to claiming the lives of human beings and increasing the number of orphans, AIDS has brought complex and multifaceted problems to human development and a change in the demographic, social, economic and political structures (Family Health International, 2001). Equally, the impact of HIV/AIDS in Ethiopia are broadly categorized as demographic, social, economic, agriculture, health care, education, impact on households and communities.

In line with the global concern and demand for response to curb the devastating impact of HIV/AIDS on human and social capital development, the Ethiopian government has developed important policy and strategic instruments. Accordingly, a national task force was established in 1985, and following it, in 1987 the National AIDS/STD Control Program (NACP) was established at department level within the Ministry of Health. It is responsible for directing and coordinating the implementation of the National AIDS Control Programs (World Council of Churches, 2003). In effect, two medium term prevention and mitigation strategies were implemented in the years
1987-1996 (MOH, 2000). The First Medium Term Plan (MTP-1) focused on public awareness, establishment of laboratory services, and surveillance of the HIV/AIDS

prevalence and training of health workers. The Second Medium Term Plan (1992-1996), put emphasis on interventions to control the spread of HIV and adopted a multi-sect oral approach to mobilize national efforts against AIDS through decentralization of AIDS/STDs prevention and control activities at team level under the Ministry of Health, which was responsible for the coordination of the national and regional endeavours.

2.2 THE CONSEQUENCES OF HIV/AIDS

The impact of HIV/AIDS may differ across countries, communities, households, families and individuals depending on the level of development and the existing coping mechanisms. To this effect, poor countries and their population are most vulnerable due to various social, economic and political problems. The impact of HIV/AIDS in resource poor countries, like Ethiopia is multidimensional, among others the main ones are demographic, social, economic, gender-related and its impact on the elderly. Since its emergence in the early 1980s, HIV/AIDS has spread at an alarming rate world-wide with the number of new infections rising each year. According to UNAIDS (2004), since the beginning of the epidemic, more than 20 million people have died in the world. For instance, in 2003 sub-Saharan African countries estimated 2.2 million people deaths, which accounts 75% of the 3 million global AIDS deaths in that particular year.

There were also 3.5 million new HIV/AIDS infections in sub-Saharan Africa in 2002 out of the 5 million worldwide (UNAIDS, 2004)). Furthermore, more than 21.8 million people who have died from HIV/AIDS since the start of the epidemic are from Africa. Consequently, AIDS deaths have left over 8 million orphans in sub-Saharan Africa. These high rates of HIV/AIDS incidence make the disease the leading cause of death in Africa (UNAIDS/WHO, 2000).

The UN report indicates that in seven African countries where HIV prevalence is higher, the average life expectancy of persons born between the years 1995-2000 is 49 years, which is 13 years lower than in the absence of AIDS.

As the majority of people living with HIV/AIDS in Africa are between the ages of 15-49, which is the productive age group, it weakens the economy by squeezing productivity, adding various costs, diverting resources, and depleting knowledge and skills. This shows that HIV/AIDS has negative impacts on all sectors of development, which the African countries are attempting to achieve. With regard to the health sector, HIV/AIDS is bringing additional pressures on the poor health infrastructures of the highly affected sub-Saharan African countries. According to Aster (2004), in sub-Saharan African countries, AIDS patients occupy about half of the hospital beds.

2.3 THE IMPACT OF GENERAL EDUCATION ON HIV PREVALENCE

Education is one of our key defenses against the spread and impact of AIDS. The evidence for this is growing: in countries with severe epidemics, young people with more education who are sexually active are more likely to use condoms than their peers with less education. However, just as HIV targets the body's defense system, the AIDS pandemic is disabling the education sector's core functions and protective value. Achieving Education for all will require making HIV/AIDS the highest priority in the most affected countries "Schaefer, S. (1994).

While HIV and AIDS continue to spread rapidly throughout Africa and Asia, especially among young people aged 15-24, HIV infections are spreading most quickly within youth populations. An estimated 11.8 million young people aged 15–24 are living with HIV/AIDS, and half of all new infections – over 5,000 daily – are occurring among them (UNAIDS, 2003).

The 5 to 14 age group represents the one most likely to be free from HIV, therefore, often termed the "window of hope." It is also this group that should normally receive or have received a primary school education, which provides the protective effects of increased knowledge and life skills – both critical to raising a generation of young people who will be able to grow up without being infected with HIV . Education has been cited by several well-respected sources, including the World Bank, as one of the most important factors in helping to prevent this group from contracting HIV and AIDS. Knowing the successful role that school feeding and take-home rations have played in increasing enrolment and attendance rates in poor schools, especially among girls, the World Food Programme has attempted to address the needs of orphans and other vulnerable children in countries with high HIV prevalence rates through support to education. (World Bank, 2002)

2.4 THE IMPACT OF HIV/AIDS SPECIFIC EDUCATION ON HIV PREVALENCE

HIV/AIDS prevention programs work with young people. Evaluations have found that school and community-based programs can reduce risks and are effective in making a positive impact on knowledge, attitudes and risk behavior (UNAIDS, 1997). The evaluations also suggest that school and community leaders need to convince parents and concerned members of the community that well planned and implemented programs reduce risks without encouraging involvement in sexual relations.

Nevertheless, although exceptions exist, specific HIV/AIDS education components have been generally disappointing in developing countries, due to the over-emphasis on information and lack of skills training to link knowledge, attitudes and values. Often, too, they have been conducted without an adequate policy framework, structures and support services (e.g. training and materials) to ensure consistent and high quality coverage. A comprehensive and effective school health, hygiene and nutrition program is more valuable in addressing HIV/AIDS than specific HIV/AIDS programs delivered in isolation. As

health outcomes and risk behaviors often share the same root causes and tend to cluster, comprehensive school health programs can help to address a range of health and social issues, and the factors and conditions that affect them. For example, poor nutrition and limited access to clean water and sanitation compromise the immune system and can lead to a range of illnesses and a general failure to thrive, which affects absentees and also makes learning difficult when at school.

Enhancing overall health and nutritional status is an important way to reduce vulnerability to HIV/AIDS, and sustain the health of those already infected (WHO, 2000). A smaller effect will be that of infection among school-age children. In many countries where children begin school at a later age and/or where repetition rates are high, many secondary school students will have entered their reproductive years. As these students become sexually active they will be increasingly exposed to the disease. This appears to be an issue particularly in the case of young girls, as studies have shown that HIV infection rates tend to be considerably higher among teenage girls than boys. Girls from poor families are particularly vulnerable, as they are susceptible to the advances of older men with some amount of disposable income. Focus group discussions in Namibia brought out the importance of the concept of "sugar daddies" in the culture and, even more disturbingly, the non-negligible extent of teacher-to-student sexual contact. Furthermore, evidence from Namibia shows that one of the primary causes of dropout among upper secondary students is pregnancy, highlighting the degree to which unprotected sex is a problem among school-going youth. HIV infection among young people is unlikely to have a significant effect on the size of school-age populations, as the incubation period of the disease is generally seven to ten years. However, it does highlight the need for education systems to provide effective programs for AIDS awareness and prevention (Shumba, 2001).

2.5 THE TRANSMISSION PATH OF HIV

Depending on the existing scientific knowledge, HIV can be transmitted by different paths of infection:

Main causes for the spreading of HIV/AIDS in Ethiopia:

- Sexual force against women
- Unprotected sex – Partners infected unprotected sexual contact with one (Vaginal, anal, oral)
- Prostitution
- Drug abuse
- Mother-to-child transmission - assignment woman during the pregnancy under the birth or by the mother's milk (prenatal transmission) HIV infected of one.
- Transfusion of blood or blood contaminated products
- Common use of injection needles and instruments

The causes of the fast and nationwide distribution of the HI-Virus in Ethiopia are extremely multilayered. A distinction can roughly be carried out into two big blocks.

I. Political and socio-economic causes (for example social inequalities of sections of the population or desolate public health care system) and
II. Social causes (for example the role of the women, high rape installments of Prostitution)

In principle, the same transmission processes by which the HI-Virus is passed on also in all other continents apply to Africa. Unlike many developed regions this one is in Africa at the distribution of the illness "essential by the patriarchal definition of provided like a man and femalely sexuality and the heterosexual sexual intercourse in the center of the event, though. A reason for the amplified appearance finds itself at women in this transmission path typical of Africa. The infection probability of women is presumably fundamentally higher than those of their male partners at the unprotected vaginal sexual intercourse.

The contagious distribution cannot alone be explained by this vulnerability to the disadvantage of the women, though. Unrecognized or untreated venereal diseases, sexual practices and rites assignment promoting malnutrition and potential increase the biological susceptibility to the virus. (November 2008 – the Peace Operations Training Institute, Newspaper report).

2.6 HIV/AIDS AND EDUCATION: A TWO WAY LINKAGE

The linkage between the education system and the AIDS epidemic can be seen as a dual one. On the one hand the school system provides a mechanism for the transmission of information about HIV and hence can play a central role in the prevention effort. On the other hand the disease undermines the structure and function of the education system itself. In this study we focus primarily on the latter effect, developing a framework to assess the various aspects of the burden imposed by the disease (Kelly, 2000).

Increasing the impact of education on HIV/AIDS and reducing its impact on education AIDS will have broad demographic effects in countries with high prevalence. As the primary mode of transmission in Africa is heterosexual contact, the disease disproportionately affects men and women of reproductive age. As these individuals die, overall fertility naturally declines. Furthermore, studies have found that women who are HIV positive are less likely to conceive; fertility rates are estimated to be approximately 30 percent lower among these women. As prevalence rates raise this is expected to have a significant effect on overall fertility. Infant and child mortality can also be expected to rise with overall increases in prevalence as a result of mother-to-child transmission of HIV.

A smaller effect will be that of infection among school-age children. In many countries where children begin school at a later age and/or where repetition rates are high, many secondary school students will have entered their reproductive years. As these students become sexually active they will be increasingly exposed to the disease. This

appears to be an issue particularly in the case of young girls, as studies have shown that HIV infection rates tend to be considerably higher among teenage girls than boys. Girls from poor families are particularly vulnerable, as they are susceptible to the advances of older men with some amount of disposable income.

The HIV/AIDS epidemic in Addis Ababa has made it clear that multiple impacts can be expected in most sectors of society (Addis Ababa City Administration Health Bureau, 1999). Over the last decade, the education sector has received increased attention in the city. ("Climate and Weather," 1997)

The HIV/AIDS epidemic has a multiple impact on education, at structural, quantitative and qualitative levels (Save the Children - USA, 1999). This impact can also be identified at both city and local levels down to each single family and child (World Bank, 1999).

Children with AIDS are frequently kept home from school due to illness, or taken out of school Organization of Social Services for AIDS (OSSA, 2002). It is not unreasonable to believe that some parents see the costs of schooling as unnecessary if the child is not able to attend or performs badly due to illness.

Chapter III
Research Methods

3.1 METHODOLOGY OF THE STUDY

A quantitative research method is the type of research method employed to carry out the study. It provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. From sample results, a researcher generalizes or makes claims about the population. The researcher believes that for a better understanding of the issue covered in the study, this type of method is appropriate. Accordingly, the study employed quantitative research method to generalize from the sample to the population so that inferences can be made about the effect of education on students' knowledge, behaviour and practice in relation to HIV/AIDS in Medhanealem Preparatory School. Besides, the researcher preferred this method considering the advantage of quantitative research such as the economy of the design and the rapid turnaround in data collection.

3.2 SAMPLING TECHNIQUE

A simple random sampling design was employed. From Medhanealem Preparatory school sample were randomly selected using simple random sampling systems where we put the ID numbers of all students (2,340) on a slip of paper and a lottery was conducted and the first 112 draws was selected and participated in the questionnare. The method for sample size determination was decided on by considering time constraints and inadequate resource.

3.3 SAMPLE

To carry out the impacts of education on students' knowledge, behaviour and practice of HIV/AIDS, two hundred twelve students have been taken out of 2340 population as a sample. Gender wise students that participated in the questionnaire filling process at comprised of 58 males and 54 females out of the 112 samples.

Table 3.1 Sample Students and their Grade Level

Grade		Frequency	Percent
Valid	11th	53	47.3
	12th	59	52.7
	Total	112	100.0

3.3.1 Sample Size Determination Procedure

Sample size was obtained using sample size determination table (James E.et.al; 2001). According to the data found from the school administration the total population of students of Medhanialem Preparatory School is 2340. Sample size representative for a population of 2000 with alpha level 0.5 and margin of error 0.3 for continuous data which is 112 was taken.

The following table given clarification about the sample size determination technique.

Table for determining minimum returned sample size for a given population size for continuous and categorical Data

Population Size	Sample size					
	Continuous data (margin of error =.0.3)			Categorical data (margin of error =.05)		
	Alpha=.10 t =1.65	Alpha=.05 t=1.96	Alpha=.01 t=2.58	p=.50 t=1.65	p=.50 t=1.96	p=.50 t=2.58
100	46	55	68	74	80	87
200	59	75	102	116	132	154
300	65	85	123	143	169	207
400	69	92	137	162	196	250
500	72	96	147	176	218	286
600	73	100	155	187	235	316
700	75	102	161	196	249	341
800	76	104	166	203	260	363
900	76	105	170	209	270	382
1,000	77	106	173	213	278	399

1,500	79	110	183	230	306	461
2,000	83	112	189	239	323	499
4,000	83	119	198	254	351	570
6,000	83	119	209	259	362	598
8,000	83	119	209	262	367	613

Note: The margins of error used in the table were .03 for continuous data and .05 for categorical data. Researchers may use this table if the margin of error shown is appropriate for their study; however, the appropriate sample size must be calculated if these error rates are not appropriate. Table developed by Bartlett, Kotrlik, and Higgins.

3.4 Source of Data

Primary and secondary data were used in this study. The primary data were collected by survey method using close-ended questionnaire. The close-ended questionnaires were used to generate quantitative data. The researcher created simple 3 pages nameless self - administered questionnaires to understand the impacts of education on HIV/AIDS in Medhanealem Preparatory Schools. Three pages questionnaires were included all necessary information to get enough data. In addition, qualitative information collected from secondary sources education material.

3.5 Instruments and Procedures for Data Collection

The main instruments for data collection were used sequentially. Thus the following instruments were developed and employed.

a) FGD among the sample students from both grade levels
b) Questionnaire for all students from both grade levels
c) The schools' HIV/AIDS club teaching materials

Questionnaire: - The principal purpose of this study was to assess the impacts of education on students' knowledge, behaviour and practice of HIV/AIDS, Accordingly, one of the

possible instruments used to collect information was questionnaire. Questionnaire is a very useful tool to study in breadth and to give an overview about the issue to be studied. Thus, closed ended questions were prepared to determine the role and the impacts of education on students' knowledge, behaviour and practice of HIV/AIDS, All sample students from grade 11 and grade 12 responded for the questions.

Document Analysis: - The data collection technique used by this instrument was mainly focus on the assessment of education materials that the HIV/AIDS club used to educate the students.

Focus Group Discussions: - FGD is one of the instruments currently used in educational research. Focus groups are a form of group interview, though not in the sense of a backwards and forwards between interviewer and group. Rather, the reliance is on the interaction within the group who discuss a topic supplied by the researcher. As the study was aimed to assess the impacts of education on students' knowledge, behaviour and practice of HIV/AIDS, FGD is found to be important.

3.6 ETHICAL CONSIDERATION

As it well known, HIV is a pandemic that still has sterotypic outlook and is frowned upon among most of the population hence studies like this one seek highly sensitive informaiton. Therefore, very strong emphasis should be placed on ethical considerations. Biased, inappropriate and sexually explicit questions were not included in the questionnaire, keeping in mind that the participants are High School Students. After the selection of the 112 students all were informed of the questions to be filled and the significance of the study. After which consent was given by raise of hands. I also informed them that they have full right to discontinue or refuse to participate in the study if they felt uncomfortable.

Chapter IV
Presentation, Analysis and Interpretation

In this chapter, the researcher presented and discussed the findings of the study. The data are organized under the following headings and order: background information about the participants, the effects of education on the students' knowledge, behaviour and practice on HIV in the selected school. For the sake of convenience, related data collected and various tools used and discussed collectively under particular heading it belongs to.

4.1 BACKGROUND INFORMATION

Data were collected on respondent background information. It is believed that information on sex, grade and age about the respondents would help in understanding the remaining section. Therefore, respondent's age, sex and grade are presented in Table 1.

Table 4.1 Profile of Respondents

Grade		Frequency	Percent
Valid	11th	53	47.3
	12th	59	52.7
	Total	112	100.0

As shown in Table 3.1 out of the total 112 respondents, 53 from 11th grade and 59 from 12th grade participated in the questionnaire filling. In percentiles 11th graders comprised 47.3% while 12th graders comprised 52.7%. Regarding the grade of the respondents, the largest proportion of the respondents, i.e., 52.7%% are grade 12 students.

Table 4.2 Gender of the Respondent

Grade		Frequency	Percent
Valid	Male	58	51.8
	Female	54	48.2
	Total	112	100.0

Gender wise students that participated in the questionnaire filling process at Medhanealem preparatory high school comprised of 58 males and 54 females. The valid percentages of males and females were 51.8% and 48.2% respectively

Table 4.3 Age of the Respondent

Age	Frequency	Percent
17	47	42.0
18	21	18.8
19	18	16.1
20	14	12.5
21	7	6.3
22	5	4.5
Total	**112**	**100**

As shown in Table 4.3, there was a good distribution of age among the different students in the school. There were a total of 47 students who were 17 year olds which comprised the majority of the sample size comprising 42%. 21 students who were 18 years of age comprise 18.8% of the total sample size. There were a total of 18 students who were 19 years of age; comprising 16.1% of the total sample size. There were a total of 14 students who were 20 years of age; comprising 12.5% of the total sample size and there were also a total of 7 students who were 21 years of age and 5 students who were 22 years of age; comprising 6.3% and 4.5% respectively. Majority of the students were comprising of students in the age range of 17-20 year olds while minority of them comprised of the age group of 21-22 years of age

4.2 ANALYSIS AND INTERPRETATION

4.2.1 Sexual Partnership

According to literatures, Education is one of our key defenses against the spread and impact of AIDS. The evidence for this is growing: in countries with severe epidemics, young

people with more education who are sexually active are more likely to use condoms than their peers with less education. The researcher also believed in that as far as the education given on HIV is in a manner to change the behavior of students their sexual partnership would be limited. However, as per the findings of the FGD, the participants' opinions in this regard were varied. Some of the responded as far as they have safe sex (using condoms) the number of sexual partners doesn't matter. But majority of respondents didn't agree in this idea. They justified by responding the more there is sexual partner the more the probability to expose for HIV. One of the respondents stated the following;

"Since it is difficult a healthy looking person is infected with HIV or not, there is most likely a chance to have sex with an infected person. In this case there may be a probability of improper usage of the condom. As a result anyone can be exposed for infection. Therefore, it is safer to have limited sexual partner ship."

TABLE 4.4 REGULAR PARTNERS DURING THE LAST 12 MONTHS

Valid	Frequency	Percent
0	52	46.4
1	48	42.9
2	12	10.7
Total	**112**	**100**

- Out of the students that participated in the questionnaire 52 students replied that they have had no regular partners in the last 12 months comprising of 46.4% of the total sample size
- Out of the 112 students; 48 students replied that they have had a single regular partner in the last 12 months comprising of 42.9% of the total sample size
- Out of the 112 students; 12 students replied that they have had 2 different regular partners in the time span of the last 12 months comprising of 10.7% of the total sample size

- The data collected shows that the significant of the students have had no regular partners in the past 1 year.

According to the finding significant number of students didn't have regular partner in the past one year. This may be a change of behaviour they got through the education. However, 42.9 percent of students had one regular partner which shows more of the students are intended to limit their sexual partner than abstaining. The number of students who had more than one sexual partner in the past one year shows there is still a room for more education to bring the expected behavioural change.

Table 4.5 Non Regular Partner during the Last 12 Months

Valid	Frequency	Percent
No	53	47.3
Yes	44	39.3
Don't Know	2	1.8
No response	13	11.6
Total	**112**	**100**

- Out of the 112 students, 53 students replied that they have not had any Non-regular partner in the last 12 months comprising of 47.3% of the total sample size
- 44 students claim that they have had only 1 non regular partner in the past 12 months which comprised of 39.3% of the total student sample size
- 2 students claim that they have had 2 non regular partners in the past 12 months comprising 1.8%
- 13 students claim that they have had 3 non regular partners in the past 12 months comprising of 11.6%.

The number of students who claimed to have one or more non regular partners is very frustrating. Literatures suggest that such behavior is the main way of transmitting HIV/AIDS. In this case the education provided so far cannot be said effective or distorted

knowledge was imparted. According to the finding, though they have the information about the way HIV/AIDS is transmitted their practice witnessed they couldn't change their behavior.

Table 4.6 Commercial Partner in the Last 12 Months

Valid	Frequency	Percent
No	103	92%
Yes	9	8%
Don't know	-	-
No response	-	-
Total	**112**	**100.0**

- Out of 112 students that participated in the questionnaire 103 students replied that they have had no commercial partner in the last 12 months comprising of 92% of the total sample size
- While only 9 students claim that they have had only 1 commercial partner in the last 12 months

As shown in Table 4.6, majority of the students don't have commercial partner in the past one year. However, 9 students that is 8% of the population were involved in commercial sex. Such prevalence is not something to be ignored. Though it requires the reason why they involved in commercial sex and treat their case accordingly, the education given needs to address such students as well.

4.2.2 Using Condom and the Probability of Being Protected from HIV

During the FGD conducted among the participants, different opinions were reflected concerning the using condom to be protected from HIV. In fact, majority of the participants believed using condom during sexual intercourse can protect from HIV. However, the percentage of condoms protection was debatable. The researcher believed that the education should consider and address the protecting capacity of condom from HIV.

Table 4.7 Use of Condom with Regular Partner

Valid	Frequency	Percent
No	17	15.2
Yes	55	49.1
Don't remember	3	2.7
No response	37	33.0
Total	**112**	**100.0**

- 17 students out of the 112 students that participated replied that they do not use condom with regular partner; comprising 15.2%
- 55 students claimed that they do use condoms when having sexual intercourse with regular partner; comprising 49.1% Students claim that they do not remember; comprising 2.7% of the total Population 37 students did not wish to give a response to the question which comprised 33% of the sample size

Using condom during sexual intercourse is one of the mechanisms to protect the transmission of HIV/AIDS. This Knowledge is imparted by the school clubs in different Medias. However, the numbers of students who are using condom are almost half of the respondents. This show the education has shown some improvement in terms of change in behaviour among the students. Yet 15% of the respondents confirmed that they don't use condom during sexual intercourse. This shows the method of teaching needs to be considered in a manner that addresses all students understanding.

Table 4.9 Knowledge of Sexual Transmission Infections (STI's)

Valid	Frequency	Percent
No	4	3.6
Yes	99	88.4
Don't remember	2	1.8
No response	7	6.3
Total	**112**	**100.0**

- Out of the 112 students 4 students claimed that they had no knowledge of STI comprises of 3.6%.
- 99 students claimed that they had knowledge of sexually transmitted infections; comprising 88.4%.
- 2 students claimed that they don't know about knowledge of STI's; comprising 1.8%.
- 7 students decided not to respond comprising of 6.3%.

As shown in Table 4.9 majority of the respondents (88.4%) has knowledge about sexually transmitted infections (STI). In fact, the number of respondents were not willing to respond and don't have knowledge about STI is not to be ignored. Though it is insignificant it also indicates the education doesn't address all the students and there is a possibility of not knowing about HIV/AIDS through the education.

Table 4.10 History of Sexual Transmission Infections (STI's) in the past 12 months

Valid	Frequency	Percent
No	105	93.8
Yes	6	5.4
Don't know	-	-
No response	1	.9
Total	**112**	**100.0**

- Out of the 112 students, 105 students claimed that they have had no prior history of STI's in the past 12 months comprising of 93.8%

  6 students claimed that they have had at least 1 form of STI's in the past 12 months
- 1 student chose not to give a response comprising of 0.9%

As shown in Table 4.10, majority of the respondents have no prior history of STIs in the past one year. It is encouraging that the respondents are safe from STI. It is possible to consider they were using condoms or abstained from having sex. Whatever, the reason might be the impact of education could be considered either to use condom or being abstain.

Table 4.11 Willingness to Share a Meal with an HIV Patient

Valid	Frequency	Percent
No	55	49.1
Yes	12	10.7
Don't know	43	38.4
No response	2	1.8
Total	**112**	**100.0**

- 55 students out of the 112 replied that they were not willing to share a meal with an HIV patient comprising of 49.1% of the total sample size
- 12 students were indeed willing to share a meal with an HIV patient comprising 10.7%
- 43 students did not know where they are willing to share a meal with an HIV patient comprising of 38.4%.
- 2 students did not wish to reply, comprising of 1.8%.

According to the FGD that was held among the respondents the attitude towards a person infected with HIV/AIDS was discouraging. As per the expression of the participants it was not because they were afraid of being infected, it was without reason. This showed the attitudinal change is not yet satisfactory. As shown in Table 10, almost half of the respondents are not willing to share meal with an HIV patient.

Table 4.12 Should People with HIV/AIDS be allowed to attend Community Activities?

Valid	Frequency	Percent
No	7	6.3
Yes	82	73.2
Don't know	21	18.8
No response	2	1.8
Total	**112**	**100.0**

Out of the 112 students only 6.3 % thought that people with HIV/AIDS should not be allowed to attend community activities like EKKUB and IDDIR

- 82 students replied that people with HIV should be allowed to freely attend community activities comprising 73.2%

- 21 students replied that they did not know whether or not people with HIV/AIDS be allowed to attend community activities comprising 18.8% of the sample student size Only 2 students did not wish to give a response to the question comprising 1.8%.

As shown in Table 3.11, majority of the respondents have positive attitude for people with HIV to have social interaction among the other community. It is possible to conclude that the education provided about stigma and discrimination against people with HIV should be discouraged because 73.2% of the respondents support the idea of allowing people with HIV to attend in the community activities.

Table 4.13 Willingness to Buy Food from a Food Vendor Infected with HIV

Valid	Frequency	Percent
No	65	58.0
Yes	19	17.0
Don't know	18	16.1
No response	10	8.9
Total	**112**	**100.0**

- Out of the 112 students, 65 students were not willing to buy food from
- a food vendor infected with HIV comprising of 58% of the sample size
- 19 students were willing to buy food from a food vendor infected with HIV comprising of 17%
- 18 students did not know whether or not they were willing to buy food from an HIV infected person
- 10 students did not wish to give a response to the question

Regarding to buy food from an infected person with HIV, more than half of the respondents were not willing. This is an indicator of the attitude of the respondents vary in terms of stigma and discrimination. This may be due to lack of in depth knowledge about the transmission mechanisms or other social factors. However, the education provided with regard to stigma and discrimination has a gap. Though it is not significant, the number of respondents who are willing to buy food is also an indicator of the educations impact.

Table 4.14 Can using Condom Protect from Transmission of HIV

Valid	Frequency	Percent
No	3	2.7
Yes	80	71.4
Don't know	19	17.0
No response	10	8.9
Total	**112**	**100.0**

- Out of the 112 students only 3 students replied that use of a condom does not protect from transmission of HIV which comprised of only 2.7% of the sample size
- 80 students on the other hand replied that they indeed thought that use of condom can protect from transmission of HIV comprising of 71.4%

- 19 students did not know whether or not condom use can protect from transmission of HIV comprising of 17%

- 10 students did not give a response to the question comprising of 8.9%

Regarding whether using condoms can protect from HIV or otherwise, majority of the respondents (71.4%) confirmed that condom protects from HIV. The respondents' knowledge concerning condom is encouraging and the education played great role in this regard. However, the number of respondents who are in dilemma cannot be ignored. Therefore, the method educating the students to aware about the reliability of condom in protecting HIV should be revised.

Table 4.15 Can HIV be transmitted by Mosquito Bite?

Valid	Frequency	Percent
No	48	42.9
Yes	31	27.7
Don't know	29	25.9
No response	4	3.6
Total	**112**	**100.0**

- When asked if they thought HIV can be transmitted by mosquito bite 48 students replied that they did not think that HIV can be transmitted by mosquito bites comprising of 42.9%

- 31 students replied that they thought that HIV indeed can be transmitted by a mosquito bite comprising of 27.7%

- 29 students replied that they did not know whether or not HIV can be transmitted by mosquito bite comprising of 25.9%

- 4 students did not give a response to the question

As shown in Table 4.15, the number of respondents who believed HIV/AIDS can be transmitted by mosquito and the number of respondents who didn't know whether HIV/AIDS is transmitted by a mosquito is significant. It is only 42.9% of the respondents who did not think (though not hundred percent sure) that confirm mosquito doesn't transmit HIV/AIDS. Therefore, there is still the need to educate that HIV/AIDS doesn't transmitted by insect bites which most people are not sure about according to literatures.

Table 4.16 Can Abstinence Protect from Acquiring HIV

Valid	Frequency	Percent
No	32	28.6
Yes	55	49.1
Don't know	20	8.9
No response	15	13.4
Total	**112**	**100.0**

- Out of the 112 students that participated 32 students did not think that abstinence can protect from HIV comprising of 28.6%
- 55 students did indeed believe that abstinence does protect from HIV comprising of 49.1 % of the sample size 10 students did not know whether or not abstinence can protect HIV or not.
- 15 students chose not to give a response

Even if almost half of the respondents believe in abstinence does protect from HIV/AIDS almost one third of respondents don't think abstinence can protect HIV/AIDS. Though it is insignificant number of respondents who don't know about whether it protects or not, it shows the gap in education. In general literature suggests abstinence is one of the best protecting method from HIV/AIDS the number of respondents who don't think it can protect the transmission is frustrating. Therefore, the education with regard to abstinence

needs to be revised. So far, the lesson given on this issue has a big gap as far as this particular topic is concerned.

Table 4.17 Can a Healthy Looking Person be infected with HIV

Valid	Frequency	Percent
No	10	8.9
Yes	54	48.2
Don't know	31	27.7
No response	17	15.2
Total	**112**	**100.0**

- Out of the 112 students that participated only 10 students did not think that a healthy looking person can be infected with HIV comprising of 8.9%
- 54 students indeed believe that a healthy looking person can be infected HIV comprising of 48.2% of the sample size
- 31 students did not know whether or not a healthy looking person can be infected with HIV comprising of 27.7 % of the total sample size
- 17 students chose not to give a response

In fact, almost half of the respondents know that a healthy looking person can be infected with HIV. However, as shown in Table 16, a little more than a quarter of respondents are not sure whether a healthy looking person can be infected with HIV and 8.9% of the respondents don't think a healthy looking person can be infected with HIV. This showed how the respondents have a gap in knowledge between HIV infected person and HIV patient. Literatures show that a person who is infected with HIV may look healthy. Therefore, the education is expected to make clear the difference between HIV infected and HIV patient so that the students can be cautious about HIV/AIDS whenever they have sexual relationship with a healthy looking person.

Table 4.18 Can a Pregnant Women who is HIV Positive Transmit the Virus to Her Fetus?

Valid	Frequency	Percent
No	-	-
Yes	69	61.6
Don't know	37	33.0
No response	6	5.4
Total	**112**	**100.0**

- Out of the 112 students 69 students indeed believe that a pregnant women who is HIV positive can transmit the virus to her fetus comprising of 61.6% of the sample size

- 37 students did not know whether or not a pregnant women who is HIV positive can transmit the virus to her fetus comprising of 33 % of the total sample size

- 6 students chose not to give a response comprising of 5.4%.

As shown in Table 3.17 majority of the respondents know HIV can be transmitted form a positive pregnant woman to the fetus. As literature witnessed that HIV aids can be transmitted from HIV positive mother to a fetus, the students' knowledge in this regard is encouraging. However, there is still a gap in terms of educating 33 % of the respondents who don't know about the case.

Table 4.19 Can HIV be Transmitted through Breastfeeding?

Valid	Frequency	Percent
No	36	32.1
Yes	40	35.7
Don't know	27	24.1
No response	9	8.0
Total	**112**	**100.0**

- Out of the 112 students that participated 36 students did not think that HIV can be transmitted through breastfeeding.
- 40 students indeed believe that HIV can be transmitted through breastfeeding comprising.
- 27 students did not know whether or HIV can be transmitted through breast feeding comprising of 24.1 %.

Majority of the respondents either don't think whether HIV is transmitted through Brest Feeding or not one sure whether it is one way of transmission or not. Therefore, the students' knowledge in this regard is far behind the expected level. There is a lot to be done on this issue because this the probability of giving birth for some of the students is very high form their sexual practiced observed through the questionnaire.

Table 4.20 If Voluntary Counselling and Testing Services is Available to you will you be willing to Use it?

Valid	Frequency	Percent
No	29	25.9
Yes	41	36.6
Don't remember	32	28.6
No response	10	8.9
Total	**112**	**100.0**

- Out of the 112 students, 29 students replied that they were not willing to participate in voluntary counselling and testing services if made available which accounted for 25.9 % of the total sample size
- 41 students replied that they were willing to participate in a voluntary counselling and testing service which comprised 36.6%

- 32 students did not know whether or not they were willing to participate comprising 28.6%
- 10 students did not wish to reply comprising of 8.9%

As shown in Table 19, a quarter of the respondents are not willing to participate in voluntary counselling and testing service and a little more than a quarter is in dilemma. It is only 36.6 % of the respondents who are willing to participate in voluntary counselling and testing. This showed the education given is not to the extent that most of the students to be encouraged for the voluntary counselling and testing.

Chapter V
Summary, Conclusions and Recommendations

5.1 SUMMARY

The purpose of this study is to investigate the impacts of education on HIV/AIDS in Addis Ababa Public High School. Emphasis was given to understand the knowledge, attitude and practice of the students regarding HIV/AIDS. To this effect sexual history of the students, their knowledge on the transmission methods of the virus and students attitude to care and support those infected and affected by the virus were key thematic areas of the study. HIV/AIDS has become a devastating challenge that threatens the development endeavours as well as well-being of largely the populations in the less developed world. In Ethiopia HIV is spreading at alarming rate. The trend in the age group of 15-24 shows need for coordinated effort from all parties. The following are major findings of the study that require further investigation in other future researches:

5.1.1 Concerning the Effect of Education on the Students' Knowledge on HIV

Even if the rate varies according to studies the following are some of the causes for spreading of HIV in Ethiopia.

- Sexual force against women Unprotected sex – Partners infected unprotected sexual contact with one(Vaginal, anal, oral)
- Prostitution
- Drug abuse
- Mother-to-child transmission - assignment woman during the pregnancy under the birth or by the mother's milk (prenatal transmission) HIV infected of one.

The study findings about the knowledge of causes for transmission of HIV showed as follows;

Majority of the respondents either don't think whether HIV is transmitted through Brest Feeding or not sure whether it is one way of transmission or not. Therefore, the

students' knowledge in this regard is far behind the expected level. There is a lot to be done on this issue because this the probability of giving birth for some of the students is very high form their sexual practice observed through the study. Besides, their age is allowed them to get married sooner.

Majority of the respondents know HIV can be transmitted form a positive pregnant woman to the fetus. The students' knowledge in this regard is encouraging. However, there is still a gap in terms of educating 33 % of the respondents who don't know about the case.

Majority of the respondents (88.4%) has knowledge about sexually transmitted infections (STI). In fact, the number of respondents were not willing to respond and don't have knowledge about STI is not to be ignored. Though it is insignificant it also indicates the education doesn't address all the students and there is a possibility of not knowing about HIV/AIDS through the education.

The number of respondents who believed HIV/AIDS can be transmitted by mosquito and the number of respondents who didn't know whether HIV/AIDS is transmitted by a mosquito is significant. It is only 42.9% of the respondents who did not think (though not hundred percent sure) that confirm mosquito doesn't transmit HIV/AIDS. Therefore, there is still the need to educate that HIV/AIDS doesn't transmitted by insect bites which most people are not sure about according to literatures.

Even if almost half of the respondents believe in abstinence does protect from HIV/AIDS almost one third of respondents don't think abstinence can protect HIV/AIDS. Though it is insignificant number of respondents who don't know about whether it protects or not, it shows the gap in education. In general literature suggests abstinence is one of the best protecting method from HIV/AIDS the number of respondents who don't think it can protect the transmission is frustrating. Therefore, the education with regard to abstinence

needs to be revised. So far, the lesson given on this issue has a big gap as far as this particular topic is concerned.

Regarding whether using condoms can protect from HIV or otherwise, majority of the respondents (71.4%) confirmed that condom protects from HIV. The respondents' knowledge concerning condom is encouraging and the education played great role in this regard. However, the number of respondents who are in dilemma cannot be ignored. Therefore, the method educating the students to aware about the reliability of condom in protecting HIV should be revised.

5.1.2 Concerning the Effect of Education on Students' Behaviour about HIV

Most of the respondents have no prior history of STIs in the past one year. It is encouraging that the respondents are safe from STI. It is possible to consider they were using condoms or abstained from having sex. Whatever, the reason might be the impact of education could be considered either to use condom or being abstain.

According to the FGD that was held among the respondents the attitude towards a person infected with HIV/AIDS was discouraging. As per the expression of the participants it was not because they were afraid of being infected, it was without reason. This showed the attitudinal change is not yet satisfactory.

Majority of the respondents have positive attitude for people with HIV to have social interaction among the other community. It is possible to conclude that the education provided about stigma and discrimination against people with HIV should be discouraged because 73.2% of the respondents support the idea of allowing people with HIV to attend in the community activities.

Regarding to buy food from an infected person with HIV, more than half of the respondents were not willing. This is an indicator of the attitude of the respondents vary in

terms of stigma and discrimination. This may be due to lack of in depth knowledge about the transmission mechanisms or other social factors. However, the education provided with regard to stigma and discrimination has a gap. Though it is not significant, the number of respondents who are willing to buy food is also an indicator of the educations impact.

5..1.3. Concerning the Effect of Education in of Students' Practice about HIV

According to the finding significant number of students didn't have regular partner in the past one year. This may be a change of behaviour they got through the education. However, 42.9 percent of students had one regular partner which shows more of the students are intended to limit their sexual partner than abstaining. The number of students who had more than one sexual partner in the past one year shows there is still a room for more education to bring the expected behavioural change.

The number of students who claimed to have one or more non regular partners is very frustrating. Literatures suggest that such behavior is the main way of transmitting HIV/AIDS. In this case the education provided so far cannot be said effective or distorted knowledge was imparted. According to the finding, though they have the information about the way HIV/AIDS is transmitted their practice witnessed they couldn't change their behavior.

Majority of the students don't have commercial partner in the past one year. However, 9 students that is 8% of the population were involved in commercial sex. Such prevalence is not something to be ignored. Though it requires the reason why they involved in commercial sex and treat their case accordingly, the education given needs to address such students as well.

Most of the respondents have no prior history of STIs in the past one year. It is encouraging that the respondents are safe from STI. It is possible to consider they were

using condoms or abstained from having sex. Whatever, the reason might be the impact of education could be considered either to use condom or being abstain.

5.2 CONCLUSION

According to several studies, AIDS has brought complex and multifaceted problems to human development and a change in the demographic, social, economic and political structures. Equally, the impact of HIV/AIDS in Ethiopia are broadly categorized as demographic, social, economic, agriculture, health care, education, impact on households and communities.

Education is one of our key defenses against the spread and impact of AIDS. The evidence for this is growing: in countries with severe epidemics, young people with more education who are sexually active are more likely to use condoms than their peers with less education.

Moreover, education has been cited by several well-respected sources, including the World Bank, as one of the most important factors in helping to prevent this group from contracting HIV and AIDS. HIV/AIDS prevention programs work with young people. Evaluations have found that school and community-based programs can reduce risks and are effective in making a positive impact on knowledge, attitudes and risk behavior.

The objective of this study is to look in to The Effects of Education on Students Knowledge, Behavior and practice on HIV/AIDS in Medhanealem Preparatory School.

Accordingly, the study found out the following;

Concerning the students' knowledge on HIV;

- The students' knowledge regarding HIV transmission through Brest Feeding is far very law. There is a lot to be done on this issue because this the probability of giving birth for some of the students is very high form their sexual practice observed through the study.

- Most of the respondents know HIV can be transmitted form a positive pregnant woman to the fetus. As literature witnessed that HIV aids can be transmitted from HIV positive mother to a fetus, the students' knowledge in this regard is encouraging. However, there is still a gap in terms of educating 33 % of the respondents who don't know about the case.

- Majority of the respondents (88.4%) has knowledge about sexually transmitted infections (STI). In fact, the number of respondents were not willing to respond and don't have knowledge about STI is not to be ignored.

- The number of respondents who believed HIV/AIDS can be transmitted by mosquito and the number of respondents who didn't know whether HIV/AIDS is transmitted by a mosquito is significant. It is only 42.9% of the respondents who did not think (though not hundred percent sure) that confirm mosquito doesn't transmit HIV/AIDS.

- Even if almost half of the respondents believe in abstinence does protect from HIV/AIDS almost one third of respondents don't think abstinence can protect HIV/AIDS. Though it is insignificant number of respondents who don't know about whether it protects or not, it shows the gap in education.

- Regarding whether using condoms can protect from HIV or otherwise, majority of the respondents (71.4%) confirmed that condom protects from HIV. The respondents' knowledge concerning condom is encouraging and the education played great role in this regard.

Concerning the students' behaviour on HIV;

- Most of the respondents have no prior history of STIs in the past one year. It is encouraging that the respondents are safe from STI. It is possible to consider they were using condoms or abstained from having sex.

- The attitude towards a person infected with HIV/AIDS was discouraging. This showed the attitudinal change is not yet satisfactory. Almost half of the respondents are not willing to share meal with an HIV patient.

- Majority of the respondents have positive attitude for people with HIV to have social interaction among the other community. 73.2% of the respondents support the idea of allowing people with HIV to attend in the community activities.
- Regarding to buy food from an infected person with HIV, more than half of the respondents were not willing. This is an indicator of the attitude of the respondents vary in terms of stigma and discrimination.

- Concerning the students' practice that exposes them to HIV;

- Significant number of students didn't have regular partner in the past one year. This may be a change of behaviour they got through the education. However, 42.9 percent of students had one regular partner which shows more of the students are intended to limit their sexual partner than abstaining.
- The number of students who claimed to have one or more non regular partners is very frustrating. In this case the education provided so far cannot be said effective or distorted knowledge was imparted.

- Most of the students don't have commercial partner in the past one year. However, 9 students that are 8% of the population were involved in commercial sex. Such prevalence is not something to be ignored.

- Majority of the respondents have no prior history of STIs in the past one year. It is encouraging that the respondents are safe from STI. It is possible to consider they were using condoms or abstained from having sex.

5.3 RECOMMENDATION

In terms knowledge to transfer

- The students' knowledge concerning transmission of HIV from an infected mother to fetus is law. Therefore, the school HIV/AIDS club needs to give emphasis the recent discoveries how HIV can be transmitted from an infected mother to fetus and the protection of transmission.
- Concerning the education about Sexually Transmitted Infection (STI) the knowledge need to be addressed to all students. The school club need to seek for a mechanism how to make sure whether all students are addressed through its education or not.
- The students need to know about some suspected means of transmission of HIV. For example, mosquito is one of the suspected insect that believed to transmit HIV. Therefore, the education needs to make the students knowledgeable about the main causes and ways of HIV transmissions.
- Abstinence is one of the best methods to be protected from HIV. Therefore, the students need to have clear knowledge about abstinence. The education club needs to give emphasis about abstinence in its education.
- There were some students who were in dilemma about whether condom can protect HIV or otherwise. Therefore, the students need to be educated about the reliability

of condom in protecting HIV. The club need to invite external gusts who are professional in the health sector to improve the students' knowledge.

In general the school's HIV/AIDS club needs to educate and make the Students knowledgeable about scientific findings about causes and means of transmission for HIV/AIDS. The method of teaching also need to be revised depending on the topic presented to the students.

In terms of change in behaviour

- It is encouraging that the respondents are safe from STI. It is possible to consider they were using condoms or abstained from having sex. However, the education needs to address the gap shown on students' behaviour on some students.
- It is possible to conclude that the education provided about stigma and discrimination against people with HIV should be discouraged because 73.2% of the respondents support the idea of allowing people with HIV to attend in the community activities.
- Although, the students have positive attitude towards people with HIV, some gap has been observed with regard to stigma and discrimination. Therefore, detail information should be imparted through the education to minimize the gap.

The students' change in behaviour needs more emphasis in comparison with their knowledge. The method of educating the students about HIV/AIDS should go beyond informing the students. Behavioural changing methods of education should be implemented by the club.

In terms of change in practice

- Some students had more than one sexual partner in the past one year; the number of students who claimed to have one or more non regular partners is very frustrating. Therefore, the school club needs support from the government health offices and other

organizations that are working on HIV/AIDS to provide with proper education and discourage the practice observed by the students.

- Few students who are involved in commercial sex should be identified and get support so that they may have a chance to continue their education. In this regard the club need to go beyond education and design a strategy with the school to support who are enforced to involve in commercial sex.

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Appendix A

BUDGET

The cost of undertaking the research can be covered personally from my own source. The estimated required costs are summarized in the table below.

Table showing estimated material and service costs.

S. No.	Items	Total Birr
1	Stationary (Secondary Data), photocopy, pen and writing pad	2,000.00
2	Per diem for data collectors (3 persons x 40Birr x 6 days)	720.00
3	Fuel cost for myself (40km x 6 days = 240.00 x 18.78)	4,507.20
4	Cost for Data, labelling, coding and entry for statisticians	2,000.00
	TOTAL	9,227.20

Appendix B

Survey Questionnaire to Understand Knowledge, Attitude and Practice of Addis Ababa Public High School Students on HIV/AIDS

1. Grade ☐ **1.** 11th **2.** 12th

2. Gender of the respondent ☐ 1. Male 2. Female

3. Age of the respondent ☐

Instruction 1

Please thick in the boxes given next to the questions. Your answer will be according to the following. No ☐ Yes ☐ Don't know ☐ No response ☐

4. Think about the sexual partners you've had in the last 12 months.

How many were:

A. Regular Partners ☐ ☐ ☐ ☐

B. Commercial (partner who paid you or you paid for sex) ☐ ☐ ☐ ☐

C. Non-regular partners ☐ ☐ ☐ ☐

Instruction 2

Please circle on the answer among the given alternatives.

5. The last time you had sex with a regular partner; did you and your partner use a condom?

1. No 2. Yes 3. Don't remember 4. No response

6. The last time you had sex with a commercial partner; did you and your partner use a condom?

1. No 2. Yes 3. Don't remember 4. No response

7. The last time you had sex with non-regular but non-commercial partner, did you and your partner use a condom?

1. No 2. Yes 3. Don't know 4. No response

8. Have you ever heard of diseases that can be transmitted through sexual intercourse?

1. No 2. Yes 3. Don't know 4. No response

9. Have you had sexually transmitted disease during the past 12 months?

1. No 2. Yes 3. Don't know 4. No response

10. Do you think people living with HIV/AIDS should be quarantined?

1. No 2. Yes 3. Don't know 4. No response

11. Would you be willing to share a meal with a person you knew had HIV or AIDS?

1. No 2. Yes 3. Don't know 4. No response

12. If a relative of yours became ill with HIV, the virus that causes AIDS, would you be willing to care for him/her in your household?

1. No 2. Yes 3. Don't know 4. No response

13. If a person has HIV but is not sick, should he be allowed to continue attending meetings of IDDIR, IKKUB and related community activities?

1. No 2. Yes 3. Don't know 4. No response

14. If you knew a shop keeper or food seller had HIV virus, would you buy food from him/her?

1. No 2. Yes 8. Don't know 9. No response

15. If a member of your family became ill with HIV, the virus that causes AIDS, would you want it to remain secret?

1. No 2. Yes 3. Don't know 4. No response

16. Can people protect themselves from the HIV viruses by using a condom correctly every time they have sex?

1. No 2. Yes 3. Don't know 4. No response

17. Can a person get the HIV from Mosquito bites?

1. No 2. Yes 3. Don't know 4. No response

18. Can a person get the HIV by sharing a meal with someone who is infected?

1. No 2. Yes 3. Don't know 4. No response

19. Can people protect themselves from the HIV by having one uninfected faithful sex partner?

1. No 2. Yes 3. Don't know 4. No response

20. Can people protect themselves from the HIV by abstaining from sexual intercourse?

1. No 2. Yes n3. Don't know 4. No response

21. Do you think that a healthy-looking person can be infected with HIV, the virus that causes AIDS?

1. No 2. Yes 3. Don't know 4. No response

22. Can a pregnant woman infected with HIV or AIDS transmit the virus to her unborn child?

1. No 2. Yes 3. Don't know 4. No response

23. Can a woman with HIV or AIDS transmit the virus to her new-born child through breastfeeding?

1. No 2. Yes 3. Don't know 4. No response

24. If you have a member of your family sick for a long time or an AIDS patient, how would you take care in handling body fluids like diarrheal, vomit, sputum and blood?

1. NO SPECIAL CARE ☐
2. WASH HANDS AFTER CARE ☐
3. USE PLASTIC GLOVE ☐
4. ASK SOMEONE ELSE TO HELP ☐
5. OTHERS ☐
6. NO RESPONSE ☐

25. Is there any organization or group that can provide home based care for AIDS patients in your community?

1. No 2. Yes 3. Don't know 4. No response

26. Who do you think are the right groups for providing this type of services?

1. FAMILY MEMBERS ☐
2. VOLUNTEERS ☐
3. NEIGHBORS ☐
4. RELIGIOUS GROUPS ☐
5. HEALTH WORKERS ☐

6. OTHERS ☐

7. DON'T KNOW ☐

8. NO RESPONSE ☐

27. If a VCT (voluntary counselling and testing) service is available to you will you be willing to use it?

1. No 2. Yes 3. Don't know 4. No response