ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

SPATIAL VARIATION IN THE AWARENESS AND KNOWLEDGE OF HIV/AIDS BETWEEN RURAL AND URBAN AREAS IN THE AMHARA REGION

THE CASE OF METEMA WOREDA

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Submitted in Partial Fulfillment of Master of Arts Degree in Geography in Addis Ababa University

November, 2003
Addis Ababa

Acknowledgement

First and for most I would like to express my heartfelt and deepest gratitude to my wife W/ro Berhane Ejigu for her dedication and devoted collaboration in material and moral support.

I am also grateful to my advisor, Dr. Beyene Doilicho for his invaluable comment and constructive advice to the accomplishment of this research.

Wagaw Legesse

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Acronyms and Abbreviations

ADF	African Development Form
AIDS	Acquired Immune Deficiency Syndrome
CRDA	Christian Relief Development Association
CSA	Central statistics Authority of Ethiopia
DHS	Demography And Health Center
FDRE	Federal Democratic Republic Of Ethiopia
HIV	Human Immune Virus
IEC	Information, Education And Communication
MOH	Ministry Of Health
NAC	National Aids Council
PRB	Population Reference bureau
STDS	Sexually Transmitted Dieses
WHO	World Healthy Organizations

Abstract

The major objective of this study was to explore whether there is a significant variation in knowledge of HIV/AIDS among rural and urban residents of Metema woreda. An attempt was also made to examine knowledge on HIV/AID in relation to some selected background characteristics: sex, age, marital status, educational level and religion using percentage and Chi-square test. The dependent variables were tested against independent variables sex, age, educational level marital status and religion were used as useful variables for both sample areas separately.

Four hundred seventy five randomly selected respondents participated in the study. Data were collected using structured questionnaires.

Misconceptions of the mode of HIV transmission were higher among rural respondents than among urban respondents (47%) of rural respondents(22 percent of the males 25 percent of the females) believed that HIV can be transmitted through kissing whereas only (11.4 %) of urban respondents (5.5 percent of the males and 5.9 percent of the females believed that HIV can be transmitted by kissing.(85%) of rural participants (Thirty five of the males and 50 percent of the females) mentioned that HIV can be transmitted by mosquito bits whereas only (4.4%)of urban respondents) (2.4 percent of the males and 2.0 percent), of the females mentioned that HIV can be transmitted by mosquito bites.

To see the clear awareness and knowledge variation between rural and urban head of households about HIV/AIDS, Chi-square test was carried out. For the question" can AIDS be cured"? " Can a healthy looking person have HIV/AIDS"? and "Have you ever used condom" the Chi-square result shows P< 0.001.

The study revealed that rural respondents had no easy access to condom. As a result they were the least user of it. Recommendations were forwarded that may enhance knowledge of HIV/AIDS and bring about behavioral changes among the study population.

Educational variation, exposure to mass media and place of residence are the major factors that contribute to the variation in knowledge about HIV/AIDS between rural and urban head of households.

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CHAPTER ONE

1.1 Introduction

The origin of human immune deficiency virus continues to be an enigma and the timing of the first human infection remains unknown (IUSSP, 1993). The fast advancing spread of Acquired Immune Deficiency Syndrome (AIDS) has raised the question on its origin to the top of the priorities. However, it still remains debatable.

The AIDS epidemic began spreading around 1980's in North America, Western Europe and Sub- Saharan Africa. Since then, HIV that causes AIDS, has quickly reached all corners of the globe (Bongaarts as cited in WHO 1996).

In Ethiopia, the first evidence of infection was found in 1984 and the first AIDS case was reported in 1986 (WHO, 1996: 10). In its early times HIV/AIDS epidemic was considered as only a health problem. Now it has become a global crisis, and continues to be one of the most formidable challenges to development and social progress (ILO, 2002: 4).

Ethiopia is one of the sub-Saharan African countries, which suffers the highest rate of HIV/AIDS prevalence in the world next to South Africa and India (DVV, 2002: 9). According to the 1997 Ministry of Economic Development and Cooperation of Ethiopia, its population is characterized by large proportion of youth; 48 percent is under 15 years of age. The working age population, aged 15 – 59, comprises 47.2 percent, while the aged population, 60 years and above, constitutes only 4.7 percent (MEDaC 1997: 4). The age group (15 – 49) is the most productive or active segment of the society that is expected to support economically the age groups below 15 and above 60 years.

In 2000, about2.6 million people in Ethiopia lived with HIV/AIDS. Of this total, 2.4 million were adults (NAC 2001: 9). In 2001, 2.8 million adults were also expected to be living with HIV/AIDS in Ethiopia (DVV, 2002: 8). This shows that the prevalence rate still increases. For example, it was zero in 1984, and has now reached 6.0 – 9.0 percent (MOH, 2000).

Globally, the rapid spread of the epidemic has drawn the attention of many scholars to devote their time and energy to slow down its spread. Nevertheless, the effort made so far, particularly in the field of medicine, did not show promising results. Thus, in the absence of curative medicine to HIV/AIDS, the only way to arrest it is to let people know the basic facts about HIV/AIDS transmission, non transmission, prevention, care and to draw effective intervention strategy.

Several studies undertaken by different scholars in different countries have affirmed that the dominant mode of transmission of HIV/AIDS is heterosexual intercourse. In Ethiopia, too, heterosexual contact is the dominant mode of transmission constituting about 87 percent (MOH, 1996).

In the era of HIV/AIDS epidemic, behavioral change is the only means to prevent the transmission of the disease. Behavioral change, however, is not easy to achieve. After the advent of the epidemic in Ethiopia the government is trying its best to reduce the rate of the prevalence but has not fully controlled the prevalence.

1.2 Statement of the Problem

HIV/AIDS continues to pose a major threat to all human race in general and Africa in particular. AIDS is andexpensive disease' in the sense that it requires a considerable amount of resources for treatment, and funeral expenses. For example, in rural Ethiopia an average of 2500 birr is required for 'teskar' (MOH, 2000: 33). It is several times the average household income.

The highest rates of HIV infection occur in the countries of Eastern and Southern Africa. More than half of the Sub-Saharan African countries at the end of 1999 showed an adult prevalence of greater than 5 percent. The countries that are suffering from the highest percentage of HIV prevalence are those with the largest population, Nigeria, Ethiopia, South Africa and Democratic Republic of Congo (Kelley, 2001:4).

As stated earlier, 47.2 percent of the Ethiopian population is in the age group 15 – 59. The rate of spread of HIV/AIDS for adults increases from time to time. Among the major factors that facilitate HIV spread in the country are poverty, low level of understanding, poor management, cultural obstacles, and civil war and conflicts etc. (FDRE, 2001).

Like in other developing countries many people in Ethiopia do not believe the existence of HIV/AIDS. As a result some believe HIV/AIDS as a mere propaganda of the west to incriminate Africa as the origin of the pandemic. Others also consider the health education about HIV/AIDS as a simple advertisement of condom. Still others believe that AIDS is punishment form God against prostitutes and homosexuals (Beyene et al 1993).

Drawing an effective intervention strategy, therefore, requires good understanding of sexual behavior of various sections of the society as each group differs in its exposure to the information and the risk of the disease. For example, commercial sex workers (CSW), students, youth out of school, workers in industry, farmers, workers in the informal sector etc differ in the degree of awareness, knowledge, exposure and perception as to the risk of infection. The common intervention mechanisms designed in National AIDS Council (NAC) are promoting abstinence before marriage and faithfulness to one partner, promoting the use and availability of condoms including female condoms and controlling other sexually transmitted diseases.

There is no problem in preparing the policies on paper but the problem comes when these mechanisms cannot make the people equally aware of the danger associated

with HIV/AIDS in urban and rural areas. Despite the efforts of changing the behavior, the focus and dissemination goals do not seem to have been achieved.
The author's contention is that issuing policies and not using them effectively to bring about changes in the behavior of people of the countryside will not bring rapid change in preventing the spread of HIV.

Many of the studies that have been made on the issue of HIV spread in Ethiopia are very general and mostly confined to big cities where HIV/AIDS has already greatly expanded. But rural areas and small towns have not got sufficient attention. For example, the intervention mechanisms such as male and female condoms may not be easily available and the way to use them may not be known in the countryside.

Therefore, the primary focus of this research is to assess the level of variations in knowledge and awareness about HIV/AIDS between rural and urban communities in the Amhara regional state, North Gondar – Metema Woreda.

1.3 Objectives of the Study

The main objectives of this study is to explore the level of knowledge and awareness variation on HIV/AIDS between rural and urban residents, and identify some potential risk factors.

1.3.1 Specific Objectives

1. To explore the knowledge of the study population on HIV/AIDS in relation to their education, exposure to mass media, religion, age, martial status and place of residence (urban and rural).
2. To assess factors that affect their knowledge on HIV/AIDS

1.4 Research Questions

1. Are there any socio – cultural obstacles influencing the people in the understanding of HIV/AIDS?
2. Are there variation in the knowledge and awareness of HIV/AIDS between urban and rural residents of the study area?
3. Do urban and rural residents have equal access of information about HIV/AIDS?
4. Are intervention mechanisms such as male and female condoms easily available in both rural and urban areas?

1.5 Methods of Data Collection and Analysis

1.5.1 Methods of Data Collection

For this study both primary and secondary data collection methods were employed. Primary data collections was carried out using structured questionnaires. Relevant secondary data (both published and unpublished) were obtained from libraries, documentation centers, offices of governmental and non-governmental organizations.

1.5.2 Methods of Data Analysis

The methods employed to analyze the data included both descriptive and inferential statistics. Tables and maps were also used to organize and describe the data. Some measures of association and tests of significance were also used. The statistical method (s) employed to carry out this study were univariat and bivariat analysises.

1.6 Sample Techniques

There are 24 rural kebele administrations and 3 urban kebeles in Metema, woreda. Of these administrations one from urban kebeles which has largest percentage of dwellers (33 percent) and two from rural kebeles (8 percent), which are very remote were selected for this study.

From lists of households of the selected kebeles sample headS of households were selected using simple random sampling. A sample of 178 from urban dwellers and 297 from rural dwellers were selected and questionnaires were administered in two ways; those who could read and write filled the questionnaire by themselves and those who do not read and write filled the questionnaire with the help of enumerators

1.7 Significance of the Study

The findings of this research will be valuable inputs for designers of HIV/AIDS prevention, intervention strategies. It will give an opportunity to capture the risk factors for the transmission of HIV in these areas. It will also help them to draw a sound and effective awareness creating mechanisms for rural areas, which are remote from modern source of information.

1.8 Organization of the Thesis

This thesis is organized into five chapters. The first chapter deals with introduction, that gives the highlights of the contents of the thesis, like the statement of the problem which shows what initiated the researcher to study that problem; objective of the study under which the aim of the research is identified; research questions are also laid in this chapter to be answered in chapter four. Methods of data collection and data analysis are also part of this chapter to. Sampling technique shows how samples were selected from the total population; significance of the study, which is the last part of this chapter shows the importance of the research to the country in general and to the study area in particular.

Chapter Two of this thesis deals with review of related literature where theories by different scholars about the origins of HIV/AIDS are stated; the global and continental conditions of HIV/AIDS, its impact on socio-economic and demographic condition the country are briefly discussed. Ethiopia at the eve of HIV/AIDS and the current situation of HIV/AIDS in the country is briefly stated. The last part of this chapter shows the findings of different researchers in different countries and at different times on the variation of awareness and knowledge level in different social groups.

Chapter three states the socio-economic and demographic characteristics of the study area. Under this, population distribution, characteristics of population, age and sex composition, growth rates, and economic characteristics, marital status, migration and urbanization processes are briefly stated. Some information on the physical environment such as temperature, rainfall, elevation (relief) vegetation type etc are also included to give clear picture about the study area.

The fourth chapter of the thesis deals with analysis and findings of the thesis. This is basically the main body of the thesis. As the main body of the thesis it tries to answer the research questions stated in chapter one.

The last chapter of the thesis, chapter five, presents summary and recommendation. From the general results of the research generalization is made in summary. Finally, recommendations are given as to how planners and policy makers can go about tackling HIV in rural and urban areas equally.

CHAPTER TWO

2.1 Review of Related Literature

2.1.1 Theories About the Origin of HIV/AIDS

The origin of the disease AIDS (Acquired Immune Deficiency Syndrome) is debatable. There is no convincing evidence that assures its original source. However, different researchers have made assumptions and speculations.

Traditional medical practitioners in Ethiopia assume that the disease is not a new phenomenon; it has been in existence since the beginning of the human race and they believe that they have the medicine to cure it. Nevertheless, no one has found the medicine to date (Solomon Gebre, 1990).

On the other hand, modern scientists, even if they come to terms with how the disease affects humans, they have different views about the exact epicenter of the epidemic.

Many researchers assume that the disease first originated from Africa; and then entered the Americas and the rest of the world through extensive slave trade that took place in the 16th century. They add that the disease became a human pathogen, confined to small areas in a small number of people and remained constant and latent for a long period of time in an epidemic area. However, as time passed the growing and extensive political, colonial, economic and social interactions between continents led to the diffusion of the pathogens in different directions (WHO, 1994). One of the supporters of the above idea, Gallo (1992) considers the origin of HIV/AIDS to be in Africa and then spread to Caribbean region in 1970s. From these Islands, in the late 1970s, it entered South and North America by homosexuals and finally got into Western Europe and the rest of the world (Gallo, 1991). See map 1 on page 12. Other researchers suggest that the source is not Africa, but Western society where deviant behavior such as homosexuality, bisexuality and intravenous drug abuse are widely practiced among the human populations. But of the theories, the most popular and widely spread is that the virus originated form Africa where it is speculated that the virus was first transmitted to humans from our closest ancestor, i.e. monkey. This theory is further supported by experiments conducted on 200 African green monkeys at Harvard University in 1986 to prove whether HIV has been

transmitted from monkey to human being or not. As the result of the blood test conducted on these monkeys; 70 percent of the monkeys were infected with a virus, which was found to be similar to HIV (Grey, 1987).

The first photography of HIV were taken by an electro microscope in February 1985 at the Pasteur institute in Paris where all French researchers team led by professor Luc Montaginer had isolated the virus in tissue taken from a young homosexual man with chronically swollen Lymph glands. Several months later, the professor and his Colleagues Dr. Francocise Sinouss, and Dr Jean Chermann published a description of HIV. They believed rightly that they had found the causal agent of AIDS (WHO, 1994).

Though AIDS was first identified in the USA, evidences point to large regions of Central African Republic as the possible location of the disease. The substantial amount of evidence from a variety of directions, including biological, spatial and temporal indicate that central Africa is "the index" location of the virus (Shamon 1989). The discovery of the virus STLU (Simian T. Cell Lymp Tropic Virus) which causes AIDS like conditions in monkeys in Central Africa also adds some weight to the hypothesis that HIV "crossed over" from animal source to man, perhaps where people who inhabit the equatorial rainforest ate infected monkeys and that it might have existed in isolated African tribes for many years (Norwegian Red Cross, 1986).

Though some writers of the west ascertain that the origin of HIV/AIDS is in Africa, there is no still concrete evidence that supports shows their opinion.

The mystery surrounding this disease is made much more complicated due to the fact that year after year it becomes clear that the infection has been spreading to every corner of our planet and is affecting millions of lives.

The epidemic becomes wide spread in many counties before the disease was detected by scientists and before it was diagnosed in 1981 (WHO, 1992). Scientific sources had indicated that the epidemic would continue to affect about 42 million people in 2002 and out of these more than 30 million would be adults living with HIV/AIDS, and they add that if the trend continues and remains unchecked with no effective and accessible cure or medicine, the number of cases is likely to reach uncontrollable proportion of human population, and expand its spatial coverage claiming millions of lives without discriminating by sex, age, socio–economic status, race, religion and color, (WHO, 1992).

2.1.2 Global Extent of HIV/AIDS

As stated earlier, a decade ago, HIV/AIDS was regarded primarily as a serious health crisis. Today it is clear that AIDS has become a serious development crisis, with impacts and implications for all sectors. Already, 18.8 million people around the world have died of AIDS; 3.8 million of them are children. Nearly twice that number, 34.3 million, are now living with HIV, the virus that causes AIDS. The most recent USAIDS/WHO estimates show that, in 1999 alone, 5.4 million people were newly infected with HIV. More than 70 percent of the total people living with HIV/AIDS, 78 percent of the AIDS cases and 68 percent of the new infection have occurred in sub-Sahara Africa.

The virus has also infected many Ethiopians. For every 13 adults one is infected. In urban areas more than one out of every six adults is infected. Since there is no cure for AIDS, this disease threatens the social and economic well being of the country. (MOH, 2002: 2)

Globally it was estimated that up to the end of 2001, 40 million people were living with HIV/AIDS. New infection was 5 million and death due to HIV/AIDS was also 3 million.

Table 1: Adults and children estimated to be living with HIV/AIDS end 2001.

Continents	**No of people infected**	**Prevalence rate in percent**
North America	940,000	2.35
Caribbean	42,000	1.05
Latin America	1,400,000	3.5
Western Europe	560,000	1.4
North Africa and middle East	440,000	1.1
Sub Saharan Africa	28,100,000	70.25
Eastern Europe and Central Asia	1,000,000	2.5
East Asia and Pacific	1,000,000	2.5
South and South East Asia	6,100,000	15.25
Australia and New Zealand	15,000	0.0375
Total	**40,000,000**	**100**

Source: (DVV, 2002: 28)

As it can be observed from the above table, 70.25 percent of the adults and children were expected to be living in Sub-Saharan Africa followed by south and south East Asia. It seems that poverty and the spread of HIV/AIDS are closely linked to each other. The following table also indicates the estimated number of adults and children newly infected with HIV during 2001.

Map

Table 2: Older persons as percentage of AIDS cases globally

Country	Total AIDS cases	Percentage of cases aged 50 + years		
		Total	Men	Women
Africa	233,336	5.6	7.3	3.6
Asia	119,320	4.5	4.8	2.8
Latin America	198,322	7.4	7.6	7.0
Australia	8,096	9.3	12.4	17.0
Canada	16,235	11.2	11.0	16.3
France	49,421	12.9	13.1	12.4
Germany	18,515	16.4	17.2	10.4
United Kingdom	16,791	11.0	11.1	5.6
United States	733,371	10.7	11.0	9.1

SOURCE: MIDROC ETHIOPIA NEWSLETTER 2002: 7

As it can be observed from the above table and compared with table 1 on page 12, adult AIDS cases, old people in the developed countries and adult people in the developing countries like Africa, Asia and Latin America are the most affected people. Due to this the developing countries' economy and demography might be affected.

Africa is most affected by AIDS, containing more than two – third of the world's people living with AIDS. In the developed western countries, the fact that the pandemic has affected most directly marginalized population such as drug users, homosexuals the old and the poor as it can be seen on page 13. But in Africa though death among such social groups is high; the young (15 – 49), educated people, high officers are mostly dying of HIV/AIDS.

Table 3: Global estimated number of adults and children newly infected with HIV during 2001

Continents	Number of adults and children infected	Percentage rate (percent)
North America	45,000	0.9
Caribbean	60,000	1.2
Latin America	130,000	2.6
Western Europe	3,000	0.6
Northern Africa and Middle East	80,000	1.6
Sub-Saharan Africa	3,400,000	68
Eastern Europe and Central Asia	250,000	5.0
East Asia and pacific	270,000	5.4
South and south east Asia	800,000	16.0
Australia and New Zealand	500	0.01
Total	**5,000,000**	**100**

Sub–Saharan Africa stands first in the infection of its people by HIV/AIDS followed by south and South East Asia and Latin America. Until serious measures are taken, it will devastate the people of these developing countries. Due to the high prevalence of the pandemic, which is also associated with poverty, these continents are leading the world in deaths caused by HIV/AIDS. (See table 4 below). Outside of sub-Saharan Africa, the largest number of people infected with HIV or living with AIDS are in India, 3.5 million.

Table 4: Estimated adult and child deaths due to HIV/AIDS during 2001

No	Continent	Total death	Percentage
1	North America	20000	0.66
2	Caribbean	30000	1.0
3	Latin America	80000	2.66
4	Western Europe	6800	0.23
5	North Africa and Middle East	30000	10
6	Sub- Saharan Africa	2300000	76.6
7	Eastern Europe and Central Asia	23000	0.76
8	East Asia and Pacific	35000	1.16
9	South and south East Asia	400000	13.33
10	Australia and new Zealand	120	0.04
	Total	**3,000,000**	**100**

Source: DVV, 2002: 29

2.1.3 The Condition of HIV/AIDS in Africa

In many countries, HIV/AIDS represents the deadliest emergency and the greatest social, economic and health crisis. Though AIDS is a problem everywhere, it is serious especially in Africa particularly sub-Saharan Africa. Sub–Saharan Africa accounts for 80 percent of the worlds AIDS cases (ADF 2001: 5). With more than 23 million adults living with HIV/AIDS Sub– Saharan Africa is ravaged by this epidemic. Among the Sub–Saharan African countries, the most affected are: Botswana 36 percent; Lesotho, Swaziland, and Zimbabwe 25 percent; Namibia 19 present; South Africa and Zambia 20 percent prevalence among adults aged 15 to 49 are living with HIV/AIDS. South Africa has the highest number of adults living with the virus, about 4.1 million. According to population reference Bureau (PRB, 2001) nearly 3 million Ethiopian adults were living with HIV.

The continent of Africa is generally regarded as the best haven of the epidemic on our planet earth and millions of her population is in the yoke of the disease. More than 74 percent of her total productive and energetic population in terms of material production are the victims of the pandemic. The problem has complex impact on the socio – economic and political development of the continent. To stress the serious nature and its impact on social development Mr. Kofi Annan, secretary General of United Nations stated that, "It (AIDS) brings in its wake discrimination, prejudice and often violation of human rights. It is important to recognize these consequences" (ADF, 2001: 5).

HIV/AIDS is an "invisible enemy" and its characteristics make it particularly difficult to tackle for the poor continent like Africa. HIV/AIDS transmission in Africa is predominately sexual. As a result of this it becomes intimate and makes the subject of many taboos and cultural silence. These silence and denial, have fueled its transmission. Just as cultural and religious taboos inhibit open discussion about sexual practice and preferences including the use of contraceptives, shame and guilt have surrounded this virus that spreads mainly through sexual contact (PRB, 2000:

2). Poverty is another key ally. Those who can offered the costly anti-AIDS treatments prolong their lives, while the world's poor die in overwhelming number.

Unlike previous pandemics in Africa, where the death of those infected was a matter of days and thus the medical cost per individual was small HIV/AIDS requires years of expensive drug cocktails to keep it at bay (ADF, 2001: 6). One of the first challenges for Africa is to face the reality of the pandemic on the continent.

The HIV pandemic in Africa also has unique characteristics. The condition of HIV prevalence in the continent especially in eastern, central and southern Africa is particularly strong. This is due to, according to population reference Bureau (PRB 2000), various traditional practices, such as, early forced marriage for girls, widow inheritance, considering wife as home guardian, etc. For example, in Kenya it is common within the Luo community that when a husband dies, one of his brothers or cousins marries the widow to ensure that the children remain within the late husband clan and that the widow and her children are provided. Then if her husband dies of AIDS and the woman is infected, she could pass on the virus to her guardian and children (PRB, 2000: 11).

In some cultures, men believe that sex with young virgin can cleanse them of sexually transmitted disease, (STDs) and HIV. However, becoming infected with HIV is not a random medical event. Perhaps, more than any other major health threat, it demonstrates the extent to which disease is in fact embedded in the social, political, economic, cultural, behavioral and medical experiences of the individual. Moreover, vulnerability to HIV/AIDS stems from lacking the power to control one's circumstances. The power to affect the outcome of the epidemic is highly tied into social, political, economic and cultural purposes of those controls (ADF, 2001: 2).

Across many countries in Africa, cultural factors accelerate the risk of HIV transmission. For example, in some countries women are not expected to discuss or make discussion about sexuality, so suggesting condom use is out of the question;

"good women are expected to be ignorant about sex and passive in sexual interaction" (PRB, 2000: 7).

Africa is the continent least well placed to respond to the crisis of HIV/AIDS. It is the poorest continent with the worst health and educational infrastructures. It has the weakest civil society, and the political leadership in many countries is marked by patrimonalism, corruption, authoritarianism, and even militarization and crime. Africa is subjected to social disorder, with mass displacement, due to war and disaster, and mass migration in search of employment and opportunity. As a result migrants face greater risks of infection than less mobile population. Separated from family and regular sexual partners for a long period migrant men sometimes use condoms during casual relationships outside their wives. But they never use condom with their wives when they return home (PRB, 2000, 19). This creates a central problem in formulating ways of tackling HIV/AIDS in Africa. As a result of this pressure governments are finding themselves faced with difficult choices. In particular they are finding it necessary to make trade–off between treating AIDS as against preventing new HIV infections; between treating AIDS as against treating other illnesses; and between spending on health as against spending on other sector, (Keley, 2001:6). This is the relationship between necessary short –term action and the need for more profound change. No problem can be seen in isolation. Yet, with HIV/AIDS, the connection to broader question of poverty and power is particularly stark. The absence of any medical 'magic bullets' or immediate technical fixes demands that responses involve a wide range of moral, social and economic challenges. To indicate the root cause of HIV spread in Africa, Fredland stated the following: "broader scale medical problems have politico-economic roots… any solution must be related to attacking these large problems and not just medical occurrences. This has led to some stress the importance of dealing with the broader issue of poverty, under–development and a gender inequality, at the expense of addressing the issue of HIV itself". However, as VanDer Vliet points out the problem with seeing AIDS as essentially a product of poverty and socio economic condition is that prevention and cure must be then postponed till utopia or something approaching it … long term socio – economic supplement may well curb the epidemic. But AIDS is a happening

in the short term. Leaders who can enable people and communities to devise appropriate strategies for coping with AIDS are needed rather than using it as a political football. The leadership challenge is thus to make in road into tackling causes such as poverty, and gender inequality while simultaneously taking specific steps to target HIV/AIDS because these are the root cases for the high spread of the epidemic (ADF 2000: 3). Though the 'safe sex' message is universally accepted to slowdown the high spread of HIV/AIDS, it must be accompanied by individuals' behavioral change because individuals behavior is contingent on social and cultural factors as well as biological factors and health services which facilitate or retard behavioral change.

According to African development forum there is a huge gap between what people know to be the best source of action and what they actually do, and this gap is sustained by social and economic pressure to which people find themselves subjected. It seems, due to this fact, in Africa HIV/AIDS is predominantly transmitted by heterosexual activity.

One of the groups at greatest risk in Africa is a young woman. Over 20 percent more women than men are living with HIV. The impact of AIDS threatens women as individuals, mothers and carriers. As the Uganda study has show death from HIV/AIDS, especially of mother, leads to reduced farm inputs and farm labour, lower agricultural production, reduced schooling for children and a higher malnutrition (ADF, 2000:5).

2.1.4 Ethiopia in the Era of HIV/AIDS

Until recently most people did not know much about HIV/AIDS in Ethiopia. However, traditionally they have been aware of a disease called 'AMENMIN', and now they are increasingly aware of the presence of the epidemic 'AIDS' in the country (MOH, 2000). It was in 1985 and 1986, that 5265 recruit soldiers were tested and 0.1 percent of them where found infected and that the presence of the disease in the

country was recognized. By 1991, the prevalence rate for the population has risen to 2.6 percent. Similar increases were seen among female prostitutes. In 1988, for example 18.5 percent were infected, by 1989, 29.2 percent were infected. Highest rates among female prostitutes were found in towns along major transport route between Addis Ababa and Assab. Similarly high rates were found among long distance truck drivers who work in that route (Max Essex et. al 1994: 671).

The modern definition of human resource development has incorporated health as a major component because healthy population is a potential for sustainable economic and social development. Health and economic development are inextricably linked. From an economists viewpoint; improvement in health status represents both gains and welfare and an investment in the future. Health affects development prospects: healthy individuals can be more productive at their jobs, perform better at school, and earn more than those who are unhealthy.

Ethiopia is one of the poorest countries of the world. Its past history of civil war, recurring draught and famine were some of the natural and man-made causes for the low performance of the economy. The agriculture-dominated economy is obviously affected by any challenge that country may face any time.

At present the country is facing three extremely serious problems: HIV/AIDS, the recurrent drought and Malaria. Three of these are "consumers" of productive labour force. Recurrent drought could be tackled by outside intervention and by technological achievement through irrigation and some other ways such as resettlement program. Malaria expansion can be checked easily because it is not transmitted through sex and it cannot spread in all climatic regions whereas, AIDS is 'mirage' which can adapt to any 'climate' and associated with sex. So it should be encountered by any possible means that the country can afford. Therefore, it is wise to look at the efforts so far made by the responsible authority in order to curb the spread of the disease.

In 1985, the government of Ethiopia, realizing the serious implication of human suffering, social effects and cost of health service, established a National Task Force. For the prevention and control of HIV infection. In 1987 the National AIDS Control Program (NACP) was created at a department level within the ministry of health responsible for directing and controlling the implementation of ACP (MOH, 1998).

Eventhough the activities accomplished by NACP and the effort made to sensitize the general population is worth mentioning, in the last few years, the program which was running at the department level has been lowered and graded at a team level.

This could be one of the testimonies for the lower attention lent to this disease. It is enlightening to mention, at this point, the key alarming facts indicated in the summery of UNAIDS, Ethiopia, after visiting regions concerning HIV/AIDS activities in September 1997. Only few points are given below.

1. Except for two regions Gambella and Addis Ababa out of seven visited regions, all regions were found to have inadequate human resources in both quantity and level of training in technical and general HIV/AIDS related materials.
2. There is no mechanism provided for monitoring, supervision and provision of back stopping assistance by the central ministry of health (MOH) to the regions.
3. In all regions visited, the team found shortage in the relevant materials and supplies for the prevention and control of HIV/AIDS infections. This problem has its root in the long procurement procedures and adequate budgetary allocations.
4. The assessment team found that there was no system in place for tackling the HIV/AIDS epidemic in the country. This makes it difficult for the country, regions and communities to plan adequately, sustain the required political commitment to fight the HIV/AIDS epidemic and monitor the effectiveness of current interventions.

5. The assessment team revealed that the second National Medium Term Plan (MTP) for the prevention and control of HIV/AIDS transmission ended in 1996. Even though the disease is very serious, there was no national strategy for two years after the end of the second National Medium Team plan. Because of this in Benishangul, the stigma attached to the diagnosis of HIV/AIDS was reported as being so intense that health workers were afraid to pronounce the diagnosis of AIDS. So neither clinical nor serological diagnosis was attempted.

By realizing the past weakness of the program and considering the fast spread of the pandemic, which demands the effort and participation of all citizens in the prevention the government of Ethiopia launched a National policy on HIV/AIDS in 1998. The policy is designed to guide the implementation of successful programs to prevent the spread of HIV/AIDS to care for those with AIDS and to reduce the adverse socio – economic consequence of the epidemic (MOH, 2000: 47).

Individuals and communities need appropriate information both to protect them selves from health risks and to promote good health. Relevant information may be imparted at the individual level from health care professionals, educators, or counselors. Concrete information about behaviors that can spread infection and the most effective ways to protect against infection are essential to the health of the individuals (Max Essex et. al 1994: 551). This could happen as the experiences of other countries show when people are exposed to mass media. In Uganda, for example, 12 million people out of the total 23 million have radio transistor. With this the Ugandan people are able to reduce the prevalence rate from 14 percent to 8 percent whereas, in Ethiopia 86 percent of the women and 73 percent of the men, have no exposure to mass media (EDHS, 2000: 2).

When the national AIDS policy was promulgated in 1998 in Ethiopia, the prevalence rate was 7.1 and now it is 7.3 (6.0 – 9.0), which means it does not show a decreasing rate of prevalence. Rather it is still growing.

Therefore, it should be understood that, this work has been undertaken in such critical time and condition to address the issue and contribute to the efforts going into the prevention of the disease

2.1.5 Current Estimates of HIV Prevalence in Ethiopia

Adult prevalence is one of the common measures of the extent of HIV in the population. This is the percentage of adults aged 15 years and above who are infected with HIV. HIV probably started to spread in Ethiopia in the early 1980's. The first evidence of HIV infection was found in 1984. Although HIV prevalence was very low in Ethiopia during the early 1980's it has been increasing rapidly since early 1990's. It was estimated that by 1989, adult HIV prevalence had increased to 2.7 percent. The estimated adult prevalence of 7.1 percent in 1997 has increased to 7.3 percent in 2000.

The current adult prevalence in urban Ethiopia is estimated to be much higher, 13.4 percent (16.8 percent in Addis Ababa), than in rural areas, where current adult prevalence is about 5 percent. It is important to pay attention to the age and sex distribution of reported AIDS cases in order to understand the severity of the future consequences.

Table 5: Age and sex distribution of reported AIDS cases (1986 – June 2000).

Age group	Sex		Total	Percent
	Male	Female		
0-4	1400	1200	2600	4.96
5-14	300	350	650	1.24
15-19	800	1900	2700	5.10
20-24	4500	5500	10,0000	19.10
25-29	7000	5900	12900	24.60

30-34	6100	3000	9100	17.38
35-39	4800	2100	6900	13.18
40-44	2900	2000	4900	9.36
45-49	1900	500	2400	4.58
50+	1500	500	2000	3.82
Total	**31200**	**22950**	**54150**	**100**

Source: MOH 2000

From table 5 we can learn at least the following important and general points

- About 91 percent of reported AIDS cases are adults between the ages of 15 and 49. Since this group is economically and biologically productive part of the population, these deaths constitute an important economic burden. This is also the age when investments in education are just beginning to pay off. These deaths also have important consequences for children since most people in this age group are raising young children.
- There are roughly an equal number of male and female cases. This is because most infection is acquired through sexual contact.
- The peack ages for AIDS cases are 20 – 29 for females and 25 – 34 for males. Since AIDS results from HIV infections acquired about 8 years earlier, this means that the peack ages for new HIV infections are 15 – 24 for females and 15 – 34 for males.
- The number of females infected in the 15 – 19 age group is much higher than for males in the same age group. This is due to earlier sexual activity by young females and the fact that they often have older partners.
- There have been a significant number of AIDS cases reported among young children. Most of these received the infection from their mother during gestation or at the time of birth and probably through breast-feeding.
- The absence of many AIDS cases in the 5 – 14 year old age group shows that infection is not transmitted by mosquitoes or casual contact such as shaking hands or kissing. Traditional malpractice and unclean injection practice might account for the transmission of the virus in this age group and below.

There are few cases of AIDS among children between the ages of 5 - 14. This is a "window of hope". If these children can be thought to protect themselves from HIV infection before they become sexually active, they can remain free of HIV for their entire lives. But action must be taken now, because rates of new infection are quite high once children reach the 15 – 19 age group (MOH 2000:11).

The ministry of health estimates that HIV adult prevalence in Ethiopia is between 6 and 9 percent range. As of the end of 2001 there were 3 million infected persons in the country. Out of these 250,000 were children. According to the report, this figure is only the tip of the iceberg due to under reporting.

If HIV prevalence does increase to 9 percent by the year 2006, then the number of infected people in the population would increase to 5.8 million by 2006. Constant prevalence simply means that the number of infections every year is equal to the number of people dying of AIDS each year. According to the report if there are 3 million people alive with HIV infection today, then there must be about 260,000 new AIDS cases every year. By the year 2010, this would increase to above 500,000 new AIDS cases each year. The cumulative number of AIDS deaths would increase from about 740,000 in 2000 and to 7 million by 2014 (DVV, 2002).

Underreporting of the AIDS cases is one of the major drawbacks in developing countries including Ethiopia, which makes the real consequences of the disease. Bongaarts in 1996 and Ministry of health in 1986 listed the same reasons for under reporting of AIDS cases in Ethiopia. The following are some of the reasons.

Some people never seek hospital care for AIDS.

a. The practice of recording and reporting of AIDS cases from hospital may be incomplete.
b. Some people with HIV infection may die of the diseases before they are even diagnosed as having AIDS.

c. Some rural health care facilities may not have the capability to test for HIV infection, and
d. Many people have poor access to health service units.

2.1.6 Impact of HIV/AIDS

The most immediate effect of HIV/AIDS is experienced at the individual and household levels. The facets of illness, physical and psychological pain and suffering, health care and costs, income loss, reduced household productivity, death, funeral costs, mourning and grief, increased poverty, increased vulnerability of women, growth in the number of orphaned, the social dislocation of those who survive, and the ultimate disappearance of households (Kelley, 2001: 2).

The first and most basic impact of HIV/AIDS is on those who contract the disease. Medication to relieve symptoms and treat opportunistic illness (illness that affect people with weak immune system) can sometimes be obtained at low costs and ease suffering and prolong the productive lives of the people infected with HIV. But as the immune system collapses, leaving the AIDS patient susceptible to opportunistic illness that are ultimately fatal, available treatments become increasingly expensive and their efficiency less certain. Studies for a number of African countries show that the magnitude of the problems at household level due to HIV/AIDS is very serious.

Following an AIDS death, average household consumption in Cote d' Ivoire fell 44 percent. In Ethiopia, It reduced working hours from 33.6hrs, which is a mean of a week in non AIDS affected households to 11.6 to 16.4hrs in agricultural activities. In Tanzania, also a case study survey found that in households where one person was sick because of AIDS, 29 percents of the labor was spent in AIDS affected matters, if two household members were devoted to nursing duties, the average household loss from agricultural activities was 43 percent, and in Zimbabwe, a bed-ridden AIDS patient was estimated to cost the affected household an additional US$ 23 to 34 per

month. In a survey carried out in 2000 to assess the impact of adult female mortality in two districts, it was found that 65 percent of the households where the deceased female had lived were no longer in existence (Kelley 2001: 3).

A generalized AIDS epidemic is a severe shock to health sector. It increases the demand for medical care supply at a given quantity and price. As the number of people with HIV/AIDS increases, access to medical care becomes more difficult and more expensive for every one, including people not infected with HIV, and total health expenditure rises.

AIDS death is concentrated in the productive age, for example, in Ethiopia about 90 percent reported AIDS cases occur to adults between ages of 20 – 29. The loss of young adults will certainly affect the overall economic development, particularly in developing countries.

The lost output, reduction in private savings to finance the private medical cost, the consumption of foreign exchange to import drugs for the AIDS patients are good examples of its impact. As to the report by the Ministry of Health (MOH, 2000) the cost of hospital care for AIDS patient, in Ethiopia ranges from 425 to 3140 Birr (53 – 392 US) during the course of illness. Furthermore, the report indicates that the spread of the pandemic has adversely affected the health services, especially bed utilization. The problem is acute in urban areas and it is estimated that 42 – 58 percent of hospital beds in the country are occupied by AIDS patients and patients of AIDS related illness.

It is also reported in Ghana, that the cost of AIDS medication is equivalent to US$ 100 per month, which is about three months average income for an ordinary Ghanaian, and in Kinshasa the average direct cost of AIDS patients is as high as US$ 170 per annum (Ntozi, 1997).

The second impact is still serious, for the less developed countries like Ethiopia where about 85 percent of employment (95 percent of the income) is created in the agricultural sector. The impact of AIDS in the industrial sector is by far worse since the prevalence of HIV infection is higher in urban areas, 13.4 Vs 5.0 percent, the industrial workforce will be harder hit than the rural work force. The productivity of an enterprise is affected even before the employee dies due to lost workdays, as a result of illness/sickness, funeral leave etc. The number of days lost due to illness for a person with HIV/AIDS can range from 30 to 240 days in a year (MOH, 2000). AIDS can also have significant impact on health care costs for firms that provide health care for their employees. One study of industrial firms found that from 1988 – 1993 about half of all illnesses reported by employees of these firms were due to AIDS (MOH, 1996); in Ethiopia for example health care for industrial sector increases 50 percent due to illness by HIV/AIDS (MOH, 2000).

In Tanzania many businesses and employers are losing an increasing number of skilled workers to AIDS. As a result many industrial and social sectors are training new workers. Even there could be problems after recruiting and training new workers until they would gain the necessary experience (MOH, 2000). Firms are also suffering by giving considerable sum of money for sick-leave and burial expenses (CRDA, 1996).

Past gains in life expectancy, an important measure of progress, are being eroded in the most severely affected countries. In Zimbabwe life expectancy was reduced by 22.2 years, in Burkina Faso by 11.3, in Cote d'Ivoire by 11 and in South Africa by 7 years (Squire, 1997). Many other countries will also see their income gains reversed as AIDS spreads. By the year 2010 demographers project that life expectancy will fall from 66 to 33 years in Zambia, from 68 to 40 years in Kenya and from 59 to 31 years in Uganda.

The impact of AIDS mortality on population growth is not yet clearly defined. However, there have been much speculations that AIDS might lead to negative

population growth in some countries. Using parameters and equations, it is estimated that adult HIV prevalence would have to increase 30 to 40 percent to reduce population growth to zero (IUSSP, 1993). On the other hand, the future impact of AIDS on mortality will depend on the future level of HIV prevalence.

Projections of HIV prevalence are difficult to make because of uncertainty in three areas, namely the natural course of the epidemic, the degree of behavior change and the impact of future treatment or vaccines.

The social impact of the AIDS related problems are critical at the moment. Hunter et al (1997) have put the overall social impact as follows:

> *AIDS mortality and morbidity create distinct additional stress on families, including changes in family roles and relationships, emotional strains and instability arising from extended illness and multiple deaths; sudden financial drains from diagnosis, treatment and funeral expenses; loss of external income from wage labour or trading; household and agricultural labour loss and declines in agriculture productivity, income nutritional and educational status for widows and their children and stigma, affecting the persons with AIDS, family numbers and children.*

Among the social groups most affected by AIDS are children, women and the aged. The impact of AIDS on the orphans is severe. For one thing psychological suffering and frustration is worth mentioning. As Hunter et. al (1997) have described, children have severe psychological problems. As a result, their basic need for food, clothing and shelter may not be met as the family income declines through the illness. If they are fostered they face economic, and psychological insecurity that may never be alleviated. In Tanzania, a school teacher reported that the standard of living of orphaned children dropped drastically upon the death of their parents, and some come to school dirty, unfed, unable to pay their school contribution. Many have high absence rates, most are forced to engage in petty business - selling peanuts, ice cream, and cigarettes to support themselves. Hunter et al (1997) put further that boys

most often show up on the street; girls are taken in to be housemaids or trade sex for a place to sleep. The burden of AIDS on women, particularly in backward economies and in male supremacy society cultures are by far worse. Hunter et. al (1997) have reported the difficulties that face women in Tanzania. Women in Tanzania are more affected by the epidemic than men. They often cannot protect themselves from infection. A woman whose husband has other partners can do nothing about it, and looks the other way when her husband acquires a girlfriend. When infected, husbands can expect their wives to care for them, whereas, women who are infected are often abandoned by their male partners, relatives and in-laws, and have less access to the formal health system.

The Global AIDS News (1993) reported that, women in Morocco have no possibility of forcing their partner to use condoms. Ahlburg et al (1997) has also indicated the factor that is contributing for the spread of the epidemic in Philippines. He pointed that conservative religious culture of the country reduces the possibilities of open discussion of sex and other value of male domination over women in the society. Female sex roles in Philippines are associated with appropriate concepts of femininity and traits, such as submissiveness and modesty.

2.1.7 Knowledge on HIV/AIDS

HIV/AIDS is one of the diseases threatening the lives of many people in the world. In order to design effective intervention strategy understanding the risk factor is very important. The following opinions and results of different studies conducted in different groups of the society and in different populations.

The common way of asking people to know their knowledge about HIV/AIDS is asking them about sexually Transmitted Disease (STDs) in general because STD

and HIV/AIDS have similar mode of transmission. Accordingly, different results have been identified from different countries.

The Zimbabwe Demographic and health survey reported that among both women and men, HIV/AIDS was by far the most widely known STDs (DHS Zimbabwe, 1994). The knowledge of College students in Addis Ababa, on HIV/AIDS, did not show significant difference in relation to the sex (Beyene et. al 1997). Similarly the study conducted among students at Gondar College of medical science also shows no significant difference between male and female students. But their variation is associated with their educational level (Tilahun, 1997).

The knowledge attitude and behavior (KAB) study conducted among long distance bus drives in Ethiopia indicates that the knowledge gap ranged from 80 to 90 percent for those who only read and write and for those who have completed grade 12 and above, respectively (Eleni, 1998). In Malawi, for women, the range varies from 77.5 to 96.1 percent for respondents with no education and secondary and above education, respectively.

The effect of age on the level of knowledge about HIV/AIDS exhibited different results for men and women in different countries. In Zimbabwe the level of knowledge for women increased as age increased, on the other hand, for men first it increased and then declined as age increased further (DHS Zimbabwe, 1994). In Benin, for women the knowledge increased from age group 15 – 19 to 25 – 29 to decline in the subsequent age group (KAB, Benin, 1997).

Marital status as one of the determinant factors plays a greater role on the knowledge of the individual. Those who are married have better knowledge than those who were formerly in union, but lower knowledge when compared with the single ones.

Religion is another factor that affects the knowledge of an individual about HIV/AIDS. As different studies suggest, HIV/AIDS can only be effectively combated where it is not considered as secrete but is openly discussed. As Van Der Vlient stated "information despite the problems in translating knowledge into behavior, remains an absolute prerequisite of the individuals employment, until individuals have a clear and complete, unvarnished picture of the disease, and how it can be avoided appropriate behavioral manifestation is impossible." Free and open public discussion is an essential prerequisite for any effective anti-AIDS program. But this idea is affected by some religious attitudes and practices in Africa. For example, some religious beliefs consider HIV/AIDS as some sort of curse from the creator. Due to this Catholic Church was not willing to change their teaching method about AIDS. Leading Muslim and Copitc Christian theologists who were assembled in Cairo in 1991 rejected safe sex education and using of condom. Instead, they agreed HIV as some sort of divine retribution and use the pandemic as a weapon to bolster their campaign for certain forms of personal morality. Some religious authorities do not allow to talk about sex. This produced silence. This in turn affected one's knowledge about HIV/AIDS. (ADF, 2000: 9).

As stated, earlier behavioral change is the only means to prevent HIV/AIDS transmission. As a result several models have been used to explain behavioral change in relation to disease before and since the advent of HIV/AIDS. The development of these models has been based on experiences in the developed countries, which may not apply in the developing countries because of variation in culture and outlooks. However, some of these can be extended to HIV/AIDS in Sub Saharan Africa. These are the health belief model, and the AIDS Risk Reduction Model (Linda et. al 1991, Pollak 1992 as cited in Ntozi et. al, 1997).

The health belief model assumes that the individuals' attitude plays an important role in prevention of disease, especially his/her perception of susceptibility to the disease, seriousness of the disease and benefits of health action. According to this model, sufficient knowledge is essential (Pollak 1992 as cited in Ntozi et. al 1997).

The AIDS Risk Reduction includes some of the above factors like knowledge of disease transmission, belief in the severity of the disease, and perceived risk of becoming infected. It also includes peer support for safer behavior, self-efficiency or belief in one's ability to avoid disease, and skills in communicating and enacting safer behavior (Lindan et. al 1991, Livingston 1992 as cited in Ntozi et. al 1997).

Polygamy is common in nearly all Sub–Saharan African societies and remains so, but to varying degrees. Formal polygamy is common in rural areas. Nevertheless, various forms of multiple partnerships are also common in many urban areas such as mistress or "outside wives" polygamy allows older men with resources to monopolize young women, leaving young men to search for sex outside stable union.

In the center of the above assumption, as NRC, 1996 has put it, in all Sub-Saharan societies sexual contact forms part of an exceedingly complex network of relations that may involve formal or informal marriage; permanent support of women or her children, regular or occasional gifts or payment for sex, either on a repeated or as a single event.

Under such a complex sexual network, to bring a desired sexual behavior demands an immense work in the field. According to Helen (1992), in order to achieve appropriate behavioral change to reduce risk, people must feel personally that they have more to gain than to lose by such a change. She added that, beyond having relevant knowledge and the motivation to change behavior, people must also have access to the means to achieve this change.

Exposure to mass media is another factor that influences the knowledge of an individual. As the Ugandan experiences show, 12 million people out of 23 million (52 percent) or half has radio transistor. As a result of the anti-AIDS programs that are

broadcasting HIV/AIDS on the radio reduces the prevalence rate of in Uganda from 14 percent to 8 percent.

CHAPTER THREE

3.1 Socio- Economic and Demographic Characteristics of the Study Area

The Study Woreda, Metema is found in North Godnar zone of the Amhara regional state. It is located at about $11^0 – 12^0$ 58'N and $35^0 – 36^0$ 12'E. It has a land area of 3683.04 square kilometers. The general elevation of the Woreda increases from the Republic Sudan border towards the interior which ranging form 500 – 1500m. The Woreda has Kola/ warm/ temperature condition. The annual average temperature of the area is 35^0c. As far as the rainfall is concerned it has 78.5 mm of monthly and 700 –800 mm of mean annual rainfall. Open deciduous wood is the dominant vegetation that covers the woreda (Meteorological map of Ethiopia 1979).

3.1.1 Population Distribution and Characteristics

As stated earlier, Metema Woreda has 54,913 people. Of these 29,545 are males and 25,368 are females. It has land area of 3683.04 square kilometer. The crude density of the woreda is about 14.9 people per square kilometers. As to the urban – rural residence, there are 11,051 (20percent) urban dwellers and 43,864 (78.87percent) rural dwellers. With regard to children, adults and old age population, (41percent) are children below 15 years, (57percent) are adults and about (2.0percent) are 60 years and above. This shows that the working age population is large compared with the very young and old age people.

As far as the ethnic composition of the population is concerned 78.8 percent are Amhara, 10 percent Kemant, 7 percent Tigraway, 2 percent Gumuz, 1.25 percent Agew and 0.4 percent others. From the total population of the Woreda 81 percent are followers of Orthodox Christianity followed by 18 percent Muslims CSA, 1994.

Map

3.1.2 Age and Sex Composition

Table 6 below shows age and sex composition, of Metema woreda as can be seen from the table 0 percent are males and 42 percent are females below 15 years. In this age group the male – female ratio is 1.2:1. In the age group 15 – 59 there are about 57 percent male and 56 percent female. The male – female ratio in this age group is about 1:1. The age group of 60 years and above constitutes 2.2 percent male and 1.5 percent females. The male-female ratio is 1.2:1 Generally, there is an equal ratio of male – female distribution among the three age groups (CSA, 1994). Table 6 clearly shows this fact.

Table 6: Age and sex composition of Metema Woreda (1994)

Age group	Total		
	Both sexes	Male	Female
0-4	8230	4252	3978
5-9	7953	4172	3780
10-14	6391	3434	2957
Total	22574 (41percent)	11859 (40percent)	10715 (42percent)
15-19	5344	2526	2818
20-24	4840	2171	2669
25-29	6205	3058	3147
30-34	5007	2884	2123

25-39	3954	2446	1508
40-44	2647	1744	903
45-49	1584	1070	514
50-54	1143	741	402
55-59	590	406	184
Total	31314 (57percent)	17046 (57.7percent)	14268 (56percent)
60-64	460	287	173
65-69	229	148	81
70-74	183	114	69
75-79	68	44	24
80-84	50	30	26
85-89	11	7	4
90+	18	10	8
	1019 (2.0percent	640 (2.2percent)	385 (1.5percent)
Total	54913	29545	25368

Source: CSA, 1994: 28

- *Age grouping and computation of percentages are by the author.*

Table 7: Urban and rural age and sex composition of Metema Woreda (1994)

Age groups	Urban			Rural		
	Both sexes	Male	Female	Both sexes	Male	Female
0-4	1353	678	675	6877	3574	3303
5-9	1288	656	632	6665	3517	3148
10-14	1131	557	574	5260	2877	2383
Total	3772	1891	1881	18802	9968	8834
	(34percent)	(34percent)	(34.3percent)	(42.9percent)	(41.6percent)	(44.4 percent)
15-19	1004	385	619	4340	2141	2199
20-24	1147	400	747	3693	771	1922
25-29	1534	688	846	4671	2370	2301
30-34	1275	725	550	3732	2159	573

25-39	910	535	375	3044	1911	1133
40-44	603	408	195	2044	1336	708
45-49	319	217	102	1265	853	412
50-54	235	146	89	908	595	313
55-59	106	68	38	484	338	146
Total	7133 (46.5percent)	3572 (64percent)	3472 (63percent)	24181 (55percent)	12474 (48percent)	10707 (54percent)
60-64	65	47	18	395	240	155
65-69	32	26	6	197	122	75
70-74	26	18	8	157	96	61
75-79	13	8	5	55	36	19
80-84	6	3	3	50	27	23
85-89	2	1	1	9	6	3
90+	2	1	1	16	9	3
Total	146 (1.3percent)	104 (1.9percent)	42 (0.76percent)	879 (2percent)	536 (2percent)	342 (1.6 percent)
Grand Total	**11051**	**5567**	**5484**	**43862**	**23978**	**19884**

Source: CSA 1994: 28)

** Age grouping and computation of percentages are by the author.*

When we compare the age and sex composition between urban and rural areas, we see that children aged (0-14) 34 percent are in urban and 42.9 percent in rural areas. In the age group (15-39), 64.5 percent are adults in urban areas and 55 percent are in rural areas (see table 7 above). This shows us that there are relatively more children in rural than in urban areas and more adults in urban than in rural areas. Concerning the age group 60 years and above, in rural area it constitutes about 3 percent and 1.5 percent in urban areas. In both urban and rural areas the proportion of adults is much higher than the young age group and 60 years and above constitute very few proportion as compared to the adult and child group. This implies that life expectancy in the area is low. It could be due to malaria infection and high effective temperature, which is not conducive for human life.

3.1.3 Growth Rate

According to the 1994 population and housing census of Ethiopia Metema Woreda has 54,913 people and according to the 2000/2001 Bureau of planning and economic

development of the Amhara region, Metema has 70576 populations. Thus it has about 2.8 percent growth rate.

3.1.4 Economic Characteristics

The most dominant economic activities of the woreda are mechanized agriculture and subsistence farming with animal husbandry. The type of crops grown in the woreda include sesame, cotton, millet, sorghum etc.

3.1.5 Migration and Urbanization

It is stated that the dominant economic activity is mechanized agriculture. Due to this, according to the 1994 census of Ethiopia, the area has seasonal migration of people during farming, clearing, weeding and harvesting season from May to October. However, due to lack of data, volume, direction and magnitude of migration is not stated in the study area. Although data of rate and growth of urbanization is not available at the Woreda level, the process of urbanization is significantly high in urban growth but not in their number (CSA, 1994).

The Woreda is selected for this study for four reasons.

1. It is an area where mechanized agriculture is the dominant farming system. As a result people of different ethnic groups migrate to this area in search of jobs.
2. There is settlement program in the Woreda.
3. Metema also recently serves as a dry port between Ethiopia and the Republic of Sudan. As a result different social groups are engaged in trade; and
4. As compared with other Woredas of the Zone it is by far the remotest (177km) away from the Zonal Capital. Especially two of the sample Kabeles have an average distance of 75km, from the Woreda Town – SHEHEDI and 252km from the Zonal Capital. Due to their remoteness and poor infrastructure they are also far from the modern information source.

So far there is no study conducted in Ethiopia in general and in the Woreda in particular: Concerning Urban-rural awareness and knowledge variation about HIV/AIDS. It is obvious that HIV/AIDS spreading is very fast through out the country. So this comparative study will help intervention planners, governmental and non-governmental organization, and religion institutions to give more attention to those remote areas before they are seriously affected by the pandemic.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Characteristics of the Respondents

The head of households were classified on the bases of sex, age, place of residence, level of education and religion as these variables can influence awareness and knowledge about HIV/AIDS. Four hundred seventy five head of households were selected from both rural and urban areas. The reason for selection of participants from both rural and urban areas was to find out awareness and knowledge variation as a result of spatial variation. From the total numbers of respondents 297(62.5 percent) were from rural and 178(37.5 percent) were from urban areas. Table 8 below shows the characteristics of the respondents.

Table 8: Background characteristics of the respondents by sex and age (rural and urban).

Back ground characteristics	Type of residence				Count Total	%
	Rural		Urban			
	Count	%	Count	%		
Sex						
Male	257	86.5	127	71.3	384	80.8
Female	40	13.5	51	28.7	91	19.2
Total	**297**	**100.0**	**178**	**100.0**	**475**	**100**
Age Group						
18-29	66	22.2	81	45.1	147	30.9
30-39	97	32.7	58	32.6	155	32.6
40-49	87	29.3	24	13.5	111	23.4
50-59	20	6.7	12	6.7	32	6.7
60+	27	9.1	3	1.7	30	6.3
Total	**297**	**100**	**178**	**100**	**475**	**100**

Respondent were classified by sex. Two hundred fifty seven (86.5 percent) in rural and one hundred twenty seven (71.3 percent) in urban areas were males, while 40 (13.5 percent) and fifty-one (28.7 percent) in rural and urban areas were females,

respectively. This disparity between males and females was due to the fact that household is mostly named by male (Head of the family) and questionnaires were administered on the basis of households.

Respondents were classified into five age groups 18-29,30-39, 40-49, 50-59 and 60 years and above respectively. As to the report of Ministry of health (MOH, 2000) about 91 percent of AIDS cases in Ethiopia were in the age group of 15-49. This age group is vulnerable to sexually transmitted disease (STDs) including HIV/AIDS. In this survey the age group, 18-49 constitutes about 89.9 percent of the respondents. The age groups 50-59 and 60 years and above were the groups where sexual activity starts to decline.

Table 9: Background Characteristic of the respondents by Marital status (rural and urban)

Back ground characteristics	Type of residence				Count Total	%
	Rural		Urban			
	Count	%	Count	%		
Marital status						
Single	18	6.1	34	19.1	52	10.9
Married	226	76.4	89	50.0	315	66.3
Divorced	36	12.1	24	13.5	60	12.6
Separated	-		2	6.0	2	0.4
Windowed	17	5.4	29	15.8	46	9.7
Total	**297**	**100**	**178**	**100**	**475**	**100**

The current marital status of the respondents was one of the key background variables to attain the study objectives. The term “single’ in the study is used to show those respondents who never married during the survey. The term ‘windowed’ shows respondents who were married in the past but during the survey they were alone due to the death of husband or wife. ‘Divorce’ is a legal separation of husband and wife who were not living together during the survey. The term ‘separation’ shows spatial separation of husband and wife due to work and some other social factors. Married are husband and wife who are living together in one house and sharing common experiences during the survey. Of the total study population, 6.1 percent of the rural and 19.1 percent of the urban were single. As far as the married respondents were concerned 76.4 percent and 50 percent in rural and urban areas were married,

respectively. With regard to divorce 12.1 percent of the rural and 13.5 percent of the urban were divorced. Windowed constitutes only 5.4 percent in rural area and 15.8 in urban areas. The proportion of separated was so small as compared with other marital status groups, which constitutes only 0.6 percent in urban areas.

Respondents were further classified according to their educational level on the basis of the former educational system of the country. Of the total study population 15.2 percent of the urban and 53.7 percent of the rural were illiterate. Those who could read and write only constitute 27.5 percent of the urban and 35.0 percent of the rural. Those with elementary education constitute 25.8 percent of the urban and 9.8 percent of the rural. Concerning junior to senior secondary level of education 27.5 percent in the urban and 1.7 percent of the rural had junior to senior secondary education. Only 3.0 percent of the urban respondents were above grade 12. In general, about 97.0 percent of the study population was below grade twelve and above.

Table 10: Background Characteristic of the respondents by level of education (rural and urban).

Back ground characteristics	Type of residence				Count Total	
	Rural		Urban			
	Count	%	Count	%	Count	%
Level of Education						
Illiterate	159	53.5	27	15.2	186	39.16
Reading and writing	103	35.0	49	27.5	152	32.00
Elementary (1-6)	29	9.8	46	25.8	75	15.80
Junior to senior Secondary (7-12)	6	1.7	49	27.5	55	12.44
Above grade 12	-	-	7	3.0	-	-

Regarding the religious affiliation of the respondents, 78 percent of the urban and 83.7 percent of the rural were Orthodox Church members. Only 2 (0.6 percent) of the rural respondents were Catholic Church Member. Concerning the Protestant Church followers 4.0 percent of the rural and 3.4 percent of the urban were Protestant Church followers. About eighteen percent of the rural and 12.9 percent of urban respondents were Muslims.

Table 11: Background characteristics by religion (rural and urban) Metema.

Back ground characteristics	Type of residence				Count Total	%
	Rural		Urban			
	Count	%	Count	%		
Religion						
Orthodox	231	78.0	149	83.7	380	80.0
Catholic	2	0.6	-	-	2	0.4
Protestant	12	4.0	6	3.4	18	3.8
Muslim	52	17.5	23	12.9	75	15.8
Total	**297**	**100**	**178**	**100**	**475**	**100**

4.2 Awareness of Sexually Transmitted Diseases by Sex, Age and Level of Education

All respondents were asked, “Have you ever heard of a disease that can be transmitted through sex?” 81.7 percent of the males and 70 percent of the females in rural areas and 88.2 percent of the males and 86.3 percent of the females in urban areas affirmed that they know STDs in general.

Table 12a: Knowledge of sexually transmitted disease by sex, age and level of education (Rural).

Background Characteristics	Ever heard of STDs				Count Total	%
	Yes		No			
	Count	%	Cont	%		
Sex						
Male	210	81.7	47	18.3	257	86.5
Female	28	70.0	12	30.0	40	13.5
Total	**238**		**59**		**297**	**100**
Age						
18-29	56	84.8	10	15.2	66	22.2
30-39	79	81.4	18	18.6	97	32.7
40-49	65	74.7	22	25.3	89	30.0
50-59	16	80.0	4	20.0	20	6.7
60+	22	81.5	5	18.5	27	9.0
Total	**238**		**59**		**297**	**100**
Educational level						
Illiterate	132	83.0	27	17.0	159	53.5
Read and Write	73	70.2	31	29.8	104	35.0
Elementary	28	96.2	1	3.4	29	9.7
Junior to Senior secondary	5	100.0	-	-	5	1.69
Total	**238**		**59**		**297**	**100**

When they were asked about specific STDs including HIV/AIDS, seventy percent of the male and 76 percent of the female in rural areas and 88.6 percent of the males and 89.8 percent of the females in urban areas know HIV/AIDS as a disease that can be transmitted through sex. The information, education and communication (IEC) program that has mainly focused on urban areas might probably have made HIV/AIDS the most widely recognized STDs.

With regard to specific STDs, 88.0 percent of the male and 60 percent of the female household heads in rural areas and 83.3 percent of the male and 73.5 percent of the female household heads from urban areas know Gonorrhea as a disease that can be transmitted through sexual intercourse. Syphilis as a disease that can be transmitted through sexual intercourse is also known by 73.6 percent of the males and 74.5 percent of the females from rural respondents and 85.8 percent of the males and 79.6 percent of the females from urban respondents. Chancroid is also known by 64.9 percent of the male and 74.2 percent of the female respondents in urban areas and 75 percent of the male and 71.4 percent of the female respondents in urban areas as one of the STDs. Generally respondents from rural areas were less informed about HIV/AIDS than urban respondents. This could be probably due the low level of social interaction and shortage of information on HIV/AIDS in the rural areas. But those who are living in urban areas have got exposure to modern source of information and discussion among family members and friends than those who are living in rural area.

Concerning the age groups and knowledge of sexually transmitted disease more than 70 percent in all age groups in rural areas know STDs in general whereas among urban respondents in all age groups more than 80 percent know STDs in general. As far as HIV/AIDS is concerned 87.5 percent in the age group 18-29 and 83.8 percent in the age group 30-39 know HIV/AIDS as one of the STDs whereas among urban areas respondents, 98.7 percent in the age group 18-29 and 93.7 percent in the age group 30-39 know HIV/AIDS know as one of the STDs.

Table 12b. Specific STDs for those who have said yes

Specific STDs								
Background Characteristics	Syphilis		Gonorrhea		HIV/ AIDS		Chancroid	
	Count	%	Count	%	Count	%	Count	%
Sex								
Male	155	73.6	185	88.0	147	69.8	136	64.9
Female	218	74.5	17	60.0	212	76.0	207	74.2
Age								
18-29	31	55.4	27	48.2	49	87.5	26	46.4
30-39	48	61.3	38	48.2	66	83.8	41	52.5
40-49	61	93.9	48	74.2	44	64.5	45	68.5
50-59	16	100.0	16	100.0	8	52.5	12	72.5
60+	12	100.0	22	100.0	3	11.7	19	87.5
Educational level								
Illiterate	6	53.4	108	81.6	97	73.5	84	64.0
Read and Write	42	57.5	65	88.4	56	76.6	52	71.9
Elementary	17	62.4	26	94.3	22	78.6	21	74.3
Junior to Senior secondary		80.0	5	100.0	5	100	4	80.0

- The sum of percentiles is greater than 100% because an individual can chose more than one answer

The responses of the urban and rural head of households to the question "which STDs do you know" indicates that HIV/AIDS as one of the STDs is more known by in urban area respondents than the rural respondents in these age groups. Though there is variation in proportion, except HIV/AIDS, knowledge about specific STDs increase as age increases in both urban and rural areas, (see table 12 and 13.)

Table 13a: Knowledge of sexually transmitted disease by sex, age and level of education (Urban).

Background Characteristics	Ever heard of STDs				Count Total	
	Yes		No			
	Count	%	Count	%	Count	%
Sex						
Male	112	88.2	15	11.8	127	71.3
Female	43	86.3	8	15.7	51	28.7
Total	**165**		**23**		**178**	**100**
Age						
18-29	68	84.2	13	15.8	81	45.5
30-39	54	91.1	5	6.9	59	33.0
40-49	20	83.3	4	16.7	24	13.5
50-59	19	83.3	-	16.7	10	5.6
60+	4	100.0	-	-	4	2.2

Total	**165**		**23**		**178**	**100**
Educational level						
Illiterate	24	88.9	3	11.1	27	15.2
Read and Write	39	80.6	10	19.4	49	27.5
Elementary	39	89.5	7	13.0	46	25.8
Junior to Senior	46	93.9	3	6.1	49	27.5
Secondary School	6	100.0	1	100.0	7	3.9
Total	**165**	**100**	**23**		**178**	**100**

With Regard to Educational level and knowledge about HIV/AIDS, generally increases as educational level increases. But as table 13a shows the proportion of knowledge about HIV/AIDS is less in rural household heads than urban household respondents.

Table 13b: Specific STDs for those who have said yes

Background Characteristics	Specific STDs							
	Syphilis		Gonorr-hea		HIV/AIDS		Chan-croid	
	Count	%	Count	%	Count	%	Count	%
Sex								
Male	96	85.8	93	83.3	99	88.6	84	75.0
Female	34	79.6	32	73.5	39	89.8	31	71.4
Age								
18-29	50	74.0	51	75.3	67	98.7	50	74.0
30-39	48	89.5	41	76.0	51	93.7	37	67.7
40-49	19	95.5	16	77.3	14	69.1	15	75.0
50-59	19	100.0	12	60.0	12	60.0	16	85.0
60+	4	100.0	3	66.7	3	56.7	4	86.7
Educational level								
Illiterate	16	66.0	15	64.4	22	92.0	17	72.0

Read and Write	29	75.5	26	67.4	38	96.7	28	72.7
Elementary	27	69.6	27	68.1	38	97.8	34	87.0
Junior to Senior	42	90	38	83.3	45	98.3	44	96.0
Secondary School	6	93.9	6	100	6	100.0	6	96.8

- The sum of percentiles is greater than 100% because an individual can chose more than one answer

4.3 Knowledge of HIV/AIDS and Source of HIV/AIDS Information by Sex and Age

Acquiring knowledge of HIV/AIDS is an important step to prevent transmission of HIV/AIDS. Table 14a' and b' and 15a' and b' below depicts the prevalence of knowledge about HIV/AIDS based on sex and age and participants source of information about the disease.

Table14a: Knowledge of HIV/AIDS by sex and age (Rural)

Background Characteristics	Have you Ever heard of a disease called HIV/AIDS?					
	Yes		No			
	Count	%	Count	%	Count Total	%
Sex						
Male	254	98.8	3	1.2	257	87
Female	40	100.0	-	-	40	13
Total	**294**		**3**	**-**	**297**	**100**
Age						
18-29	66	100.0	-	-	66	22
30-39	96	98.96	1	1.0	97	33
40-49	86	98.9	1	1.1	87	29
50-59	19	95.0	1	5.0	20	7
60+	27	100.0	-	-	27	9

Total	**294**		**3**		**297**	**100**

It is necessary to note that the prevalence of AIDS knowledge presented in table 13a' and b' is based on a different question from the one asked for table12a' and b'. For table 12b respondents were asked which 'STDs do you know?" In contrast for table 13b' respondents were asked the following questions in which HIV/AIDS" was specifically mentioned, "Have you ever heard a disease called HIV/AIDS?" When asked, if they had heard of an illness called HIV/AIDS, 98.8 percent of the males and 100 percent of the female respondents in rural areas and 94.5 percent of the males and 98.2 percent of the respondents in urban responded affirmatively.

Table 14b: Source of HIV/AIDS information for those who have said yes (Rural)

Source of HIV/AIDS information																			
Background Characteristics	count	Ritual laces	Count	Radio	Count	TV	Count	School	Count	Community meeting	Count	Friends	Count	Work Place	Count	Health Workers	Count	Relatives	Count
Sex																			
Male	36	14.0	134	44.7	22	8.8	15	5.8	151	59.5	72	28.4	72	8.6	22	10.9	28	6.2	15
Female	1	10.0	14	35.0	2	5.0	3	7.5	32	80.0	10	25.0	10	15.0	6	2.5	1	2.5	1
Age																			
18-29	40	10.6	41	62.1	9	13.6	40	10.6	59	60.6	23	34.8	23	13.6	9	9.1	6	7.6	5
30-39	14	14.4	40	41.2	8	8.2	4	4.1	60	62.9	29	29.9	29	9.3	9	13.4	23	7.2	7
40-49	17	19.5	35	40.2	4	4.6	6	6.9	54	63.2	25	28.7	25	5.7	5	10.3	9	4.6	3
50-59	1	5.0	6	30.0	1	5.0	1	5.0	14	75.0	3	15.0	3	10.0	2	5.0	1	5.0	1
60+	10	37.7	7	25.9	1	3.7	-	-	14	51.9	7	25.9	7	11.1	3	-	-	-	-

- The sum of percentiles is greater than 100% because an individual can chose more than one answer

Regarding the source of information from which they had heard about HIV/AIDS, 91.3 percent of the male and 98.20 percent of the female respondents in urban areas mentioned radio as their source information (Table 15b. p. 45) while 44.7 percent of the male and 35 percent of the female respondents in rural areas mentioned radio as their source of information (Table 14b). Health workers as source of information for urban areas were 87.6 percent for the males and 94.1 percent for females in urban areas, respectively. In rural areas 10.9 percent of the males and 2.5 percent of the

females reported health workers as their source of information. Ritual places (Church, Mosques etc) in urban areas as source of information constitute 80.3 and 88.2 percent for males and females, respectively. Concerning the rural respondents 14.0 percent of the males and 10 percent of the females only have got ritual places as their source of information.

Table15a: Knowledge of HIV/AIDS and source of HIV/AIDS information by sex and age (Urban)

Background Characteristics	Have you Ever heard of a disease called HIV/AIDS?					
	Yes		No			
	Count	%	Count	%	Count Total	%
Sex						
Male	120	94.5	7	5.5	127	71.3
Female	45	98.2	6	1.8	51	28.7
Age						
18-29	75	93.8	6	6.2	81	45.5
30-39	54	91.5	4	8.5	58	33.0
40-49	22	87.4	3	12.5	25	13.5
50-59	12	100.0	-	-	12	2.2
60+	3	100.0	-	-	3	1.7

About seventy three percent of the males and 74.5 percent of the females from urban respondents have an access to TV which they mentioned as their fourth information source. But in rural areas only 8.8 percent of the males and 5.0 percent of the females mentioned TV as their source of information. The first source of information for rural respondents was community meeting. The community meeting information is 'second hand' information, which one cannot rely on. In all, the information sources from which they head rural areas were inferior to those of urban.

Table 15b: Source of AIDS information for those who have said yes (Urban)

Source of AIDS information

Background Characteristics	Count	Ritual Places	Count	Radio	Count	TV	Count	School	Count	Community meeting	Count	Friends	Count	Work Place	Count	Health Workers	Count	Relatives
Sex																		
Male	96	80.3	110	91.3	88	73.2	48	40.2	70	58.3	51	42.5	46	38.6	105	87.6	21	17.2
Female	40	88.2	44	98.2	34	74.5	24	52.9	34	74.5	22	49.0	21	47.1	42	94.1	7	14.5
Age																		
18-29	66	87.7	71	95.1	64	85.2	36	48.1	50	66.7	34	45.7	34	45.7	72	96.4	6	8.2
30-39	48	89.7	52	96.6	48	89.7	31	56.9	41	75.9	35	65.5	30	55.2	47	86.2	4	7.2
40-49	13	58.3	21	95.8	6	25.0	5	20.8	6	29.2	4	16.7	4	16.7	18	83.3	1	5.6
50-59	8	66.7	9	75.0	3	25.0	-	-	6	50.0	-	-	-	-	11	91.7	1	43
60+	8	66.7	1	33.0	1	33.3	1	33.3	1	33.3	-	-	-	-	-	-	-	-

- The sum of percentiles is greater than 100% because an individual can chose more than one answer

To conceptualize the social impact of HIV/AIDS, open discussion is very important. However, the issue as a problem does not seem to be discussed in urban areas despite the opportunities offered by different meetings such as: Kebele meetings, Senbete meetings (the meeting common for orthodox church followers), Edir, Equb (a sort of informal credit institution) etc. As a result urban areas were less informed through the community meetings. This could be due to the fact that urban dwellers are mostly merchants and their participation in community meeting is less.

About twenty eight percent of the males and 25 percent of the females in rural areas and 42.5 percent of the males and 49 percent of the females in urban areas said that they obtain information about HIV/AIDS from their friends and 6.2 percent of the males and 2.5 percent of the females in rural areas and 17.2 percent of the males and 14.5 percent of the females among urban respondents have relatives as source of information about HIV/AIDS. From these two results one can say that respondents living in urban areas discuss the issue among the family members better than those in rural areas. Discussion about HIV/AIDS at work place is still at rudimentary level among rural respondents because only 8.6 percent of the males and 15 percent of the females reported work place as their source of information. But 38.6 percent of the males and 47.1 percent of the females among urban dwellers mentioned positively work places as their source of information about HIV/AIDS. This could be an indication that, friends, relatives and work place as source of information are

relatively less important due to social taboo to discuss matters related with sex in rural areas. These are socio-cultural factors that affect ones knowledge about HIV/AIDS, which were also indicated by African Development Forum (ADF, 2001).

As far as age groups and knowledge about HIV/AIDS and sources of HIV/AIDS information are concerned; 39.4 percent in the age group 18-29, 27,0 percent in the age group 30-39, 27.9 percent in the age group 40-49, 25 percent in the age group 50-59 and 37 percent in the age group 60 years and above have heard about HIV/AIDS. Among urban respondents 93.8 percent in the age group 18-29, 91.5 percent in the age group 30-39, 87.4 percent in the age group 40-49, 100. percent in the age group 50-59 and 60 years and above heard about HIV/AIDS. It indicates that between rural and urban household there is a big gap about the HIV/AIDS information. Concerning the source of information from which they heard the majority of the rural respondents in all age groups mentioned community meeting and radio whereas the urban respondents in all age groups mentioned radio, health workers, TV, and ritual places as their main source of information. This shows there is variation in information sources between rural and urban areas.

4.4 Knowledge of HIV/AIDS Transmission by Sex and Age

Knowledge of ways of getting HIV/AIDS is presented in table 16. About forty percent of the males and 32.5 percent of the females from rural respondents and 74 percent of the males and 88.2 percent of the female respondents in urban areas reported sex with multiple partners as a means of AIDS transmission. Multiple sex partners was also the risk factor frequently mentioned by both urban and rural respondents. However, the proportion of rural respondents who mentioned multiple sex partners as a factor of AIDS transmission was less than the urban respondents. Urban respondents appear to be more conscious than the rural respondents about the particular danger posed by multiple partner relationships.

Table 16: Percentage of rural study household heads with positive responses to the different ways by which AIDS can be transmitted, by sex and age (rural).

Background Characteristics	Sex with multiple partner %	Sex with prostitutes %	Sex without C d	Using untested blood %	By curse %	Sharing skin piercing instruments %	Kissing %	Mosquito bits %	Shaking hands %	Sharing wearing %
Sex										
Male	39.5	67.1	38.4	15.2	49.0	12.5	22.0	35	16	16.8
Female	32.5	50.0	30.0	20.0	60.0	22.5	25.0	50	15	22.5
Age										
18-29	54.5	92.4	33.3	24.2	24.8	25.8	3.0	4.5	3.0	15.2
30-39	45.4	88.4	21.6	25.5	25.8	9.3	3.1	3.1	2.1	15.5
40-49	34.9	84.9	14.0	14.0	33.7	9.8	2.3	5.8	2.3	17.4
50-59	20.0	75.0	13.0	10.0	45.0	5.0	40.3	10.2	11.3	45.0
60 and above	19.6	66.7	11.1	6.0	68.1	4.8	50.2	30.5	25.7	51.1

- The sum of percentiles is greater than 100% because an individual can choose more than one answer

From table 16 and 17 one can make a good comment on the response given by rural and urban sample heads of households by comparing responses to risk factors such as sharing skin piercing instruments, sex with prostitutes and non-use of condom during sex. For the first factor (sharing skin piercing instruments) 12.5 percent of the male and 22.5 percent of the female respondents in rural areas and 65.4 percent the male and 74.5 percent of the female urban respondents answered affirmatively. For the second risk factor, (sex with prostitutes) 67.1 percent of the male and 50 percent of the female respondents from rural and 87.4 percent of the male and 70.6 percent of the female from urban areas mentioned sex with prostitutes as a means of HIV/AIDS transmission. As to the third risk factor, sex without condom, 38.4 percent of the male and 30 percent of the female respondents from rural areas and 69.3 percent of the male 74.5 percent of the female respondents from urban areas mentioned that it is a means of HIV/AIDS transmission. Generally, For the three risk

factors (sharing skin piercing instruments, sex with prostitutes and sex without condom) rural respondents were less conscious than the urban respondents.

Table 17: Percentage of Urban study household heads with positive response to the different ways by which HIV/AIDS can be transmitted by sex and age (Urban)

Background Characteristics	Sex with multiple partner %	Sex with prostitutes %	Sex without Condom %	b	By curse %	Sharing skin piercing instruments %	Kissing %	Mosquito bits %	Shaking hands %	Sharing wearing %
Sex										
Male	74.0	87.4	69.3	68.5	22.8	65.4	5.5	2.4	2.4	6.3
Female	88.2	70.4	74.5	74.5	21.2	74.5	5.9	3.9	2.0	9.8
Age										
18-29	85.2	85.2	80.2	79.0	23.5	80.2	7.4	3.7	3.7	7.4
30-39	93.1	86.8	82.8	81.0	25.9	74.1	5.2	1.7	1.7	8.6
40-49	54.2	84.0	21.7	15.8	25.0	31.7	5.4	4.2	10.1	4.2
50-59	46.7	83.3	16.7	14.0	58.0	6.7	7.6	11.3	12.3	10.0
60+	33.3	66.7	13.3	13.3	100.0	3.3	8.7	12.7	3.5	33.3

- The sum of percentiles is greater than 100% because an individual can choose more than one answer

Respondents also mention HIV/AIDS as something given to man by the creator to punish him. As a result 49.3 percent of the male and 60 percent of the female respondents from rural areas and 22.8 percent of the male and 21.2 percent of the respondents from urban areas mentioned HIV/AIDS as a curse to punish human beings. In the literature it was stated that some religious leaders in Africa consider HIV/AIDS as some sort of curse from the creator. Curse as reason for the advent of HIV/AIDS increases as age increases.

Misconception of the HIV/AIDS transmission was also widely observed with big difference between rural and urban respondents when they were asked whether kissing, shaking hands, and mosquito bites could transmit HIV/AIDS or not. As a

result, 12.5 percent of the males and 22.5 percent of the females respondents in rural areas believed that kissing can transmit the HIV/AIDS from infected person to a healthy person whereas from urban respondent only 5.5 percent of the male and 5.9 percent of the female believed kissing as a mechanism that can transmit HIV/AIDS from infected person to a healthy person. Thirty five percent of the male and 25 percent of the female from rural respondents believed that mosquito bites can transmit HIV/AIDS from infected person to a healthy person whereas only 2.4 percent of the male and 2.0 percent of the female from urban respondents believed that mosquito bites can transmit HIV/AIDS from infected person to a healthy person. With regard to shaking hands and sharing wear, 16 percent of the male and 15 percent of the female respondents and 16.8 percent of the male and 22.5 percent of the female from rural respondents also believed that shaking hands and sharing wear with infected person with HIV/AIDS can transmit the disease to a healthy person. But from urban respondents it was only 2.4 percent of the males and 2 percent of the females and 6.3 of the males and 9.8 percent of the females, respectively, believed that shaking hands and sharing weare with infected person can transmit the virus from infected person to a healthy person.

With regard to age groups and knowledge of HIV/AIDS transmission, 54.5 percent in the age group 18-29 and 45.4 percent in that age group 30-39 from rural areas mentioned sex with multiple partner as a mechanism that can transmit the virus from the infected person to a healthy person whereas 85.2 percent of the males and 93.1 percent of the females mentioned sex with multiple partner as a mechanism that can transmit the virus from infected to non infected person. With regard to sex with prostitutes 92.4 percent in the age group 18-29 and 88.4 percent in the age group 30-39 from rural household respondents mentioned sex with prostitutes as a mechanism of HIV/AIDS transmission from infected person with HIV/AIDS to a non infected person whereas 85.2 percent in the age group 18-29 and 86.8 percent in the age group 18-29 and 86.8 percent in the age group 30-39 from urban respondents mentioned sex with prostitutes as a mechanism that can transmit HIV/AIDS from an infected person to a non infected person. Urban household heads consider sex with multiple partners as a mechanism of HIV/AIDS transmission than the rural household

heads and rural household respondents stressed sex with prostitutes more as a mechanism of HIV/AIDS transmission than the urban household heads.

For the other age groups, though there is variation between rural and urban knowledge about sex with multiple partner and sex with prostitutes as a mechanism of HIV/AIDS transmission decreases as age increases.

As far as sex without condom as a mechanism of HIV/AIDS transmission, 33.3 percent in the age group 18-29, and 21.6 in the age group 30-39 from rural household respondents mentioned sex without condom as a mechanism of HIV/AIDS transmission from infected to a non-infected person whereas 80.2 percent in the age group 18-29 and 82.8 percent in the age group 30-39 from urban household heads mentioned sex without condom as a mechanism of HIV/AIDS transmission from infected to a non infected person. This shows that urban household heads are more conscious about the use of condom to prevent oneself from HIV/AIDS infection than the rural household respondents. Concerning the risk factors using untested blood and sharing skin piercing instruments, 24.2 percent in the age group 18-29 and 25.5 percent in the age group 30-39 and 25.8 percent 9.3 percent in age groups (18-29 and 30-39) respectively mentioned that using untested blood and sharing skiing piercing instruments as a mechanism that can transmit HIV/AIDS from infected to a non infected person. Whereas from the urban respondents 79 percent in the age group 18-29 and 81 percent in the age a group 18-29and 81 percent in the age group 30-39 mentioned using untested blood as a mechanism that can transmit HIV/AIDS infection from infected person to a non infected person.

Concerning sharing skin piercing instrument 80.2 percent in the age group 18-29 and 74.1 percent in the age group 30-39 from urban household respondents mentioned sharing skin piercing instruments as one of the factors of HIV/AIDS transmission from infected to a non infected person. For these two risk factors (using un tested blood and sharing skin piercing instruments) rural household respondents were less conscious than the urban respondents. For the remaining misconception such as HIV/AIDS given by curse, kissing, mosquito bite, shaking hands and sharing wear,

though there is variation between rural and urban households, misconception increases as age increases.

4.4 Knowledge of HIV/AIDS Transmission by Marital Status and Educational Level

Both rural and urban household heads were asked about HIV/AIDS transmission on the basis of their marital status and educational level to assess whether these variables affect their knowledge about HIV/AIDS transmission or not.

Table 18: Knowledge of HIV/AIDS transmission by marital status, level of education and religion (Rural).

Background Characteristics	Sex with multiple partner	Sex with prostitutes	Sex without Condom	Using untested blood	By curse		Kissing	Mosquito bits	Shaking hands	Sharing wearing
	%	%	%	%	%	%	%	%	%	%
Marital Status										
Single	44.4	72.2	38.9	33.3	72.2	33.3	5.6	22.2	10.7	16.7
Married	38.5	87.2	17.3	13.7	28.3	11.5	1.3	2.2	1.8	16.4
Divorced	52.8	52.8	19.4	19.4	41.7	16.7	5.6	5.6	5.6	30.6
Widowed	50.0	87.5	37.5	18.0	18.8	18.8	6.3	11.5	12.3	6.3
Level of Education										
Illiterate	33.3	76.7	15.7	17.0	53.5	15.7	2.5	6.3	3.1	30.8
Read and Write only	48.5	86.4	18.4	10.7	3.9	7.8	-	0.0	0.0	2.9
Elementary	48.3	93.1	34.0	17.2	17.2	17.2	3.4	1.0	1.0	0.0
Junior-senior Secondary	100.0	100.0	100.0	80.0	20.0	60.0	40.0	0.0	0.0	0.0
Religion										
Orthodox	38.5	81.8	16.9	13.9	28.6	11.3	3.0	4.3	2.6	17.3
Catholic	-	100.0	-	100.0	-	-	-	-	-	100.0
Protestant	75.0	100.0	66.7	58.3	35.0	50.0	-	-	-	8.3
Muslim	46.2	78.8	23.1	13.5	44.2	17.3	-	1.9	-	19.2

- The sum of percentiles is greater than 100% because an individual can choose more than one answer

As it can be seen from table 18,44.4 percent of the single 38.5 percent of the married, 52.8 percent of the Divorced and 50 percent of the windowed from rural

household respondents mentioned sex with multiple partner as a mechanism of HIV/AIDS transmission from infected to non infected person whereas 94.1 percent of the single, 69 percent of the married, 75 percent of the divorced 100 percent of the separated and 85 percent of the widowed from urban household respondents mentioned sex with multiple partners as a mechanism of HIV/AIDS transmission from infected to a non infected person (see table 18 and 19)

Table19: knowledge of HIV/AIDS transmission by marital status and level of

education (Urban).

Background Characteristics	Sex with multiple partner %	Sex with prostitutes %	Sex without Condom %	Using untested blood %	By curse %	Sharing skin piercing instruments %	Kissing %	Mosquito bits %	Shaking hands %	Sharing wearing %
Marital Status										
Single	94.1	76.5	88.2	88.2	35.3	82.4	14.7	8.8	5.9	5.9
Married	69.7	85.4	64.0	64.0	24.7	58.4	3.4	1.1	0.0	5.6
Divorced	75.0	70.8	66.7	58.3	33.3	58.3	0.0	0.0	0.0	4.2
Separated	100.0	100.0	75.0	0.0	100.0	100.0	7.1	0.0	0.0	0.0
Widowed	85.00	89.3	100.0	78.6	17.0	92.9	0.0	3.6	7.1	17.9
Level of Education										
Illiterate	66.7	70.4	48.1	48.1	63.0	55.6	7.4	3.7	7.4	18.5
Read and Write only	65.3	83.8	61.2	63.3	34.7	55.1	6.1	4.1	0.0	10.2
Elementary	78.3	84.8	71.1	69.6	19.6	86.4	4.3	4.3	2.2	4.3
Junior-senior Secondary	100.0	85.7	87.8	85.7	12.2	5.5	0.0	0.0	2.0	2.0
Above Grade 12	100.0	100.0	100.0	100.0	16.7	66.7	0.0	0.0	0.0	0.0

- The sum of percentiles is greater than 100% because an individual can choose more than one answer

From rural household respondents, 72.2 percent of the single, 87.2 percent of the married, 52.8 percent of the divorced and 87.5 percent of the widowed (Table 18 p. 51) mentioned that sex with prostitutes can transmit HIV/AIDS from infected to a non-

infected person. From the Urban household respondents, 76.5 percent of the single, 85.4 percent of the married, 70 percent of the divorced, 100 percent of the separated and 89.3 percent of the widowed mentioned that sex with prostitutes can transmit HIV/AIDS from an infected to a non-infected person. From the responses of these two factors (sex with multiple partner and sex with prostitute) rural respondents knowledge is less than those in urban areas (see table 18 and 19). Concerning sex without condom as a mechanism to transmit HIV/AIDS 38.9 percent of the single and 37.5 percent of the widowed from rural household respondents mentioned sex without condom as a mechanism that can transmit HIV/AIDS from an infected to a non infected person. Regarding the urban respondents, 88.2 percent of the single, 64 percent of the married, 66.7 percent of the divorced, 75 percent of the separated and 100 percent of the widowed mentioned sex without condom as one of the mechanism of HIV/AIDS transmission from an infected to a non-infected person. Sex without condom as a mechanism that transmit HIV/AIDS is recognized more by urban respondents than the rural respondents.

As far as the relationship between knowledge of HIV/AIDS transmission and level of education is concerned, although the proportion of rural respondents is less than the urban respondents, knowledge of HIV/AIDS transmission increases as educational level increases.

4.5 Knowledge of ways to Avoid Getting HIV/AIDS by Sex and Age

Respondents who have heard of the disease AIDS, were further asked the question, “is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?” Accordingly, 14.5 percent of the males and 15 percent of the females among rural respondents said that there is no way to avoid getting HIV/AIDS (Table 21a, p.54). In terms of valid ways to prevent AIDS having sex with faithful partner was citied by 52.1 percent of the male and 62.4 percent of the female respondents in rural areas and 74.8 percent of the male and 78 percent of the female respondents in urban areas.

Table 20a: Knowledge of ways to avoid getting HIV/AIDS by sex and age (urban)

Background Characteristics	Is there any thing a person can do to avoid AIDS?					
	Yes		No		Total count	
	Count	%	Count	%	Count	%
Sex						
Male	116	70.3	11	7.9	127	71.3
Female	49	29.7	2	3.9	51	28.7
Total	**165**		**13**		**178**	
Age						
18-29	78	96.3	3	3.7	81	46.0
30-39	57	98.3	2	1.7	58	33.0
40-49	20	83.3	4	16.7	24	14.0
50-59	8	86.7	4	13.3	12	7.0
60+	3	68.0	-	32	3	1.7
Total	**165**		**13**		**178**	

From this premise, avoiding sex with prostitutes as a mechanism to avoid AIDS is higher among urban respondents, than rural respondents. Use of condom during sex as a means to avoid HIV/AIDS was still mentioned by smaller number of respondent from rural than urban i.e.11.4 percent of the males and 11.8 percent of the females and 66.4 percent of the males and 76 percent of the females, respectively.

Table20b: knowledge of ways to avoid getting HIV/AIDS for those who have said yes

Ways of Avoiding getting HIV/AIDS																
Background Characteristics	Count	Avoid sex before marriage	Count	Sex with faithful partner	Count	Seek protection from traditional healers	Count	Using condom during sex	Count	Avoid sharing un sterilized instruments	Count	Avoid using untested blood fusion	Count	Avoid sex with prostitutes	Count	abstinence
		%		%		%		%		%		%		%		%
Sex																
Male	32	65.5	87	74.8	24	21.0	77	66.4	77	66.4	77	66.4	86	73.9	103	89.1
Female	36	74.0	38	78.0	21	42.0	37	76.0	32	66.0	34	70.0	39	80.0	48	98.0
Age																
18-29	55	70.0	60	77.5	38	48.8	55	70.0	55	70.0	76	97.4	62	80.0	72	92.5
30-39	47	82.8	49	86.2	21	36.2	49	86.2	43	75.9	48	83.4	50	87.9	51	89.2
40-49	9	45.0	11	55.0	6	30.0	9	45.0	9	45.0	9	45.0	9	45.0	18	90.0
50-59	1	12.5	4	50.0	2	25.0	3	32.5	2	25.0	2	25.0	3	37.5	8	100.0
60+	1	33.3	1	33.3	1	12.0	1	33.3	1	33.3	1	33.3	1	33.3	3	100.0

- The sum of percentiles is greater than 100% because an individual can choose more than one answer

An important point to draw a sound strategy is the response in favor of seeking protection from traditional healers as a way to avoid getting AIDS. In this regard 36 percent of the male and 47.6 percent of the female rural respondents and 21 percent of the male and 42 percent of the female urban respondents answered affirmatively. And 14.5 percent of the male and 15 percent the female in rural and 7.9 percent of the male and 3.9 percent of the female in urban area said that there is a way to avoid AIDS.

Table 21a: Knowledge of ways to avoid getting HIV/AIDS by sex and age (Rural)

Background Characteristics	Is there any thing a person can do to avoid AIDS?				Total count	
	Yes		No			
	Count	%	Count	%	Count	%
Sex						
Male	220	85.5	37	14.5	257	68.5
Female	34	85.0	6	15.0	40	13.5
Total	**254**		**43**		**297**	**100**
Age						
18-29	64	97.0	2	3.0	66	22.2
30-39	88	90.7	9	9.3	97	32.6
40-49	72	82.6	15	17.4	87	29.3
50-59	14	70.0	6	30.0	20	6.7
60+	16	59.3	11	40.7	27	9.0
Total	**254**		**43**		**297**	**100**

Concerning avoiding sex before marriage was one of the best ways to avoid getting HIV/AIDS only 9.1 percent of the male and 8.8 percent of the female from rural heads of households responded positively whereas 65.5 percent of the males and 74 percent of the female among urban respondents mentioned avoiding sex before marriage as the best way of avoiding HIV/AIDS. For the risk factors such as avoiding sharing unsterilized instrument and avoiding untested blood fusion, there is big variation between rural and urban household heads. About 66.4 percent of the males and 66 percent of the females from urban household heads mentioned avoiding sharing unsterilized instrument as a way to avoid getting HIV/AIDS, whereas from rural household heads only 11.9 percent of the males and 11.8 percent of the females mentioned that avoiding sharing unsterilized instrument as the way to avoid getting HIV/AIDS.

Table 21b: Ways of Avoiding getting HIV/AIDS for those who have said yes

Ways of Avoiding getting HIV/AIDS							
Avoid sex before marriage	Sex with faithful partner	Seek protection from traditional healers	Using condom during sex	Avoid sharing un sterilized instruments	Avoid using untested blood fusion	Avoid sex with prostitutes	Abstinence
%	%	%	%	%	%	%	%
9.1	52.1	36.0	11.4	11.9	11.9	65.3	78.2
8.8	62.4	47.6	11.8	11.8	14.7	35.3	69.4
15.6	80.2	15.6	28	18.8	18.8	59.4	43.1
10.2	77.0	15.9	20.1	12.5	11.4	59.1	56.9
5.6	70.1	15.5	14	8.5	9.9	57.6	49.3
-	57.1	21.4	13	7.1	14.3	51.4	68.1
-	53	38.8	7.1	-	-	43.8	87.0

- The sum of percentiles is greater than 100% because an individual can choose more than one answer

And from urban households 66.4 percent of the males and 70 percent of the females mentioned avoiding using untested blood fusion as the way to avoid getting HIV/AIDS but only 11.9 percent of the male and 14.7 percent of the female from among rural respondents mentioned avoiding untested blood as one of the ways to avoid getting HIV/AIDS. As far as abstinence as the way to avoid getting HIV/AIDS is concerned, 89.1 percent of the males and 98 percent of the females from urban respondents and 78.2 percent of the males and 69.4 percent of the females from among rural household heads mentioned abstinence as one of the way to avoid getting HIV/AIDS. Generally, there is variation in knowledge between rural and urban household heads towards the way to avoid getting HIV/AIDS.

With regard to age and knowledge of ways to avoid getting HIV/AIDS, 97 percent in the age group 18-29 and 90.7 percent in the age group 30-39 , 82.6 percent in the age group 40-49, 70 percent in the age group 50-59 and 59.3 percent in the age group 60 years and above from rural household heads mentioned that it is possible to avoid getting HIV/AIDS.

Among the age groups of the urban respondents 96.3 percent in the age group 18-29, 98.3 in the age group 30-39, 83.3 percent in the age group 40-49, 86.7 percent in the age group 50-59 and 68 percent in the age group 60 years and above

mentioned that it is possible to avoid getting HIV/AIDS. These age groups of rural and urban household heads have almost equal knowledge of ways to avoid getting HIV/AIDS and it decreases as age increases for both rural and urban age groups.

Except for abstinence as the way to avoid getting HIV/AIDS, for the other alternatives knowledge of rural respondents and urban respondents decreases as age increases. But still the rural household heads seems to know less than the urban household heads.

4.6 Awareness of HIV/AIDS Related Health Issues

The first question for both urban and rural respondents was “is it possible for a healthy looking person to have HIV virus?” The response shows the following: 43.8 percent of the males and 30 percent of the females in rural area (tables 22a and 23a) and 62.2 percent of male and 47.1 percent of the female in urban areas responded affirmatively. This question was important because of the nature of virus, which takes a long period of incubation, and the person himself who cannot recognize that the virus had affected him.

Table 22a: Percentage of head of households who were ask about certain

HIV/AIDS related health issues by sex and age (Urban)

Background Characteristics	Can a healthy looking person have HIV/AID?	Total count

	Yes		No			
	Count	%		%	Count	%
Sex						
Male	79	62.2	48	37.8	127	17.3
Female	24	47.1	27	52.9	51	28.7
Total	**103**		**75**		**178**	
Age						
18-29	41	50.6	40	49.4	81	45.5
30-39	33	56.9	25	43.1	58	32.6
40-49	16	66.7	8	33.3	24	13.5
50-59	10	83.3	2	16.7	12	6.7
60+	3	100.0	-	-	3	1.69
Total	**103**		**75**		**178**	

The main intention of the question "do you personally know someone with HIV/AIDS or who died of HIV/AIDS?" was to measure the degree of openness in the society about HIV/AIDS and thereby determine whether the society discusses HIV/AIDS s a disease. The personal knowledge of some one with HIV/AIDS or who has died of HIV/AIDS has noting to do with the selected background characteristics. This question is also backed by Reboulot's hypothesis:- Human beings need the rude shock of many deaths in order to awaken their senses and change their behavior.

Table 22b: Percentage of head of households who were ask about certain

HIV/AIDS related health issues by sex and age (Urban)

Background Characteristics	Know PLWHIV	Know person die of AIDS	Can AIDS be cured				Count Total	%	Should PLWHIV isolated	
			Yes		No.				Yes	No.
	%		Count	%	Count	%			%	%
Sex										
Male	47.2	42.5	40	31.5	87	68.5	127	71.3	13.1	86.9
Female	37.3	43.1	16	31.4	35	68.6	51	28.7	25.9	79.2
Total			**56**		**122**		**278**			
Age										
18-29	50.6	44.4	23	28.4	58	71.6	81	45.5	20.5	79.5
30-39	43.1	48.3	12	20.7	46	79.8	58	32.6	21.0	79.0
40-49	41.7	41.7	11	45.8	13	54.2	24	13.5	30.2	69.8
50-59	16.7	16.7	8	66.7	4	33.3	12	6.7	34.6	65.4
60 and above	0.0	0.0	2	66.7	1	33.3	3	1.69	41.0	59.0
Total			**56**		**122**		**278**			

About 47 percent of the males and 37.3 percent of the females in the urban and 19.5 percent of the males and 35 percent of the females in rural said that they know someone who has AIDS, respectively. Knowledge of rural respondents towards someone who has AIDS is smaller than urban respondents. Probably, this might be due to the fact that patients specially in rural areas do not want to expose the disease to any one, as they fear the social stigma (Segregation). Agyman (1993) reported such circumstance where among 18 patients in Ghana, 16 did not inform their parents for fear of segregation and ostracization, and non told their children and neighbors.

Table 23a: knowledge of HIV/AIDS related health issues by sex and age (rural)

Background Characteristics	Can a healthy looking person have HIV/AID?				Total count	
	Yes		No			
	Count	%	Count	%	Count Total	%
Sex						
Male	112	43.8	145	56.2	257	86.5
Female	12	30.0	28	70.0	40	13.5
Total	**124**		**173**		**297**	
Age						
18-29	35	53.0	31	47.0	66	22.2
30-39	43	44.3	54	55.7	97	32.7
40-49	27	31.1	60	68.9	87	29.3
50-59	9	45.0	11	55.0	20	6.7
60+	10	37.0	17	63.0	27	9.1
Total	**124**		**173**		**297**	

Regarding response for the question “should a person with HIV/AIDS live isolated?” 13.1 percent of the males and 25.9 percent of the females in urban areas (table 22b) and 54.2 percent of the males and 42.6 percent of the females in rural areas (table 23b) responded positively to this question. Once they answered the question positively they were asked a question ‘Why’? Both the urban and rural respondents who answered affirmatively said that the disease (HIV/AIDS) may be transmitted to healthy persons through casual contact. The above finding is one of the major

misconception about HIV/AIDS mode of transmission. The result also indicates the prevalence of fear related to HIV/AIDS and PLWHIV.

Table 23b: knowledge of HIV/AIDS related issues by sex and age

Background Characteristics	Know PLWHIV	Know person die of AIDS	Can AIDS be cured						Should PLWHIV isolated	
			Yes		No.				Yes	No.
	%	%	Count	%	Count	%	Count total	%	%	%
Sex										
Male	19.5	16.4	237	53.5	120	46.5	257	86.5	54.2	45.8
Female	35.0	22.5	23	42.5	17	57.5	40	13.5	42.6	57.4
Total			**154**		**143**		**297**			
Age										
18-29	22.7	19.7	22	33.3	44	66.7	66	22.2	27.2	72.8
30-39	21.6	10.3	52	53.6	45	46.4	97	32.7	36.0	64.0
40-49	17.4	19.8	52	59.6	35	40.2	87	29.3	50.4	49.6
50-59	30.0	30.0	11	55.0	9	45.0	20	6.7	61.2	38.8
60+	25.9	18.5	17	63.0	10	37.0	27	9.1	63.5	36.5
Total			**154**		**143**		**297**			

Regarding the relationship between age of household heads and HIV/AIDS related health issues, 53 percent in the age group 18-29, 44.3 percent in the age group 30-39, 39.4 percent in the age group 40-49, 45. percent in the age group 50-59 and 37 percent in the age group 50 years and above from rural household heads mentioned that healthy looking person can have HIV/AIDS. Among the urban respondents 50.6 percent in the age group 18-29, 56.9 percent in the age group 30-39, 66.7 percent in the age group 40-49, 83.3 percent in the age group 50-59 and 50 percent in the age group 60 years and above from urban household heads mentioned that healthy looking person can have HIV/AIDS. This shows that rural household heads are less aware than the urban household heads. Regarding the responses for the question "can Aids be cured?" 71.5 percent in the age group 18-28, 79.8 percent in the age group 30-39 54.2 percent in the age group 40-49, 33.3 percent 54.2 percent in the age group 50-59 and 60 years and above from urban respondents mentioned that HIV/AIDS is not curable. Among the rural respondents, 66.7 percent in the age group

18-29, 46.4 percent in the age group 30-39, 39.5 percent in the age group 40-49, 45 percent in the age group 50-59 and 34 percent in the age group 60 years and above from rural household heads mentioned HIV/AIDS is not curable. These variations in response between rural and urban respondents indicate that rural household heads knowledge towards the non curable nature of HIV/AIDS is less than the urban household heads knowledge. As far as the question "Should PLWHIV Isolated, about eighty percent in the age group 18-29, 79 percent in the age group 30-39, 69.8 percent in the age group 40-49, 65.4 percent in the age group 50-59 and 59 percent in the age group 60 years and above from urban households mentioned that people living with HIV should not be isolated. The proportion of rural household heads response to this question is less than the Urban respondents as the response shows i.e. 72.8 percent in the age group 18-29, 64 percent in the age group 30-39, 49.6 percent in the age group 40-49, 38.8 percent in the age group 50-59 and 36.5 percent in the age group 60 years and above mentioned that people living with HIV should not isolated. For one thing, those who said PLWHIV should not be isolated in creases as the age increases.

Table 24a: Knowledge of HIV/AIDS related health issues by level of education and religion (Rural)

Background Characteristics	Can a healthy looking person have HIV/AID?				Total count	
	Yes		No			
	Count	%	Count	%	Count	%
Level of education						
Illiterate	50	40.32	109	63.0	159	53.5
Reading and writing	52	42	52	30	104	35
Elementary	18	14.5	11	15	27	9.1
Junior-senior Secondary	4	3.2	3	1.7	7	2.36
Total	**124**		**173**		**297**	
Religion						
Orthodox	90	72.5	142	79.8	232	78
Catholic	-	-	1	1.0	1	0.34
Protestant	4	3.2	8	4.6	12	4.0
Muslim	30	24.2	22	12.4	52	17.5
Total	**124**		**173**		**297**	

To asses the level of knowledge of HIV/AIDS related issues and level of education different alternatives were given to the household heads. The first question was "Can a healthy looking person have HIV virus?" About forty percent of the illiterate, 42.1 percent of those who could read and write only, 14.2 percent with elementary level education and 3.2 percent of junior to senior secondary level of education from rural household heads mentioned that healthy looking person can have HIV whereas 11.6 percent of the illiterate, 30 percent of those who could read and write, 23.3 percent, with elementary level of education, 29 percent in the Junior to senior secondary level of education and 0.1 percent, in the above grade twelve level mentioned that healthy looking person can have HIV/AIDS. (see table 25a)

Table 24b: knowledge of HIV/AIDS related health issues by level of education and religion (rural)

Background Characteristics	Know PLWHIV	Know person die of AIDS	Can AIDS be cured					Should PLWHIV isolated	
			Yes		No.			Yes	No.
	%	%	Count	%	Count	%	Count	%	%
Level of education									
Illiterate	26.4	19.5	81	50.9	78	46.7	159	60.3	39.7
Reading and writing	16.5	14.6	60	57.3	43	42.7	103	42.7	57.3
Elementary	17.2	17.2	13	55.2	16	44.8	29	30.1	69.9
Junior-senior Secondary	0.0	0.0		0.0	6	100.0	6	23.4	76.4
Total			**154**		**143**		**297**		
Religion									
Orthodox	19.5	15.2	121	52.4	111	47.6	231	85.1	14.9
Catholic	100.0	100.0	1	0.0	1	100.0	1	100	
Protestant	50.0	25.0	6	50.0	6	50.0	12	87	12.8
Muslim	23.1	23.1	25	51.9	25	48.1	52	84.0	16.0
Total			**154**		**143**		**297**		

This disparity between rural and urban household heads to the question can a healthy looking person can have HIV/AIDS shows the low level of knowledge of rural household heads compared to urban household heads knowledge. Though there is variation between rural and urban responses towards a healthy looking person, awareness about healthy looking person to have HIV/AIDS increases as level of education increases. This shows that level of education affects ones knowledge about HIV/AIDS.

Table 25a: Knowledge of HIV/AIDS related issues by level of education and religion (urban).

Background Characteristics	Can a healthy looking person have HIV/AID?				Total count	
	Yes		No			
	Count	%	Count	%	Count	%
Level of education						
Illiterate	12	11.6	15	20.4	27	15
Reading and writing	31	30	18	24	49	27.5
Elementary	24	23.3	22	29	46	25
Junior-senior Secondary	30	29	19	25.3	49	27.5
Above grade 12	6	0.1	1	1.0	7	3.9
Total	**103**		**75**		**178**	
Religion						
Orthodox	80	37.5	69	92	149	83.7
Protestant	2	2	4	5.3	6	3.37
Muslim	21	20	2	2.6	23	16.9
Total	**103**		**75**		**178**	

An assessment was also made to explore the impact of religion on HIV/AIDS health issues. As the result shows 82.1 percent of the orthodox church members, 1.0 percent of the catholic church members, 4.6 percent of the protestant church member and 12.7 percent of the Muslim religion members from rural household heads mentioned that healthy looking person can not have HIV whereas 92.0 percent of the orthodox church members, 5.3 percent of the protestant church members and 2.7 percent of the Muslim religion members from urban households heads mentioned that healthy looking person can not have HIV. This variation could be due to variation in the exposure to information.

Table 25b: knowledge of HIV/AIDS related issues by level of education and religion (urban)

Background Characteristics	Know PLWHIV	Know person die of AIDS	Can AIDS be cured					Should PLWHIV isolated	
			Yes		No.			Yes	No.
	%		Count	%	Count	%	Count total	%	%
Level of education									
Illiterate	51.9	44.4	15	55.6	12	44.4	27	50.9	49.1
Reading and writing	42.9	40.8	23	46.9	26	53.1	49	46.0	54.0
Elementary	37.0	39.1	9	19.5	37	80.4	46	33.2	66.8
Junior-senior Secondary	51.0	46.9	8	16.3	41	83.7	49	30.1	69.9
Above grade 12	16.7	33.3	1	100.0	6	100.0	7	10.1	89.9

Total			**56**		**122**		**178**		
Religion									
Orthodox	47.7	47.0	47	31.5	102	68.5	149	11.2	88.8
Protestant	16.7	22.7	0	0.0	6	100	6	10.2	89.2
Muslim	31.8	100.0	9	39.1	14	60.9	23	12.2	87.8
Total			**56**		**122**		**178**		

Regarding the response to the question, “Can AIDS be cured?” 52 percent of the orthodox church members, 50 percent of the protestant church members and 51.9 percent of the Muslims from rural household heads, mentioned that HIV/AIDS is curable (see table 24b page 61) while 31 percent of the orthodox church members, non of the protestant church members and 39.1 percent of the Muslims from urban areas mentioned that HIV/AIDS is curable (see table 25b p. 62). The response of the respondents to the question “Can AIDS be cured” shows that more rural household heads believed that HIV/AIDS is curable. It showed that their low level of understanding about the virus. As far as the question “Should PLWHIV isolated?” is concerned, 88.8 percent of orthodox church members, 89.2 percent of the protestant church members and 87.8 percent of the Muslims among the urban household heads mentioned that PLWHIV should not be isolated, but 85.1 percent of he orthodox church members, 100 percent of the catholic church members, 87.2 percent of the protestant of church members and 84 percent of the Muslims from the rural household heads mentioned that PLWHIV should isolated. This variation also shows the existence of high misconception among the followers of different religions in rural areas than in urban areas households heads. (see table 24b)

4.7 Willingness to have HIV Test by Sex, Age and Educational Level

Even though, the question about willingness of respondents to have HIV test, was somewhat unrealistic, the basic aim behind it was to know the perception of respondents towards the disease. After getting a response to these questions the second objective was to know his/her reaction, if the result of the blood test happens to be positive. Table 26a' and b' and 27 a' and b' provide the percent distribution of rural and urban respondents who were willing to have HIV test and the reaction they might have if it happens to be positive by sex, age and level of education.

Table 26a: Willingness to have HIV test by sex, age and level of education (Rural).

Background Characteristics	Willingness to have HIV test			
	Yes		No	
	Count	%	Count	%
Sex				
Male	107	41.8	149	86.5
Female	18	45.0	23	13.5
Total	**125**		**172**	
Age group				
18-29	40	66.6	26	22.2
30-39	47	48.5	50	32.7
40-49	30	34.0	57	29.3
50-59	5	25.0	15	6.7
Above 60	3	11.1	24	9.1
Total	**125**		**172**	
Level of education				
Illiterate	71	44.7	88	53.5
Reading and writing	32	31.1	71	35.0
Elementary	17	58.6	12	9.1
Junior-senior Secondary	5	100	-	2.36
Total	**125**		**172**	

Tables 26a and 27a summarize the result against sex, age and level of education. Rural and urban sample heads of households responded to the question "if the facility is available, are you willing to have HIV test?" The responses were positive for 41.8 percent of the males and 45 percent of the females in rural areas and 78 percent of the males and 74 percent of the females in urban areas. Rural respondents were less willing to have HIV test as compared with urban respondents.

Table 26b: Willingness to have HIV test and reactions if it happens to be positive (rural)

Reaction if it happens to be positive										
Tell Family	Tell friends		Don't know what to do		Remain silent		Pray to God			
Background Characteristics	Count	%	Count	%	Count	%	Count	%	Count	%
Sex										
Male	15	14.0	12	11.2	43	40.2	13	11.9	35	32.7
Female	5	27.8	2	11.1	6	33.3	2	11.1	5	26.7
Age group										
18-29	9	22.5	3	7.5	17	42.5	3	7.5	8	20.0
30-39	6	12.8	5	10.6	18	38.3	1	2.1	17	36.2
40-49	2	6.7	4	13.3	13	43.3	-	-	11	36.7

50-59	2	20.0	2	20.0	2	20.0	-	-	2	40.0
Above 60	2	66.7	1	33.3	-	-	-	-	-	-
Level of education										
Illiterate	11	15.5	4	5.6	24	33.8	2	2.8	30	42.3
Reading and writing	4	12.5	6	18.8	14	43.8	2	6.3	6	18.8
Elementary	2	11.8	3	17.6	10	58.8	-	-	2	11.8
Junior-senior Secondary	3	60.0	1	20.0	1	20.0	-	-	-	-

For those respondents who were willing, a second question, "if the test result happens to be positive what would you do?" was posed. The reaction of the respondents was obtained through different alternatives. As a result 14.0 percent of the males and 27.8 percent of the females in rural areas and 44.4 percent of the males and 42.1 percent of the females from urban areas said they would tell the result to their respective families. The rural respondents were less willing than urban respondents. Again rural respondents were less willing to disclose the fact to their friends as compared with the urban respondents. One should note that the overall response by the study population was encouraging. The reaction proposed by some respondents was pray to God. While they know that once acquired it is not a curable disease still 32.7 percent of the male and 26.7 percent of the female respondents from rural and 17.2 percent of the male and 15.8 percent of the female want to pray to God. For the alternative " Do not know what to do", still rural respondents were in a riskier position. It might be due to the stigma; 11.9 percent of the males and 11.1 percent of the female in rural areas and 4 percent of the males and 13.2 percent of the females in urban areas prefer to remain silent.

Table 27a: Willingness to have HIV test and reaction if it happens to be positive by sex, age and level of education (Urban)

Background Characteristics	Willingness to have HIV test				Total count	
	Yes		No			
	Count	%	Count	%	Count	%
Sex						
Male	99	78.0	28	22.0	127	71.3
Female	38	74.5	12	25.5	51	25.7
Total	**137**		**141**		**178**	
Age group						
18-29	71	87.7	10	12.3	81	45.5
30-39	50	86.2	8	13.8	58	32.6

40-49	13	54.2	11	45.8	24	13.5
50-59	2	16.7	10	83.3	12	6.7
Above 60	1	33.3	2	66.7	3	1.69
Total	**137**		**141**		**178**	
Level of education						
Illiterate	14	51.9	13	48.1	27	15.17
Reading and writing	31	63.3	18	36.7	49	27.5
Elementary	39	84.8	7	15.2	46	25.8
Junior-senior Secondary	47	95.9	2	4.1	49	27.5
Above grade 12	7	100	41	-	7	3.9
Total	**137**		**141**		**178**	

Among the urban heads of households, 19.2 percent of the males and 13.2 percent of the females want to tell their respective friends if the blood test happens to be positive whereas only 11.2 percent of the males and 11.1 percent of the females from rural respondents want to tell their respective friends. This variation could be lack of counseling and fear of stigma. For the alternative “do not know what to do“ 15.2 percent of the males and 15.8 percent of the females from urban heads of households mentioned that they are in dilemma about what to do if the blood test happens to be positive. In rural area also 40.2 percent of the males and 33.3 percent of the females do not know what they would do if the blood test happens to be positive. Such confused ideas need serious attention from concerned bodies especially in rural areas. With regard to age groups and their reaction if the blood test happens to be positive, 87.7 percent in the age group 18-29, 86.2 percent in the age group 30-39, 54.2 percent in the age group 40-49, 16.7 percent in the age group 50-59 and 33.3 percent in the age group 60 years and above from urban heads of households were willing to have blood test, whereas in rural areas 60.6 percent in the age group 18-29, 48.5 in the age group 30-39, 34.6 percent in the age group 40-49, 25 percent in the age group 50-59, and 11.1 in the age group 60 years and above were willing to have HIV blood test. The willingness of rural household heads was much less than the urban household heads. The willingness variation to have HIV blood test between rural and urban could be low level of knowledge of the rural household heads towards HIV blood test. One common characteristics between rural and urban household heads concerning HIV blood test and the age group is that except the age group 50-59 in urban areas willingness to have HIV blood test

decreases as age increases; the reverse is true for the alternative pray to God. It seems that as age increases people tend to pray to God for their health.

Table 27b: Willingness to have HIV test and reaction if it happens to be positive (urban)

Background Characteristics	Reaction if it happens to be positive									
	Tell Family		Tell friends		Don't know what to do		Remain silent		Pray to God	
	Count	%	Count	%	Count	%	Count	%	Count	%
Sex										
Male	44	44.4	19	19.2	15	15.2	4	4.0	17	17.2
Female	16	42.1	5	13.2	6	15.8	5	13.2	6	15.8
Age group										
18-29	30	42.3	11	15.5	14	19.7	7	9.9	9	12.7
30-39	23	46.0	13	26.0	4	8.0	2	4.0	8	16.0
40-49	7	53.8	-	-	3	23.1	-	-	3	23.1
50-59	-	-	-	-	-	-	-	-	2	100.0
Above 60	-	-	-	-	-	-	-	-	1	100.0
Level of education										
Illiterate	6	42.9	1	7.1	1	7.1	4	28.6	2	14.3
Reading and writing	13	41.9	3	9.7	2	6.5	3	9.7	10	32.3
Elementary	13	33.3	6	15.4	11	28.2	2	5.1	7	17.9
Junior-senior Secondary	26	55.3	11	23.4	7	14.9	-	-	3	6.4
Above grade 12	26	33.3	6	50.0	-	-	-	-	1	16.7

- The sum of percentiles is greater than 100% because an individual can choose more than one answer

Regarding variation in educational level and willingness to have HIV blood test, 44.7 percent of the illiterate, 31.1 percent of those who could read and write, 58.6 percent of those with elementary level education and 100 percent with Junior to senior secondary level education were willing to have HIV blood test, whereas among urban areas household heads, 51.9 percent of the illiterate, 63.3 percent those who could read and write, 84.8 those with elementary level education, 95.9 percent of those with junior to senior secondary level of education and 100 percent of above grade twelve level of education were willing to have HIV blood test. With the same level of education rural and urban household heads show variation in willingness to have HIV blood test. It may be due to lack of clear information about the importance of HIV blood test. Except, for those who could read and write in rural areas in both rural and urban areas willingness to have HIV test increases as educational level increases.

4.8 Knowledge of Condom Usage by Sex, Age, Marital Status and Level of Education

In order to assess factors affecting condom usage, respondents were asked a question “Have you ever used condom after you have heard about the danger of AIDS?” As the response reveals 57.5 percent of the males and 27.7 percent of the females in urban (Table 281) and 89.1 percent of the males and 87.5 percent of the females in rural areas have never used condom. (Table 29a p. 68).

Table 28a: Knowledge of condom usage by sex and age (Urban).

Background Characteristics	Have you ever used condom?				Total count	
	Yes		No			
	Count	%	Count	%	Count	%
Sex						
Male	73	57.5	54	42.5	127	71.3
Female	28	54.9	23	45.1	51	28.7
Total	**111**		**77**		**178**	
Age group						
18-29	59	72.8	22	27.2	81	45.5
30-39	35	60.3	23	39.7	58	32.6
40-49	7	29.2	17	70.8	24	13.5
50-59	-	-	12	100.0	12	6.1
Above 60	-	-	3	100.0	3	1.69
Total	**111**		**77**		**178**	

Once respondents said that they have not used it, both urban and rural respondents were asked reasons why they did not use it. Their reasons were as follows: 5.6 percent of the males and 3 percent of the females in urban areas mentioned that they do not know how to use it properly and 46.3 percent of the male and 52.2 percent of the female respondents in rural area said that they did not use condom because they trust their partners and 20.4 percent of the males and 17.4 percent of the females in urban area hate using condom during sex, while 44.1 percent of the males and 32.7 percent of the females did not use condom because it was against their belief. But

100 percent of the urban respondents mentioned that they have easy access to get condom (see table 28)

Table 28b: Reasons for not using condom (urban)

Reasons								
Background Characteristics	**I don't know how to use it**		**My partner and I trust each other**		**I hate sex with condom**		**It is against my religion**	
	Count	**%**	**Count**	**%**	**Count**	**%**	**Count**	**%**
Sex								
Male	3	5.6	25	46.3	11	20.4	24	44.1
Female	1	3.0	12	52.2	4	17.4	8	32.7
Age group								
18-29	1	4.5	9	40.9	6	27.3	2	9.1
30-39	1	4.3	13	56.5	6	26.1	3	13.0
40-49	-	-	9	52.9	3	17.6	5	29.4
50-59	1	8.3	4	33.3	-	-	7	58.3
Above 60	-	-	2	66.7	-	-	1	33.3

- The sum of percentiles is greater than 100% because an individual can choose more than one answer

Regarding the rural respondents, their reasons for not using condom were as follows: 22.2 percent of the males and 31.4 percent of the females did not know how to use it properly and 27.5 percent of the males and 37.1 percent of the females did not use condom because they trust their partners. And 39.2 percent of the males and 41.4 percent of the females in rural areas hate using condom during sex.

Table29a: Condom usage by sex and age (Rural)

Background Characteristics	**Have you ever used condom?**				**Total count**	
	Yes		**No**			
	Count	**%**	**Count**	**%**	**Count**	**%**
Sex						
Male	27	10.5	230	89.1	257	85.5
Female	5	12.5	35	87.5	40	13.5
Total	**32**		**265**		**297**	
Age group						
18-29	10	15.2	56	84.8	66	22.2
30-39	12	13.4	85	86.6	97	32.7
40-49	5	5.8	82	94.2	87	29.3
50-59	2	10.0	18	90.0	20	6.7
Above 60	3	11.1	24	88.9	27	9.1

Total	**32**		**265**		**297**	

Due to the influence of their belief 44.1 percent of the males and 32.2 percent of the females in urban areas did not use condom. But 84.5 percent of the males and 64.3 percent of the females in rural area mentioned even if they were interested in using condom during sex to prevent themselves against AIDS, they do not have easy access.

Regarding condom usage and age groups, 84.8 percent in the age group 18-29, 86.6 percent in the age group 30-39, 94.2 percent in the age group 40-49, 90 Percent in the age group 50-59 and 88.9 in the age group 60 years and above from rural household heads did not use condom. Their reason for not using condom mostly lies, in their trust of their partners, lack of essay access, religious beliefs do not have easy access and it was against their beliefs and hatred for using condom use during sexual intercourse.

Table 29b: Reasons for not using condom by sex and age (Rural)

Background Characteristics	Reasons									
	I don't know how to use it		My partner and I trust each other		I hate sex with condom		It is against my religion		I don't have easy access	
	Count	%	Count	%	Count	%	Count	%	Count	%
Sex										
Male	51	22.2	63	27.5	90	39.2	198	86.2	194	84.5
Female	11	31.4	13	37.1	14	41.4	23	64.3	22	62.0
Age group										
18-29	-	-	9	16.1	5	8.9	11	19.6	30	53.6
30-39	4	4.7	23	29.4	9	10.6	13	15.3	33	38.3
40-49	2	2.5	14	17.3	8	9.9	15	18.5	41	50.6
50-59	3	16.7	4	22.2	1	5.6	7	38.9	3	16.7
Above 60	-	-	1	4.2	2	8.3	19	79.2	2	8.3

- The sum of percentiles is greater than 100% because an individual can choose more than one answer

The urban household heads were better users of condom as compared with the rural household heads. About seventy two percent in the age group 18-29, 60.3 in the age group 30-39 and 29.2 percent in the age group 40-49 used condom during sexual intercourse. The other age groups (50-59 and 60 years and above) did not use

condom during sexual intercourse. For those who did not use condom their reasons were similar to the rural household heads except that 100 percent of the urban household heads had easy access to get condom. As table 28 shows the majority of the rural head of households were not condom users in all age groups.

An assessment was also made to explore whether there is variation between rural and urban household heads concerning condom usage on the basis of their marital status and educational level. The table below shows the result.

Table 30a: Condom usage by marital status and level of education (Rural)

Background Characteristics	Have you ever used condom?				Total count	
	Yes		No			
	Count	%	Count	%	Count	%
Marital Status						
Single	3	16.7	15	83.3	18	6.1
Married	25	11.5	202	88.5	227	76.1
Divorced	1	2.7	25	97.3	26	8.8
Widowed	3	18.7	23	81.3	26	8.8
Total	**32**		**265**		**297**	
Level of education						
Illiterate	19	12.6	140	87.4	159	53.1
Reading and Writing	7	6.8	97	93.2	104	35
Elementary	3	10.3	26	89.7	29	9.8
Junior senior Secondary	3	60.0	2	40.0	5	1.69
Total	**32**		**265**		**297**	

Among the rural household heads 83.3 percent of the single, 88.5 percent of the married, 97.3 percent of the divorced and 81.3 percent of the widowed were not condom users. Whereas 53.3 percent of the single and 42.8 percent of the married, 34.3 percent of the divorced and 23.1 percent of the widowed mentioned that using condom during sexual intercourse was against their religion.

Table 30b Reasons for not using Condom (Rural)

Reasons

Background Characteristics	I don't know how to use it		My partner and I trust each other		I hate sex with condoms		It is against my religion		I don't have easy access	
	Count	%	Count	%	Count	%	Count	%	Count	%
Marital Status										
Single	-	-	24	26.7	2	13.3	1	6.7	8	53.3
Married	7	3.5	32	15.9	18	9.0	57	28.4	86	42.8
Divorced	1	5.7	7	28.6	3	11.4	4	14.3	9	34.3
Widowed	-	-	12	53.8	2	7.7	4	15.4	5	23.1
Level of education										
Illiterate	8	5.7	29	20.7	11	7.9	44	31.4	46	32.9
Reading and Writing	1	1.0	16	16.7	13	13.5	13	13.5	52	53.1
Elementary	-	-	6	23.1	1	3.8	1	3.8	12	46.2
Junior senior Secondary	-	-	2	100.0	1	-	-	-	-	-

- The sum of percentiles is greater than 100% because an individual can choose more than one answer

The other major reasons why they did not use condom during sexual intercourse was that they trust their partner. As a result 26.7 percent of the single, 15.9 percent of the married, 28.6 percent of the divorced and 53.8 percent of the windowed did not use condom.

Table 31a: Reasons for not using condom by marital status and level of education (Urban)

Background Characteristics	Have you ever used condom?				Total count	
	Yes		No			
	Count	%	Count	%	Count	%
Marital Status						
Single	23	76.5	11	23.5	34	19.1
Married	54	61.8	35	38.2	89	50.0
Divorced	7	29.2	17	70.8	24	14.5
Separated	2	-	-	100.0	2	1.1
Widowed	15	57.1	11	42.9	29	16.3
Total	**101**		**77**		**178**	
Level of education						
Illiterate	8	29.6	19	70.4	27	15.7
Reading and Writing	19	44.9	30	55.1	49	27.5
Elementary	28	65.2	18	34.8	46	25.8
Junior 0senior Secondary	40	81.6	9	18.4	49	27.5

Above grade 12	6	83.3	1	16.7	7	3.9
Total	**101**		**77**		**178**	

With regard to the urban household heads condom usage and their marital status 23.5 percent of the single, 38.2 percent of the married, 70.8 percent of the divorced, 100 percent of the separated and 42.9 percent of the windowed were not condom users. The reason why they did not use was mainly they trust their partners; but can be seen from table 30a shows 100 percent of them have easy access to get condom. When we compare the two tables (29a and 30a) non-users of household heads in rural areas were far greater on number than the urban household heads. This could be probably due to lack of access, law level of understanding the use of condom to avoid getting HIV/AIDS, low level of knowledge of how to use it and the influence of their beliefs.

Table31b: Knowledge of condom usage and reasons for not using it by marital states and level of education for those who have said no (urban)

Background Characteristics	Reasons for those who have said No.							
	I don't know how to use it		My partner and I trust each other		I hate sex with condoms		It is against my religion	
	Count	%	Count	%	Count	%	Count	%
Marital Status								
Single	2	18.2	5	45.5	1	9.1	3	25.7
Married	1	2.9	20	57.1	4	11.4	17	33.3
Divorced	-	-	8	44.4	4	22.2	-	-
Separated	-	-	1	100.0	-	-	1	25.0
Windowed	-	-	3	25.0	6	50.0	-	-
Level of education								
Illiterate	2	10.5	8	42.1	2	10.5	7	36.8
Reading and Writing	1	3.3	15	50.0	7	23.3	5	16.7
Elementary	-	-	9	50.0	5	27.8	2	11.1
Junior 0senior Secondary	-	-	5	55.6	1	11.1	3	33.3
Above grade 12	-	-	-	-	-	-	1	100.0

- The sum of percentiles is greater than 100% because an individual can choose more than one answer

Concerning level of education and condom usage 88.4 percent of the illiterate, 93.2 percent those who could read and write, 89.7 percent with elementary level

education and 40 percent with Junior secondary level education from rural heads of households were not using condom during sexual intercourse. Their major reasons were lack of access trust of their partner and their religious influence, 70.4 percent of the illiterate, 61.2 percent those who could read and write, 39.1 percent those with elementary level of education, 18.1 percent those with junior to senior secondary level education and 16.7 percent of above grade twelve from urban head of households were not condom users.

As table 31b reveals, their major reasons were trust of their partners and hatred for condom use during sexual intercourse.

In the previous part of the analysis (univariate) it was found that in all aspects of the question designed to assess the awareness and knowledge variations between rural and urban respondents, rural respondents knowledge of HIV/AIDS was found to be less than that of urban respondents. To check whether the percentile variation between rural and urban household heads awareness and knowledge variation farther analysis was also made by using bivariate analysis.

4.9 Bivariate Analysis

For this study sex, age, level of education, marital status and religion were taken as independent variables whereas questions “can AIDS be cured?” “ Have you ever used condom”, and “can a healthy looking person have HIV/AIDS? “ were taken as dependent variables. On the bases of these, in order to see the association between the independent and dependent variables and thereby to evaluate the knowledge variation between rural and urban respondents the chi-square test was used.

Table 32: Chi-square output of knowledge of HIV/AIDS as measured by “can

AIDS be cured” by residence.

Type of	Can AIDS be cured?	Row	%	X^2	P-value

Residence	Yes		No		Total Count			
	Count	%	Count	%				
Urban	56	31.5	122	68.5	178	37.5		
Rural	154	51.9	143	48.1	297	62.5	18.76	*0.0001
Column total	210	44.2	265	55.8	475	100		

* Significant at (P<0.001)

For the basic question “can AIDS be cured?” 56 (31.5 percent) of the urban household heads mentioned that HIV/AIDS is curable and 122 (68.8 percent) of the urban household heads mentioned that HIV/AIDS is not curable whereas 154 (51.9 percent) of the rural household heads said that HIV/AIDS is curable and 143 (48.1 percent) of the rural household heads mentioned that HIV/AIDS is curable. The chi-square result shows that there is significant variation in the responses between urban and rural household heads to the question “can HIV/AIDS be cured?”.

Table 33: Chi-square output of knowledge of HIV/AIDS as measured by "Ever used condom" by place of residence.

Type of Residence	Ever used condom				Row Total Count	%	X^2	P-value
	Yes		No					
	Count	%	Count	%				
Urban	101	56.7	77	43.3	178	37.5	116.65	
Rural	32	10.8	265	89.2	297	62.5		*0.0000
Column total	133	28.0	342	72.0	475	100		

* Significant at (P<0.001)

Using condom during sexual intercourse is one of the mechanisms to avoid getting HIV/AIDS. For the question “have you ever used condom? Which was given to both rural and urban respondents, 101 (56.7 percent) of the urban household heads mentioned that they have used condom and 77 (43.3 percent) of the urban respondents never used condom. From the total rural area respondents only 32 (10.8 percent) have used condom but 265 (89.2 percent) never used condom. The chi-square result shows that there is significant variation between rural and urban household heads in condom usage.

Table 34: Chi-square output of knowledge of HIV/AIDS as measured by “can a healthy looking person have HIV/AIDS" by place of residence

Type of Residence	Can a healthy looking person have HIV/AIDS?	Row Total			

	Yes		No		Count			
	Count	%	Count	%		%	X^2	P-value
Urban	103	57.9	75	42.0	178	37.5		
Rural	124	41.8	173	58.2	297	62.5	11.58	*0.0000
Column total	227	47.8	248	52.2	475	100		

* Significant at (P<0.001)

To assess the household heads perception variation about a healthy looking person between rural and urban household heads a question “can a healthy looking person have HIV/AIDS was given for both rural and urban household heads. As the result table 34 shows that103 (57.9 percent) of the urban household heads mentioned that a healthy looking person can have HIV/AIDS and 75 (42 percent) of the urban heads of households mentioned that a healthy looking person cannot have HIV/AIDS. And 124 (41.8 percent) of the rural respondents mentioned that healthy looking person can have HIV/AIDS and 173 (58.2 percent) of the rural household heads mentioned that healthy looking person cannot have HIV/AIDS. When it is tested using chi-square, it shows that there is significant variation between rural and urban heads of household in response to the question “Can a healthy looking person have HIV/AIDS?”

Generally, as it can be seen from these tables (33, and 34) that it is possible to conclude that there is significant awareness and knowledge variation between rural and urban heads of households about HIV/AIDS.

A chi-square test was also made to explore whether there is awareness and knowledge variation between sexes and among age groups, level of education and religion.

Table 35: Chi-square output of knowledge of HIV/AIDS as measured by "can AIDS be cured" by sex, age, level of education and religion (rural)

Variables	Can AIDS be cured?					X^2	P-value
	Count Yes	%	Count No	%	Count Total		
Sex							
Male	137	53.3	120	46.7	257		
Female	17	42.5	23	42.5	40	1.619	0.135

Total	**154**		**143**		**298**		
Age							
18-29	22	33.3	44	66.7	66		
30-39	52	53.6	45	46.4	97		
40-49	52	59.6	35	40.2	87	12.78	*0.012
50-59	11	55.0	9	45.0	20		
60+	17	63.0	10	37.0	27		
Total	**154**		**143**		**298**		
Level of education							
Illiterate	81	46.9	78	49.1	159		
Read and write only	60	58.3	44	42.3	104		
Elementary	16	55.2	13	44.8	29	7.43	*0.059
Junior-senior secondary	-	-	6	100.0	46		
Total	**154**		**143**		**298**		
Religion							
Orthodox	121	52.2	111	47.8	232		
Catholic	0	-	1	100.0	1	1.102	0.777
Protestant	6	50.0	6	50.0	12		
Muslim	26	51.9	25	48.1	52		
Total	**154**		**143**		**298**		

** Significant at (P<0.05)*

From the total respondents of the rural areas 53.3 percent of the male and 57.5 percent of the female mentioned that HIV/AIDS is curable whereas 46.7 percent of the male and 42.5 percent of the female said that HIV/AIDS is not curable. But the chi-square result also shows that there is no significant variation between male and female in rural areas to the question “Can AIDS be cured”.

Concerning the age groups, 66.7 percent in the age group 18 – 29 said that AIDS is not curable. More than 50 percent of the remaining age groups mentioned that AIDS is curable. Though majority of the respondents said AIDS is curable, the chi-square result shows that there is significant variation in the response among age groups in rural areas to the question “Can AIDS be cured” awareness decreases as age increases.

As far as the level of education is concerned, 81 (50.9 percent) of the illiterate, 60 (57.7 percent) of those who could read and write and 16 (55.2 percent) with elementary level education said that AIDS is curable, whereas 5 (100 percent) of junior to senior secondary education level respondents said that AIDS is not curable. the chi-square result shows that there is significant variation among educational levels of rural heads of households to the question “Can AIDS be cured”

Among the religious affiliations, 121 (52.2 percent) of the Orthodox Church members, 6 (50 percent) of the Protestant Church member and 27 (51. 9 percent) of the Muslims mentioned that AIDS is curable. It was only a small number of the Catholic Church members that affirmed that AIDS is not curable. The chi-square result shows that there is no significant variation among different religious affiliations to the question “Can AIDS be cured” from rural heads of households.

Table 36: Chi-square output of knowledge of HIV/AIDS as measured by "can AIDS be cured" by sex, age, level of education and religion (urban)

Variables	**Can AIDS be cured?**					**X^2**	**P- value**
	Count	**%**	**Count**	**%**	**Count**		
	Yes		**No**		**Total**		
Sex							
Male	40	31.5	87	68.5	127		
Female	16	31.4	35	31.5	51	0.000	0.511
Total	**56**		**122**		**178**		
Age							
18-29	23	28.4	58	71.6	81		
30-39	12	20.7	46	79.3	58		
40-49	11	45.8	13	54.2	24	14.39	*0.006
50-59	8	66.7	4	33.3	12		
60+	2	66.7	1	33.3	3		
Total	**56**		**122**		**178**		
Level of education							
Illiterate	15	55.6	12	44.4	27		
Read and write only	23	46.9	26	53.1	49		

Elementary	9	19.6	37	80.4	46	25.87	*0.000
Junior-senior secondary	8	16.3	41	83.7	49		
Above grade 12	0	0	6	100.0	6		
Total	**56**		**122**		**178**		
Religion							
Orthodox	47	31.5	102	68.5	149		
Protestant	0	0	6	100.0	6	3.382	0.184
Muslim	9	39.1	14	60.9	23		
Total	**56**		**122**		**178**		

** Significant at (P<0.05)*

Of the urban respondents 87(68.5 percent) of the male and 35 (68.6 percent) of the female said that AIDS is not curable whereas 40 (31.5 percent) of the male and 16 (31.4 percent) of the female mentioned that AIDS is curable. But the chi-square result shows that there is no significant variation between male and female head of households in urban area to the question “Can AIDS be cured”.

As far as the age groups of the urban household heads are concerned, 58 (71.6 percent) in the age group 18 – 29, 46 (79.3 percent) in the age group 30 – 39 and 13 (54.2 percent) in the age group 40 – 49 mentioned that AIDS is not curable. But 8 (66.7 percent) in the age group 50 – 59 and 2 (66.7 percent) in the age group 60 years and above said AIDS is curable. The chi-square result shows that there is significant variation among the age groups in urban heads of households to the question “Can AIDS be cured”.

Among the educational levels, only 15 (55.6 percent) of the illiterate respondents said that AIDS is curable. But the majority of the other educational groups affirmed that AIDS is not curable. The chi-square result reveals that there is significant variation among different educational levels to the question “Can AIDS be cured in urban head of households”.

More than 50 percent of household heads with different religious affiliations affirmed that AIDS is not curable but the chi-square value shows that there is no significant

variation among different religious groups concerning the response to the question can AIDS be cured.

Generally, from these two tables of chi-square results one can deduce that except for variation among age groups and by educational level in both rural and urban areas response to the question “Can AIDS be cured” has no significant variation for other background characteristics.

Table 37: Chi-square output of knowledge of HIV/AIDS as measured by "ever used condom" by sex, age, level of education and religion (rural)

Variables	Ever used condom					X^2	P – value
	Count Yes	%	Count No	%	Count Total		
Sex							
Male	27	10.5	230	89.5	257	0.143	0.438
Female	5	12.5	35	87.5	40		
Total	**32**		**265**		**297**		
Age							
18-29	10	15.2	56	84.8	66		
30-39	12	12.4	85	86.6	97		
40-49	5	5.7	82	94.3	87	3.875	0.423
50-59	2	10.0	18	90.0	20		
60+	3	11.1	24	88.9	37		
Total	**32**		**265**		**297**		
Level of education							
Illiterate	19	11.9	140	88.1	159		
Read and write only	7	6.7	97	93.3	104		
Elementary	3	10.3	26	89.7	29	14.60	*0.002

Junior-senior secondary	3	60.0	2	40	5		
Total	**32**		**265**		**297**		
Religion							
Orthodox	17	7.3	215	92.7	232		
Catholic	0	0	1	100.0	1	24.50	*0.000
Protestant	6	50.0	6	50.0	12		
Muslim	9	17.3	43	82.7	52		
Total	**32**		**265**		**297**		

** Significant at (P < 0.05)*

As it can be seen from the above table, 230 (89.5 percent) of the male and 35 (87.5 percent) of the female household heads in rural areas affirmed that they never use condom whereas 27 (10.5 percent) of the male and 5 (12.5 percent) of the female said, that they have used condom. The chi-square result shows that there is no significant variation between males and females in rural areas regarding the response to the question “Have you ever used condom”. Similarly, majority of the sample heads of households in all age groups in rural areas never used condom. The chi-square result also shows that there is no significant variation among the age groups in response to the question “Have you ever used condom”.

Concerning educational level, 140 (88.1 percent) of the illiterate, 97 (93.3 percent) of those who could read and write, and 26 (89.7 percent) of those with elementary level education mentioned that they never used condom. It was only 3 (60 percent) of these with junior to senior secondary level education that affirmed that they have used condom. The chi-square result shows that there is no significant variation among household heads of different educational levels in rural areas regarding their response to the question “Have you ever used condom”.

As far as responses by religious affiliation of the rural respondents are concerned, 6 (50 percent) of the Protestant Church members said that they have used condom but of the other religious groups (Orthodox, Catholic and Muslim) 215 (92.7 percent) 1(100 percent), and 43 (82.7 percent), respectively said that they never used

condom. The chi-square result indicates that there is significant variation among different religious groups of rural heads of households.

Table 38: chi-square output of knowledge of HIV/AIDS as measured by "ever used condom" by sex, age , level of education and religion (urban)

Variables	Ever used condom					X^2	P- value
	Count Yes	%	Count No	%	Count Total		
Sex							
Male	73	57.5	54	42.5	127	0.099	0.754
Female	28	54.9	23	45.1	51		
Total	**101**		**77**		**178**		
Age							
18-29	59	72.8	22	27.2	81		
30-39	35	60.3	23	39.7	58	35.96	*0.000
40-49	7	29.2	17	70.8	24		
50-59	0	0	12	100.0	12		
60+	0	0	3	100.0	3		
Total	**101**		**77**		**178**		
Level of education							
Illiterate	8	29.6	19	70.4	27		
Read and write only	19	38.8	30	61.2	49	29.708	*0.000
Elementary	28	60.9	18	39.1	46		
Junior-senior secondary	40	81.6	9	18.4	49		
Above grade 12	6	83.3	1	16.7	7		
Total	**101**		**77**		**178**		
Religion							
Orthodox	92	61.7	57	38.3	149		
Protestant	0	-	6	100.0	6	12.296	*0.002
Muslim	9	39.1	14	60.9	23		
Total	**101**		**77**		**178**		

- *Significant at (P < 0.05)*

As table 38 reveals, 73 (57.5 percent) of the male and 28 (54.9 percent) of the female household heads in urban areas said that they have used condom whereas 54 (42.5 percent) of the male and 23 (45.1 percent) of the female said that they never use condom. The chi-square result shows that there is no significant variation between male and female head of households in rural areas in response to the question “Have you ever used condom”.

Concerning the age groups of the urban respondents, 59 (72.8 percent) in the age group 18 – 29 and 35 (70.3 percent) in the age group 30 – 39 mentioned that they have used condom whereas 7 (70.8 percent) in the age group 40 – 49, 12 and 3 (100 percent) in the age group 50 – 59 and 60 years and above respectively said that they never use condom. Though 100 percent in the age group 50 – 59 and 60 years and above have never used condom, their number was very small. The chi-square result shows that there is significant variation among the age groups of urban head households in response to the question “Have you ever used condom.

With regard to the educational level, 19 (70.4 percent) of the illiterate and 30 (61.2 percent) of those who could read and write only mentioned that they never use condom whereas 25 (60.9 percent) with elementary level education, 40 (81.6 percent) with junior to senior secondary level education and 40 (83.3 percent) with educational level of above grade 12 affirmed that they have used condom. The chi-square result show that there is a significant variation among urban household heads of different educational levels in response to the question “Hove you ever used condom”.

Of the religious groups of the urban household heads, 92 (61.7 percent) of the Orthodox Church members said that they have used Condom whereas 7 (100 percent) of the Protestant Church members and 14 (60.9 percent) of the Muslims mentioned that they never used condom. The chi-square result shows that there is a significant variation among household heads of different religious affiliation in urban areas in response to the question “Have you ever used condom”. But the protestant Church members and Muslims are small in number.

From the two tables of chi-square output rural and urban, it is clear that age among urban heads of households and sex and age among rural have no significant variation in relation to the question “Have you ever used condom” but level of education and religion among both rural and urban heads of household seem to influence the response to the question significantly.

Table 39: Chi-square out put of knowledge of HIV/AIDS as measured by "Can a healthy looking person have HIV/AIDS?" by sex, age, level of education and religion (rural)

40Variables	Can a healthy looking person have HIV/AIDS?					X^2	P- value
	Count Yes	%	Count No	%	Count Total		
Sex							
Male	112	43.8	145	56.2	257		
Female	12	30.0	28	70.0	40	2.625	*0.05
Total	**124**		**173**		**297**		
Age							
18-29	35	53.0	31	47.0	66		
30-39	43	44.3	54	55.7	97		
40-49	27	31.0	60	68.9	87	8.12	*0.042
50-59	9	45.0	11	55.0	20		
60+	10	37.0	17	63.0	27		
Total	**124**		**173**		**297**		
Level of education							
Illiterate	50	31.4	109	68.4	159		
Read and write only	52	50.5	52	49.5	104	17.78	*0.000
Elementary	18	66.7	11	33.3	29		
Junior-senior secondary	4	57.1	1	42.9	5		
Total	**124**		**173**		**297**		
Religion							
Orthodox	90	17.9	142	82.1	227		
Catholic	0	-	1	100.0	1	7.33	*0.030
Protestant	4	32.0	8	78.0	12		
Muslim	30	57.6	22	52.0	52		
Total	**124**		**173**		**297**		

** Significant (P< 0.05)*

As it can be seen from table 39, 145 (56.2 percent) of the males and 28 (70 percent) of the females among the rural household heads said that a healthy looking person cannot have HIV/AIDS whereas 112 (43.8 percent) of the males and 12(30 percent) of the females affirmed that a healthy looking person can have HIV/AIDS. It indicates that the majority of the rural heads of households mentioned that a healthy looking person cannot have HIA/AIDS. Though majority of the respondents affirmed that a healthy looking person cannot have HIV/AIDS, the chi-square result shows that there is significant variation between male and female rural head of households in response to the question “Can a health looking person have HIV/AIDS”

Regarding the age groups only 35 (53.0 percent) in the age group 18 – 29, mentioned that a healthy looking person can have HIV/AIDS. However, more than 50 percent of the remaining age groups said that healthy looking persons cannot have HIV/AIDS. The chi-square result shows that there is significant variation among different age groups in rural heads of household to the question “Can a health looking person have HIV/AIDS”.

Concerning educational level only 109 (68.4 percent) of the illiterate mentioned that a healthy looking person can not have HIV/AIDS, whereas 52 (49.5 percent) of those who could read and write only, 18 (66.7 percent) with elementary level education and 90.0 percent of the junior-senior secondary level education mentioned that a healthy looking person can have HIV/AIDS. The chi-square result shows that there is significant variation among rural heads of households by educational levels in response to the question “Can a health looking person have HIV/AIDS”.

Table 40: Chi-square output of knowledge of HIV/AIDS as measures by "a healthy looking person have HIV/AIDS" by sex, age, level of education and religion (urban)

Variables	**Can a healthy looking person to have HIV/AIDS?**					**X^2**	**P- value**
	Count Yes	**%**	**Count No**	**%**	**Count Total**		
Sex							
Male	79	62.2	48	37.8	127	3.424	*0.032

Female	24	47.1	27	52.9	51		
Total	**103**		**75**		**178**		
Age							
18-29	41	50.6	40	49.4	81		
30-39	33	56.9	25	43.1	58		
40-49	16	66.7	8	33.3	24	7.90	*0.04
50-59	10	83.3	2	16.7	12		
60+	3	100	0	0	3		
Total	**103**		**75**		**178**		
Level of education							
Illiterate	12	44.4	15	55.6	27		
Read and write only	31	63.3	18	36.7	49		
Elementary	24	57.2	22	46.8	46	9.16	*0.05
Junior-senior secondary	30	81.2	19	38.8	49		
Above grade 12	6	100.0	1	100.0	6		
Total	**103**		**75**		**178**		
Religion							
Orthodox	80	53.7	69	43.6	149		
Protestant	2	33.3	4	66.7	6		
Muslim	21	91.3	2	8.7	23	13.09	*0.001
Total	103		75		178		

**Significant at (P < 0.05)*

As can be seen from table 40, 79 (62.2 percent) of the males from the urban heads of households mentioned that a healthy looking person can have HIV/AIDS whereas 27 (52.9 percent) of the females said that a healthy looking person cannot have HIV/AIDS. That the majority of the respondents said that, a healthy looking person can have HIV/AIDS. The chi-square result shows that there is significant variation between male and female head of household respondents in urban areas in response to the question “Can a healthy looking person have HIV/AIDS”

Among the age groups more than 50 percent of the urban respondents affirmed that a healthy looking person can have HIV/AIDS. The chi-square result shows that there is significant variation among different age groups in urban areas in response to the question “Can a healthy looking person have HIV/AIDS “.

With regard to educational level, except illiterate respondents, 15 (56.6 percent) of whom mentioned that a healthy looking person cannot have HIV/AIDS, more than 50 percent of the remaining respondents in the other educational levels mentioned that a healthy looking person can have HIV/AIDS. The chi-square result shows that there is significant variation by educational level among urban heads of households in response to the question “Can a healthy looking person have HIV/AIDS”

Among the religious groups 80 (53.7 percent) of the Orthodox Church members and 21 (91.3 percent) of the Muslim mentioned that a healthy looking person can have HIV/AIDS whereas 2 (33.3 percent) of the Protestant Church members mentioned that a healthy looking person cannot have HIV/AIDS. The chi-square result shows that there is significant variation among different religious affiliations in urban area head of households to the question “Can a healthy looking person have HIV/AIDS.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Today, HIV/AIDS represents one of the deadliest emergencies and the greatest social, economic and health crises of modern times. The mode of its transmission (through the critical biological need), its long incubation period and the absence of cure medicine has complicated the nature of this killer disease.

The socio-economic impacts it imposes on the individual patients, the family and the community in general are the most serious problems of the human race. The fast spread of the disease demands a collective action of all responsible organizations and individuals.

HIV/AIDS in all developing countries, particularly in sub-Saharan Africa where economic growth is sluggish, claims the lives of millions of productive human resources making the problem more complex and difficult to challenge.

The absence of cure medicine has forced countries to fight HIV/AIDS strongly by bringing about behavioral change on individual sexual activity. One of these strategies is to strengthen the information, education and communication (IEC) program with extensive research. Of such research, assessment of awareness and knowledge variation in a given society is one.

In Ethiopia, government organs, international and national non-governmental organizations have been making efforts to fight HIV/AIDS since the advent of the disease. However, the disease is moving like tornado in big cities, and if it goes deep into the countryside with the same pace, the problem will be more serious than what we are experiencing today. Thus, commitment of the policy makers and prominent individuals is of great importance.

This study has dealt with the awareness and knowledge variation between rural and urban areas societies in Metema woreda. A total of four hundred seventy five individuals (92 females and 383 males) were asked through a structured questionnaire. The analysis was undertaken against the background characteristics: sex, age, marital status, educational level and religion of the sample heads of households for urban and rural areas.

The main aim of the study was to measure the awareness and knowledge variation between rural and urban areas about HIV/AIDS. Almost all respondents reported HIV/AIDS as one of STDs. However, other the STDs were reported by less number of young respondents in rural areas. Rural respondents were found to be less aware about HIV/AIDS than urban respondents. Those respondents living in rural areas were also less aware about HIV/AIDS in particular, and all STDs in general. Education has a significant effect on the level of knowledge (p-value < 0.05); awareness increased as educational level increased.

Misconception regarding HIV modes of transmission and preventive methods about HIV/AIDS is more in rural areas as compared with urban respondents. This would be due to variation in the source of information and lack of accuracy, and lack of access to information sources. Only 44.7 percent of the males and 35 percent of the females among the rural respondents had access to radio, and 10.9 percent of the males 2.5 percent of the females had access to health workers. In urban areas 91 percent of the males and 98 percent of the females had access to radio and 73 percent of the males and 78 percent of the females had access to TV, and 87.4 percent of the males and 94.1 percent of the females had access to health workers. Concerning the knowledge of AIDS transmission, a good number of respondents know at least more than one ways. But misconception was also observed. HIV mode of transmission and prevention methods is more prevalent in rural areas. This could also be related with the source of information.

In the ways to avoid HIV/AIDS, about 14.5 percent of the males and 15 percent of the females in rural areas and 8.2 percent of the males and 3.9 percent of the females in urban areas still believe that there is no way to avoid AIDS. Still rural respondents knowledge is less as compared with urban respondents; 36 percent of the males and 47.6 percent of the females in rural areas wanted to get protection from traditional healers but 21 percent of the males and 42 percent of the females in urban areas wanted to get protection from traditional healers. This response misses the true image of HIV/AIDS and may help the spread of the disease. As to AIDS related

health issues only 43.5 percent of the males and 30 percent of the females from among rural respondents and 66.2 percent of the male and 47.1 percent of the female from urban respondents answered that a healthy-looking person can have AIDS.

It was also found that respondents knowledge about the of HIV/AIDS varies. Forty nine percent of the male and 60 percent of the female respondents from rural areas and 22.8 percent of the male and 21.2 percent of the female respondents from urban areas believe that HIV/AIDS is given by God to punish human beings. With regard to condom usage and its importance to avoid getting HIV/AIDS, 89.1 percent of the males and 86.6 percent of the females from rural areas and 40.9 percent of the male and 39.2 percent of the females in urban areas have never used condoms due to different reasons such as lack of access, and hatred to use condom during sex and due to traditional beliefs. These problems towards condom usage need great attention. Finally, to assess the degree of willingness to have HIV test, heads of households were asked about blood test. However, rural respondents were less willing as compared with the urban respondents. Furthermore, those who responded affirmatively were asked about their reaction if the result happens to be positive. They said they would pray to God, do not know what to do, and would remain silent; such reactions especially in rural areas are unhealthy and the issue needs a serious attention.

5.2 Conclusion

Ethiopia is one of the developing countries which is most affected by HIV/AIDS poverty. Low level of understanding, Poor management and civil war and conflicts and cultural obstacles are some of the factors that have mentioned as factors that facilitated HIV/AIDS spread in the country (FDRE, 2001).

To slow down the prevalence of HIV/AIDS, the government of Ethiopia was and still is trying its best by using different mechanism ranging from setting up National AIDS

Council and increasing information education and communication (IEC) program. Though there is no question about the importance of these programs, still there are areas and people, which are not beneficiaries of these programs. One of such areas is the remote peasant kebele administration in Metema Woreda. As the research finding of this thesis shows 69.8 percent of the males and 76 percent of the females from rural areas have heard about the disease called AIDS. In contrast 88.6 percent of the males and 89.8 percent of the females from among urban heads of households have known HIV/AIDS as one of the STDs.

The major sources of information for rural areas are community meetings; 59.5 percent and 80 percent males and females, respectively in rural areas followed by friends 28.4 percent and 25 percent of males and females, respectively whereas in rural areas 91.3 percent of the males and 98.2 percent of the females, 87.6 percent of the males and 94.1 percent of the females and 80.3 percent of he males and 88.2 percent of e females, 73.2 percent of the males and 74.5 percent of the females etc. mentioned radio, health workers ritual places and TV as their sources of information about HIV/AIDS respectively. The differences in sources information and lack of accurate information brought about variation in misconception about the disease (HIV). As a result, 22 percent of the males and 25 percent of the females from among rural heads of households believed that HIV/AIDS can be transmitted from an infected to a non-infected person by kissing. Thirty five percent of the males and 50 percent of the rural female heads of households mentioned mosquito bites as one of the mechanisms of HIV/AIDS transmission from an infected to a non infected person. They also mentioned shaking hands and sharing wear as mechanisms of HIV/AIDS transmission. In contrast, only 5.5 percent of the males and 5.9 percent of the females and 2.4 percent of the males and 2 percent of the females from among urban heads of households, respectively, mentioned kissing and mosquito bites as mechanisms of HIV/AIDS transmission. Although urban heads of households mentioned shaking hands and sharing wear as mechanisms of HIV/AIDS transmission it was very insignificant as compared with rural heads of households. Rural heads of households also believed HIV/AIDS as something given to human being by the creator against prostitution and deviant behavior. Due to this, 49 percent

of the males and 60 percent of the females from among rural heads of household believed that HIV/AIDS is something given to human being to punish him. In urban areas also some heads of households share this idea but the proportions is small i.e. 22.8 percent of the males and 22.2 percent of the females, respectively.

Due to the existence of stigma, 54.2 percent of the males and 42.6 percent of the females among rural heads of households mentioned that PLWHIV should be isolated whereas from urban respondents it was only 13.1 percent of the males and 25.9 percent of the females that believed in the isolation of PLWHIV.

Condom usage is one of the alternatives to avoid getting HIV/AIDS. About 57.5 percent of the males and 54.9 percent of the females from among urban heads of households have used condom whereas from the total rural heads of households only 10.5 percent of the males and 12.5 percent of the females have used condom. In this respect, rural head of households were less users as compared with the urban heads of households.

To explore the effective of univariate results chi-square test was used. For this test sex, age, marital status, educational level and religion were taken as useful independent variables and questions “Can AIDS be cured?” “Can a healthy looking person have HIV/AIDS?” and “Have you ever used condom were taken as dependent variables. The result shows that there is significant variation between rural and urban heads of households in awareness and knowledge about HIV/AIDS.

5.3 Recommendations

Based on the results of the study the following general and specific recommendations are presented:

1. The sero prevalence of HIV/AIDS is increasing at an alarming rate and before it expands further into the rural areas where we have large population, aggressive intervention strategy must be designed. The first step should be

expanding the already set up policy towards the remote rural areas. It is worth to draw from the experience of Thailand and Senegal. In Senegal religious leaders teach their people that AIDS is a disease not given by God, and most people have access of accurate information including Condom. In Thailand non-governmental organizations focused on the backward and remote areas to empower them against AIDS. They also effectively utilized cultural media like funeral ceremony and ritual activities in rural areas. They also used small seminars, focus group discussions, heart to heart, face to face interactive discussions to avoid taboo and shame especially among the illiterate and less educated people in rural areas.

2. Serious efforts need to be made to avoid the social stigma, strengthen the HIV/AIDS victims associations and encourage the members of this association to involve in counseling activities outside the big cities.

Specific

1. Since considerable number of the study population living in the countryside, an appropriate sensitization program should be designed. This should include such activities as Open-air shows as drama, songs etc. These must be presented at their work place, ritual place, market day and when there is a funeral ceremony in a very brief way.
2. A necessary anti-HIV/AIDS committee should be setup at the grass root level in the countryside.
3. Religious leaders, especially in the countryside should spend part of their ritual activities for anti-HIV/AIDS education.
4. Since rural areas do not have easy access to get condom /male and female/ and do not know how to use it properly, concerned bodies should facilitate conditions to make these intervention mechanisms available easily and educate the rural people how to use it properly.
5. Schools, health centers, credit and saving institutions and development agencies (DAs) should take part to serve as information communication agent about HIV/AIDS in rural areas.

6. Although towns seem to better aware of the disease (HIV/AIDS), still they need more attention. For this formal and informal institutions such as 'Idir', 'Equib', 'Senbete', religious centers, ACSI (Amharar Credit and Saving Institute) should take part to serve as agitation center in urban as well as rural areas.
7. Since towns in Metema Woreda are exposed to absorb seasonal migration of people and daily laborer coming from different directions in search of job, (CSW) Commercial Sex Workers should be aware of using condom to save themselves and others.
8. Metema Woreda is one of the remote Woredas dominated by mechanization agriculture and now serving as a dry port between Ethiopia and the Republic of Sudan. As a result social interaction is very high. So the Federal and Regional government should give special attention to Metema Woreda before the disease (HIV/AIDS) affects the people. Such activities could include encouraging national and international NGOs to focus their program in the Woreda to empower the people against HIV/AIDS.

REFERENCES

African Development Forum (2001). AIDS: the Greatest Leadership Challenges.

Beyene Petros, Solomon Belayneh and Yared Mekonnen (1997). AIDS and College Students in Addis Ababa: A Study of Knowledge Development, Vol. 11 No.2.

Beyene Petros and Solomon Belayneh (1993). AIDS Information for College Students.

Bongaarts, John (1996). Global Trend in AIDS Mortality. Population and Development Review 22 (1): 21 – 45.

Benin (1997). Further Analysis, Knowledge, Attitude and Behavior Regarding AIDs in Benin.

Chalres, Larson (1991). Risk Behavior of HIV Infection; their Occurrence and Determinants in Jimma Town, south Western Ethiopia Medical journal Vol. 29 No. 3: 127-136.

CRDA (1996). Study Tour Report of HIV/AIDS/STDs Programs in Kenya, Uganda and Tanzania.

CSA (1994). Population and Housing Censure of Ethiopia. Statistical Report on Population Size and Characteristics of the Amhara Region vol. 1: Part 1.

DHS (1996). Zimbabwe Demographic and Health Survey.

DVV (2002). The Condition of HIV/AIDS and the Role of Adults and the Non-formal Education in Fighting HIV/AIDS in Ethiopia.

EMS (1979). Meteorological Map of Ethiopia.

EDHS (2000). Demographic and Health Survey of Ethiopia 2000.

Eleni Seyoum (1998). KABP Survey on HIV/AIDS: Among Long Distance Bus Drivers, Driver Assistances and Cashiers.

FDRE (2001). National AIDS Prevention and Controlling Council 2001 – 2005 Program.

Grey, W. Shamon (1989). The Origin and Diffusions of HIV/AIDS.

Gallo (1992). AIDS Pandemic: Global Geographical patterns and Local Spatial Processes. The Geographical Journal vol. 158 Part. 2.

ILO (2002). Global Program on HIV/AIDS and World of Work.

ISSUP (1993). AIDS Impact and Prevention in the Developing World. The Contribution of Demography and Social Science.

Jackson, Helen (1992). AIDS: Action Now, Information, Prevention and Support in Zimbabwe.

Kelley, M. J (2001). Challenging the Challenger.

_____ (2000). AIDS in Ethiopia.

_____ (1998). AIDS in Ethiopia; Background, Projection, Impact, Intervention.

MIDROC Ethiopia (2002). Newsletter.

Max.Essex (1994). AIDS in Africa. Editor.

MEDaC (1997). Population Image of Ethiopia.

Norwegian Red Cross (1986). AIDS and the Third World.

Ntozi, M. P, James and Kirunga Christine (1997). HIV/AIDS, Change in Sexual Behavior and Community Attitude in Uganda. Health Transition Review Supplement to vol. 7.

Population Reference Bureau (2000). Conveying Concerns Media Coverage of Women and HIV/AIDS.

Squire Lyn (1998). Confronting AIDS, Finance and Development. A Quarterly Publication of the International Monetary Fund and the World Bank (15-17).

Solomon Gebre (1990). Sexual Behavior and Knowledge of AIDS and Other STDs in Ethiopia. Journal of Health Development, Vol. 4 No. 2.

Tilahun Teka (1997). AIDS Related Knowledge and Behavior Among College students – Gondar. Comparative Study. Ethiopian Medical journal Vol. 39 No. 3.

WHO (1992). The Role of Ethnicity and Religion in Prevention and Control of AIDS (1994). AIDS Image of the Epidemic.

APPENDIX 1

Good morning good afternoon

We are conducting a survey to learn how people understand HIVLAKDS The questions are very personal an related with sexual practices. The result of this survey will help us to see the knowledge variation between urban and rural people about HIVIAIDS.

The answer of a respondent too this questionnaire remains confidential. There is no name on the questionnaire and there is no other person to know of your answer

Thank you

Interview identification

Date_____month_____year_____

Interviewers name_____

Interviewers result

a. Complete

b. Incomplete

Checked by (supervisor)

Name_____

Sign_____

Date_____

Section 1:Background information of the respondents

1. Age (years)_____

2. Sex M_____F_____

3. What is your current marital status?

   Single_____Married_____Divorced_____

   Separated_____Widowed_____

4. Where is you place of resident 1. Urban 2. Rural

5. Level of education (of the respondent)

   1. Illiterate
   2. Only Read and write
   3. Elementary (1-6)
   4. Junior - senior Secondary (7-2)
   5. Above grade 12

6. Religious affiliation

   1. Orthodox Christian
   2. Catholic Christian
   3. Protestant Christian
   4. Muslim

Section ll Awareness on Sexually Transmitted Disease (STD)

1. Have you ever heard of a disease that can be transmitted through sex?

   1. yes---------- 2. No----------

2. Which disease do you know? (Read all responses)

	Yes	No
Syphilis	1	2
Gonorrhea	1	2
HIV/AIDS	1	2
Cancroids	1	2

Section lll. Knowledge on HIVIAIDS

1. Have you ever heard of an illness called AIDS?

1. yes_____2.No_____if yes skip to Q#4

2. From which source (s) of information have you heard about AIDS? (Record all sources mentioned)

	Yes	No
Ritual place	1	2
Radio	1	2
TV	1	2
Health workers	1	2
School/teachers	1	2
Community meeting	1	2
Friends	1	2
Work place	1	2
Relatives	1	2

3. How can person get HIV/AIDS ?

Read all answers

	Yes	No
By Sexual intercourse with multiple partners	1	2
By Sex with prostitute	1	2
Not using condom during sex	1	2
By transfusion of infected blood	1	2
By a curse	1	2
By a contaminated needles and syringes and other skin piercing instruments which have not been sterilized	1	2
Kissing	1	2
Mosquito bites	1	2
Shaking hands	1	2
Sharing wear	1	2

4. Is there anything a person can do avoid getting AIDS or the virus that causes AIDS ? 1. Yes 2. No 3. Do not know

5. What can a person do to avoid getting HIVIAIDS?

	yes	No
Do not have sex before marriage	1	2
Have sex only with a faithful partner	1	2
Seek protection from traditional healers	1	2
Using condom during sex	1	2
Avoid sharing sharp instruments	1	2
Do not have sex with prostitutes	1	2
Insist on tested blood for transfusion	1	2
Abstinence	1	2

6. Is it possible for a healthy - looking person to have the AIDS Virus ?

1. Yes _____ 2.No_____ 3. Do not know

7. If the facility is available, are you willing to have HIV test?

Yes _____ No_____

8. If the test happens to be positive, what would you do?

- ✳ Tell family
- ✳ Tell friends
- ✳ Remain silent
- ✳ Do not know what to do
- ✳ Pray to God

9. Have you ever used condom after you have heard the danger of AIDS and other sexually transmitted disease 1. Yes 2. No

10. If you have not used, what are the main reason (s) for not using condom?

1. I do not known how to use it property
2. My partner and l trust each other
3. l do not like it
4. My religion does not allow
5. l can not get them easily
6. It slips during sexual intercourse.

11. Can AIDS be cured ? 1. Yes 2. No

12. Do you personally know someone who has AIDS ?

1. Yes _____ 2. No_____

13. Do you personally know someone who has died of AIDS?

1. Yes _____ 2. No_____

14. Should a person with AIDS live isolated ?

1. Yes _____ 2. No_____

15. If yes why _____

Thank you