KNOWLEDGE, ATTITUDE AND BEHAVIOUR (KAB) ON HIV/AIDS/STDs AMONG WORKERS IN THE INFORMAL SECTOR IN ADDIS ABABA

BY
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Dedicated to my wife, Roman Degefa, and

My sons, Binyam Zenabu and Be-Imnet Zenabu.

" It all started as a rumor.
Then we found we were dealing with a disease.
Then we realized it was an epidemic.
And now, we have accepted it as a tragedy."

Okware (1990)

AIDS kills the sexually active adults leaving behind the elderly and the very young.

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ABSTRACT

This study targeted to assess knowledge, attitude and behavior (KAB) on HIV/AIDS/STDs among workers in the informal sector in Addis Ababa. The study is based on the sample of 1177 respondents.

The eligibility criterion for the selection of respondents is based on the definition of workers in the Informal Sector as adapted from CSA and MOLSA survey.

This work discusses the sampling procedure employed and the quality of data and examines the relationship between knowledge, attitude and behavior and selected background characteristics using univariate, bi-variate, and multipl-variate statistical techniques of data analysis. In multi- variate analysis, logistic regression model has been employed.

The dependent variables were tested against the independent variables; age, marital status, place of work and sample area and sex were used as useful variable.

The findings indicate that there is a positive relation between knowledge about HIV/AIDS/STDs and educational level. In self-reported STD infection, relatively high rate was exhibited with increase in educational level. Education by itself doesn't guarantee for behavioral change. Males were more infected by STD than females. Attitude towards the disease was found to be lower for females than males. Misconception in the mode of AIDS transmission was higher in the study population.

The study has found that the youth, working in the core business area and outside home need target oriented intervention.

Finally, the study concluded by suggesting recommendations, general and specific, that may help to enhance awareness, attitudinal and behavioral change among the study population.

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Acronym

CSA	Central Statistical Authority
MOLSA	Ministry of Labor and Social Affairs
AIDS	Acquired Immunodeficiency Syndromes
HIV	Human Immunodeficiency Virus
STD	Sexually Transmitted Disease
MOH	Ministry of Health
IEC	Information, Education and Communication
PLWA	Peoples Living With AIDS
UAC	Uganda AIDS Commission
MCH	Material and Child Health
KAB	Knowledge, Attitude and Behavior
NGO	Non- Governmental Organization
CRDA	Christian Relief and Development Association
NRC	National Research Council
NACP	National AIDS Control Program
CSW	Commercial Sex Workers
DTRC	Demographic Training and Research Center
DHS	Demographic and Health Survey
TASO	The AIDS Support Organization

CHAPTER I. INTRODUCTION

1.1. THE RESEARCH PROBLEM: AN OVERVIEW

Okware (1990) has put it (as cited in Helen Jackson, 1992, **" It all started as a rumor. Then we found we were dealing with a disease. Then we realized it was an epidemic. And now, we have accepted it as a tragedy."**

Yes, of course, we are on the stage, watching to each other to wither away as the epidemic is staging.

The origin of Human Immunodeficiency Virus (HIV) continues to be an enigma, and the timing of the first human infection remains unknown (IUSSP, 1993). The fast advancing spread of Acquired Immunodeficiency Syndromes (AIDS) has laid the question on its origin at the bottom of the priorities.

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

Different studies have shown the same timing of the spread of HIV/AIDS in sub-Saharan African countries. In Ethiopia, the first evidence of HIV infection was found in 1984 and the first AIDS case was reported in 1986 (MOH, 1996). In Uganda, it was found in 1982 (CRDA, 1996), in Tanzania, it was reported 1983 (CRDA, 1996), and in Morocco, the first case was found in 1986 (Global AIDS News, 1993(2)).

Table 1. Shows the Global and sub-Saharan African AIDS picture as of the end of the year 1998 as reported by the World Health Organization.

Table 1: HIV and AIDS estimates, global and sub- Saharan Africa (in million)

Incident 1	Year 2	World 3	sub-Saharan Africa 4	Percentage* 4/3
New AIDS deaths	1998	2.5	2.00	80
Child Infection	1998	0.59	0.53	90
New HIV Infection	1998	5.8	4.00	69
People living with HIV	End 1998	33.4	22.5	67
Child AIDS death	to date	3.2	3.00	94
Child Infection	to date	4.4	4.00	91
AIDS deaths	to date	13.9	11.5	83
HIV Infection	to date	47.3	34.0	72

Source: UNAIDS, December 1998, AIDS epidemic Update, P.3.
* Percentage is computed for the purpose of this study.

The HIV/AIDS epidemic has become a serious public health problem because no cure or vaccine exits and the infection almost invariably leads to death. Infection is followed by years of slow destruction of the immune system, rendering carriers increasingly vulnerable to fatal opportunistic infections such as pneumonia and cancers (Bongaarts, 1996).

As table 1 depicts, 13.9 million people have already died of AIDS in the World by the end of the year 1998. Of the World total, 11.5 or 83 percent is debited in the account of sub-Saharan African countries. This tragedy can be explained by the statement that-the poor harvest the lion share of AIDS death. According to UNAIDS (1998) report, 90 percent of the new infection goes to these poor of sub-Saharan African countries. Of 47.3 million HIV infections, 34.0 million is also in this sub-region of Africa.

As Ainsworth, 1998 projects that by the year 2020 HIV/AIDS will be the largest infectious killer of adults in their prime in the developing world.

1.2 CURRENT ESTIMATE OF HIV PREVALENCE IN ETHIOPIA

One commonly used measure of the extent of HIV in population is adult prevalence, the percentage of adults (age 15 and older) who are infected with HIV. Although HIV prevalence was very low in Ethiopia during the early 1980s, it has been increasing rapidly in the past few years. It was estimated that by 1993, adult HIV prevalence increased 3.2 (2.9-3.5) per cent (MOH, 1996). By 1997, it was estimated to have increased to 7.4 (6-9) percent (MOH, 1998).

In urban areas prevalence was estimated to be much higher, about 21 (19-23) percent in 1997. In rural areas, adult HIV prevalence was estimated to have reached 4.5 (3-6) percent in 1997 (MOH, 1998).

It is important to pay attention on the age and sex distribution of the reported AIDS cases in order to understand the severity of the consequences that may await us in the near future. Thus, Table 2 shows the age and sex distribution of reported AIDS cases from 1986 to 1996.

Table 2 Age and Sex Distribution of Reported AIDS Cases

	SEX			
Age Group	**Male**	**Female**	**Total**	**Percent**
0-4	173	165	338	1.57
5-14	23	25	48	0.22
15-19	256	845	1101	5.10
20-29	4894	4511	9405	43.60
30-39	4846	1949	6795	31.50
40-49	2169	647	2816	13.00
50-59	670	203	873	4.10
60+	160	33	193	0.90
Total	13,191	8,378	21,569	100.00
(Percent)	(61.2)	(38.8)	(100.00)	

Source: MOH, 1997.

From Table 2, we can learn at least the following important and general facts:

- About 90 percent of reported AIDS cases occurred to adults between the ages of 20 and 49. The most productive human resource is at risk.
- The peak ages for AIDS cases are 20-29 for females and 20-39 for males. Since AIDS cases result from HIV infection acquired about 8 years earlier, the peak ages for new HIV infection are 15-24 for females and 15-34 for males.
- More males are infected than females (1.6:1).
- The number of females infected in the 15-19 age group is much higher than for males in the same age group.
- There are very few cases of AIDS among children between the ages of 5-14. This is the " Window of Hope". This is the right age group where a heavy investment should be made in order to keep the generation to continue.

Furthermore, as of the end of 1997, there were 57,000 AIDS cases reported to the MOH (MOH, 1998). Of this figure, about 42% is reported from Addis Ababa. According to the report, this figure is only the tip of the pyramid due to underreporting, but the true figure was estimated at 400,000 at the end of 1997. At the same time, it was estimated that there were about 2.5 million people infected with HIV. The current prevalence of adult HIV infection is reported as 7.4%, 21% and 4.5% for the National, Urban and Rural respectively.

The projection made by MOH (MOH 1998) reveals that if the prevalence increased to 9% by the year 2006, then the number of infected people in the population would increase to 3.2 million by the year 2000 and to 4.7 million by 2014. According to this projection, by the year 2010 about 370,000 people would be infected with HIV every year.

Underreporting of the AIDS cases is one of the major drawbacks in developing countries

including Ethiopia, which masks the real consequence of the disease. Ministry of Health (1998) and Bongaarts (1996) listed the following reasons for underreporting.

- Some people never seek hospital care for AIDS.
- The practice of recording and reporting of AIDS cases from hospitals may be incomplete.
- Some people with HIV infection may die of other diseases before they are even diagnosed as having AIDS.
- Some rural health care facilities may not have the capability to test for HIV infection, and
- Many people have poor access to health service units.

Globally, the fast spread of the epidemic has drawn the attention of many scholars to devote their time and energy to curb its spread. However, the effort made so far particularly in the field of medicine did not spark the light of hope either to prevent or to control the disease. Thus, in the absence of preventive and curative medicine to HIV/AIDS, the key to arrest it is to know the mode of its transmission and draw effective intervention strategy.

Several studies undertaken in different countries have established the dominant mode of HIV transmission. It is confirmed that heterosexual (sexual intercourse between opposite sexes) transmission is dominant worldwide. In Ethiopia too, heterosexual contact is the dominant mode of transmission, constituting about 87 percent (MOH, 1996).

Drawing an effective intervention strategy, therefore, requires a good understanding of the sexual behavior of the various sections of the society as each group differs in its exposure to 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. These groups vary in the degree of awareness, exposure and perception as to the risk of infection. In this connection, Ainworth (1998) noted that: The biological characteristics of HIV determine, to some extent, the rate at which it spreads, but human behavior plays a critical role in its transmission. People who have many sexual partners and do not use condoms and people who inject drugs and share unsterilized injecting equipment have the greatest risk of contracting HIV and unknowingly infecting others.

1.3 ETHIOPIA IN THE ERA OF AIDS

The modern defir tion of Human Resource Development (HRD) has incorporated Health as its major component. Healthy population is, therefore, a potential for sustainable economic and social growth.

Ethiopia, as always has been reminded for decades, is one of the poorest countries of the world. Her past history of civil war, recurring drought and famine were some of the natural and manmade causes for the low performance of the economy. The agriculture dominated economy is obviously affected by any challenge that the country may face at any time.

At present, the country is facing two extremely serious problems: HIV/AIDS and War. Both are "consumers" of productive labor force. The latter is, of course, exogenous by nature and the way out is either to negotiate, if possible, or to confront. Whereas, the former can be encountered and should be encountered by any possible means that the country has. 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 enormous implication of human suffering, social effects and costs of health services, 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 the AIDS Control Program (MOH, 1998).

Eventhough the activities accomplished by NACP and the efforts made to sensitize the general population is worth mentioning, in the last few years, the Program which was running at the Departmental level, has been down graded and currently is functioning at a Team level. This could be one of the testimonies for the lower attention lent to this disease. The crisis due to HIV/AIDS should be averted as much as possible. The issue is no more of private or personal, it is rather national.

Therefore, to mitigate AIDS and reverse its long-run impact, strong commitment and aggressive intervention strategy is needed. But the situation in Ethiopia seems to have reached an alarming stage and that we are preparing to harvest unnecessary deaths. It is enlightening to mention, at this point, the key alarming facts indicated in the summary report of the UNAIDS-Ethiopia, after the visit made in Regions concerning HIV/AIDS Activities in September 1997.

Only few points are given here below:

1. Except for two Regions, Gambella and Addis Ababa, out of eleven visited regions, all the

regions were found to have inadequate human resources in both quantities and level of training in technical and general HIV/AIDS related managerial areas.

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 a shortage in the relevant materials and supplies for the prevention and control of HIV/AIDS infection. This problem has its root in the long procurement procedures and inadequate budgetary allocation.

4. The assessment team found that there is no system in place for tracking 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 intervention.

5. The assessment teams revealed that the second National Medium Term Plan (MTP) for the prevention and control of HIV/AIDS transmission ended in 1996. Since then there has been no National strategic planning to set priority strategies as response to the HIV/AIDS epidemic in the country. As a result, the various HIV/AIDS prevention and control activities being implemented in the country do lack frame of reference.

6. In Beni-Shangul, the stigma attached to the diagnosis of HIV/AIDS was reported as being so intense that health workers were afraid to pronounce the diagnosis AIDS, so neither clinical nor serological diagnosis is attempted.

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 effort going in to the prevention of the disease.

1.4 IMPACT OF HIV/AIDS

AIDS is a distressful enemy of human kind. The problem that results from AIDS can be well understood by considering its impact to the individual, the family, the community and the society at large. HIV/AIDS should not be considered as a substitute for the failure in the family planning effort to control population dynamics in developing countries in general and in sub-Saharan Africa in particular.

The first and most basic impact of HIV/AIDS is on those who contract the disease. Medication to relieve symptoms and treat opportunistic illnesses (illnesses that affect people with weak immune systems) can sometimes be obtained at low cost, ease suffering and prolong the productive lives of people infected with HIV. But as the immune system collapses, leaving the AIDS patient susceptible to opportunistic illnesses that are ultimately fatal, available treatments become increasingly expensive and their efficiency less certain.

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

Since AIDS death is concentrated in the productive age, for example, in Ethiopia, about 90% of reported AIDS cases occur to adults between ages of 20 and 49. The loss of young adults will certainly affect the overall economic development, particularly of the developing economies. This is also the age bracket when investment in education is just beginning to pay off. 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 Christian Relief Development Association (CRDA) 1996, the cost of hospital care for AIDS patients, in Ethiopia, ranges from 425 to 3140 Birr (60-449 US$ (1US$= 7 Birr)) during the course of illness. Furthermore, the report indicated 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 30-40 % of hospital beds in Addis Ababa are occupied by AIDS patients and AIDS related illness.

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

The Sectoral impact is still sounding. For the Least developed countries such as Ethiopia, where about 85 percent of employment is created in the agricultural sector, the loss will be enormous. The impact of AIDS in the industrial sector is by far worse since the prevalence of HIV infection is higher in urban areas; the industrial work force will be harder hit than the rural work force. The productivity of enterprises is affected even before the employee dies, due to lost workdays because of sickness. The number of work days lost to illness for a person with HIV/AIDS can range from 30 to 240 days in a year (MOH, 1996). 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 Tanzania, many businesses and employers are losing an increasing number of their skilled workers to AIDS. They are also already paying considerable sums 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, 1998). Many other countries will also see their hard-won 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 the population growth is not yet clearly defined. However, there has been much speculation 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 50 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 levels of HIV prevalence.

Projections of HIV prevalence are difficult to make because of uncertainties in three areas:

- The natural course of the epidemic,
- The degree of behavior change, and
- The impact of future treatments or vaccines.

The social impact of the AIDS related problems are critical at the moment. Hunter et al. (1997) has put the overall social impact as follows: AIDS mortality and morbidity create distinct additional, stresses on families, including changes in family roles and relationships, emotional strain and instability arising from extended illness and multiple deaths; sudden financial drains from diagnosis, treatment and funeral expenses; loss of external income from wage labor or trading; household and agricultural labor loss and declines in agricultural productivity, income, nutritional and educational status for widows and their children; and stigma, affecting the person with AIDS, family members 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. Among other things the psychological suffering and frustration is worth mentioning. As Hunter et.al. (1997) have described, many 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, school teachers 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, embarrassed by their condition. Many have high absentee 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 house maids or trade sex for a place to sleep.

The burden of AIDS on Women, particularly in backward economies and dominant cultures are by far worse. Hunter et al (1997) has 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 partners to use condoms. Ahlburg et al (1997) has also indicated the factor that is contributing for the spread of the epidemic in Philippians. He pointed that conservative religious culture of the country reduces the possibilities for open discussion of sex and other values of male domination over women in the society. Female sex roles, in Philippians, are associated with appropriate concepts of femininity and traits, such as submissiveness and modesty.

1.5 LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

1.5.1 REVIEW OF RELATED LITERATURE

HIV/AIDS is one of the diseases threatening the live of many peoples in developing countries. The first and important step to design effective intervention strategy is to understand the risk factor. The main risk factors affect primarily Knowledge, attitude and then behavior. Thus, we shall see the relevant opinions and results of different studies conducted in different groups of

the society and in different populations.

1.5.1.1. KNOWLEDGE ON HIV/AIDS

The common way of asking knowledge on HIV/AIDS is by asking about STDs in general because of the similarity in their mode of transmission. Accordingly, different results have been documented for various independent socio-demographic variables.

The Malawi DHS (1996) reported that the difference in the level of knowledge about AIDS among women and men was very small, however, males' knowledge about other STDs was better than females' knowledge. In Benin, knowledge of AIDS was almost universal (DHS Benin, 1997). In Zimbabwe, among both women and men, AIDS was by far the widely known STD (DHS, Zimbabwe, 1994). In Eritrea, women's knowledge about AIDS was lower than that of men's (DHS, Eritrea, 1995). The knowledge of College students in Addis Ababa, on HIV/AIDS, didn't show significant difference in relation to their sex (Beyene Petros et. al, 1997). Similar study conducted among Students at Gondar College of Medical Sciences came with the same result as there was no significant difference observed as far as sex of respondents is concerned (Telahun, 1997). The knowledge difference among males and females may be attributed to their difference in educational level. As it can be seen in the study among college Students, where their educational level is on the same level, their knowledge difference was insignificant. The same relationship was observed in Zimbabwe, where there was only slight difference between males and females in educational level (DHS, Zimbabwe, 1994). In Eritrea, educational level at each level was higher for males than females (DHS, Eritrea, 1995).

The effect of age on the level of knowledge about HIV/AIDS has exhibited mixed 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 (DHS Zimbabwe, 1994). In Benin, for women the knowledge increased from age group 15-19 and 25-29 and declined in the subsequent age groups. For men the index declined throughout as age increased (KAB, Benin, 1997). In Malawi, there was no definite pattern in the relationship between knowledge and age for both women and men (DHS, Malawi, 1996).

The other most important determinant for the knowledge of the individual is education. The KAB study conducted among long distance bus drivers, the knowledge gap ranged from 80 to 97 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 stood from 77.5 to 96.1 percent for respondents with no education and secondary and above respectively. For men, the gap ranged from 84.9 to 95.5 percent at the same educational level given for women (DHS, Malawi, 1996). In Benin, for men with no education and with secondary and above, the gap stood from 90.4 to 100 percent respectively. For women, the gap was still wider ranging from 76 to 91.3 percent (KAB, Benin 1997). In Zimbabwe, for women the gap was very wide as compared with men (DHS, Zimbabwe 1994).

Marital Status as one of determinant variables, plays a significant role on the knowledge of respondents. Those In Union have better knowledge than those Formerly In Union but lower knowledge when compared to the Never Married ones. This relationship has been reported on DHS in Benin (1997) and DHS Zimbabwe, 1994. On the other hand, the DHS in Eritrea (1995), exhibited that respondents In Union had lower knowledge than those Formerly In Union and Never Married.

1.5.1.2. ATTITUDE ON HIV/AIDS

In the era of AIDS epidemic, behavioral change is the only means to prevent the transmission of the disease. Behavioral change, however, is not easy to achieve. Helen (1992) pointed that personalizing risk is an important factor in behavioral change. According to Helen, for appropriate behavioral change, people need not only knowledge, but also to see the risk of affecting them personally. Accurate knowledge of the epidemic, an awareness of how people can actively reduce their own risk and meeting individuals with AIDS are all relevant to personalizing risk.

Seve al models have been used to explain behavioral change in relation to disease before and since the advent of HIV/AIDS. The development of most of these models has been based on experiences in the developed countries and may not apply in the developing countries with their different cultures and outlooks. However, some of the theories can be extended to HIV/AIDS in sub-Saharan Africa. Two of these which seem to be most applicable are the Health Belief Model, and the AIDS Risk Reduction Model (Lindan et. al, 1991; Pollak 1992, as cited in Ntozi et. al,1997).

The Health Belief Model assumes that the individual's attitude plays an important role in prevention of a disease, especially his or her perception of susceptibility to the disease, seriousness of the disease and benefits of health action; and this attitude is modified by demographic factors (Pollak, 1992, as cited in Ntozi et. al,1997). According to this model, sufficient knowledge of the disease is essential but not the only prerequisite for behavioral change.

The AIDS risk Reduction Model 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-efficacy 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).

Among different theories, one by Reboult (1992) stresses on the relationship between exposure to the patients of HIV/AIDS and prevention seeking behavior. Precisely it runs as, human beings need the rude shock of many deaths in order to awaken their senses and change their behavior (Reboult, 1992 as cited in Ntozi et. al, 1997).

This theory, probably, has benefited Uganda and Tanzania, where the voluntary movement of Peoples Living With AIDS (PLWA) have created a favorable conditions for the Public to develop a healthy attitude towards them and to practice safer sex to mitigate the spread of AIDS.

In Uganda, The AIDS Support Organization (TASO) was established in 1987 to provide psychosocial support to PLWA. TASO advocates and its work is guided by " positive Living", which has come to be recognized as the philosophy of the TASO movement. " The Power of Love Stops AIDS" sprit started to take place and as a result, from 89 bedridden patients registered, 37 clients became very well, improved not only physically but also morally. The Public also changed their view. The improved patients started to act as a living example and started to educate the public and become productive (CRDA, 1996).

In Tanzania, Service Health and Development for People With HIV/AIDS (SHDEPHA+) was organized by the personal initiative of 15 HIV infected people in 1993. The main objectives of the Organization are to support people who are HIV positive and those with AIDS all over the country to live positively. The second objective is to enable the public be informed and involved in the fight (CRDA, 1996).

On the other hand, developing positive attitude towards the disease and PLWA is highly hampered by the social stigma deep rooted in the society. Peltzer et. al, 1989, as cited in Ntozi, 1997, reported: denial, anger, fear, bargaining, depression acceptance and resignation as stages of reaction to seropositivity among 127 Zambian AIDS patients, a similar reaction of shock, fear, anger and sadness at the news was recently confirmed in Ghanaian study of 141 sufferers by Awusambo-Asare (1995) as cited in Ntozi, 1997. This is because they immediately think of being blamed, stigmatized, isolated and abandoned by their partners, relatives, friends and neighbors. Among 18 male patients in Ghana, 16 didn't inform their parents for fear of condemnation and ostracization, and none told their Children or neighbors. There are also some incidents of rejection, especially by the neighbors, community and the public. Mc Grath et. al (1993) reported cases of isolation in buses, taxis by fellow passengers and the neighbors refusing to use the same water source as patients.

Among several ways available to measure the attitude of an individual, is to ask his or her perception of susceptibility to the disease. To this end, Marital status is considered as a main explanatory variable being other variables controlled. Accordingly, mixed results have been observed in different studies.

In the Malawi DHS, 1996, a great risk of being infected by AIDS was reported by the Formerly married followed by Currently married and Never married for men, and for women the order was, currently married followed by formerly married and Never married. The same pattern was observed in Zimbabwe (DHS Zimbabwe, 1994). In Eritrea, the pattern shows different direction. For females, the Never married, formerly married and currently married have high risk in the descending order. For males, the risk is high for the Never married, followed by currently married and the least for Formerly married (DHS Eritrea, 1995).

1. 5. 1.3. SEXUAL BEHAVIOR

When one deals with such an issue, sexual behavior needs to take into an account the social structure and family organization of the given society.

Studies on sexual behavior in sub-Saharan Africa share certain broad assumptions about the historical and social background of the study populations (NRC, 1996).

- It is widely believed that colonial urbanization fundamentally changed the terms of family life and gender relations.
- As taxation monetized the economy, women were forced to earn money where they could.
- Polygyny was common in nearly all sub-Saharan African societies and remains so, but to varying degrees. Formal Polygyny is more common in rural areas. Nevertheless, various forms of multiple partnerships are also common in many urban areas, such as taking of mistresses or "outside wives". Polygyny 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 assumptions, 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 a woman or her children; regular or occasional gifts; or strait payment for sex, either on a repeated or as a single event.

Under such complex sexual network, to bring a desired sexual behavior demands an immense work in the field. In relation to this, Helen (1992), has put the following: In order to achieve appropriate behavioral change to reduce risk, people must feel they personally have more to gain than to lose by such a change. She added that, beyond having relevant knowledge and the motivation to change risk behavior, people must also have access to the means to achieve this change. Some people may decide to have a safe, one-to-one relationship, to have restricted sexual activity or no sex at all. Others will decide to use condoms. Many women, particularly in marriage, have little opportunity to decide on sexual matters. For women, in general, access to the means to achieve behavior change means a fundamental shift in sexual power relations.

The proxy determinant for evaluation of the sexual behavior of a given population or a group of society is to see the prevalence (The proportion of a population that is affected by the disease under study at a given point in time.(Killewo,1994)) of STDs.

STD is one of the risk factors (an aspect of personal behavior or style, an environmental exposure, or an inborn or inherited characteristics, which on the basis of epidemiological evidence is known to be associated with health-related conditions, prevention of which are considered important (Killewo, 1994)) considered as a common denominator between reproductive health and HIV/AIDS. Although accurate determination of the prevalence of

STDs in Africa is hindered by a lack of population-based data and adequate surveillance, existing information suggests that infection rates are very high in many African settings. Serological evidence of a prevalence of syphilis ranging from 11 to 21 percent has been documented among women attending prenatal clinics in a number of sub-Saharan countries (Ratman et. al., 1982; Watson 1985; Cooper-Poole, 1986, as cited in NRC 1996:84-85).

At Adigrat Health Center, North Ethiopia, out of 812 patients, aged between 15 and 45, 60 patients had STDs. (the prevalence rate of about 7.4 percent) (Daniel Zemenfes Ashebir, 1996). Studies among patients of STD clinics, in Addis Ababa, found that 30-40 percent of them was also infected with HIV. This is three times higher than the prevalence of infection among the general urban population (MOH 1998).

The second risk factor is acquiring multiple sexual partners. In urban population of Ethiopia, about 22 percent of adult males and 8 percent of adult females were engaged in sex with multiple partners (Mehret, 1995 as cited in MOH 1998) and fifty three percent of male students and 24 percent of female students among senior high schools in Addis Ababa had more than one partners (Gabre, 1990 as cited in MOH, 1998).

In the era of AIDS, as stated earlier, the only way to avoid the crises is to adopt safe sexual behavior. However, despite the increasing awareness of the society, still STD is prevails in different parts of sub-Saharan African countries. Thus, it is of paramount importance to look at different studies made in different strata of the population or as a whole in a given population concerning STD.

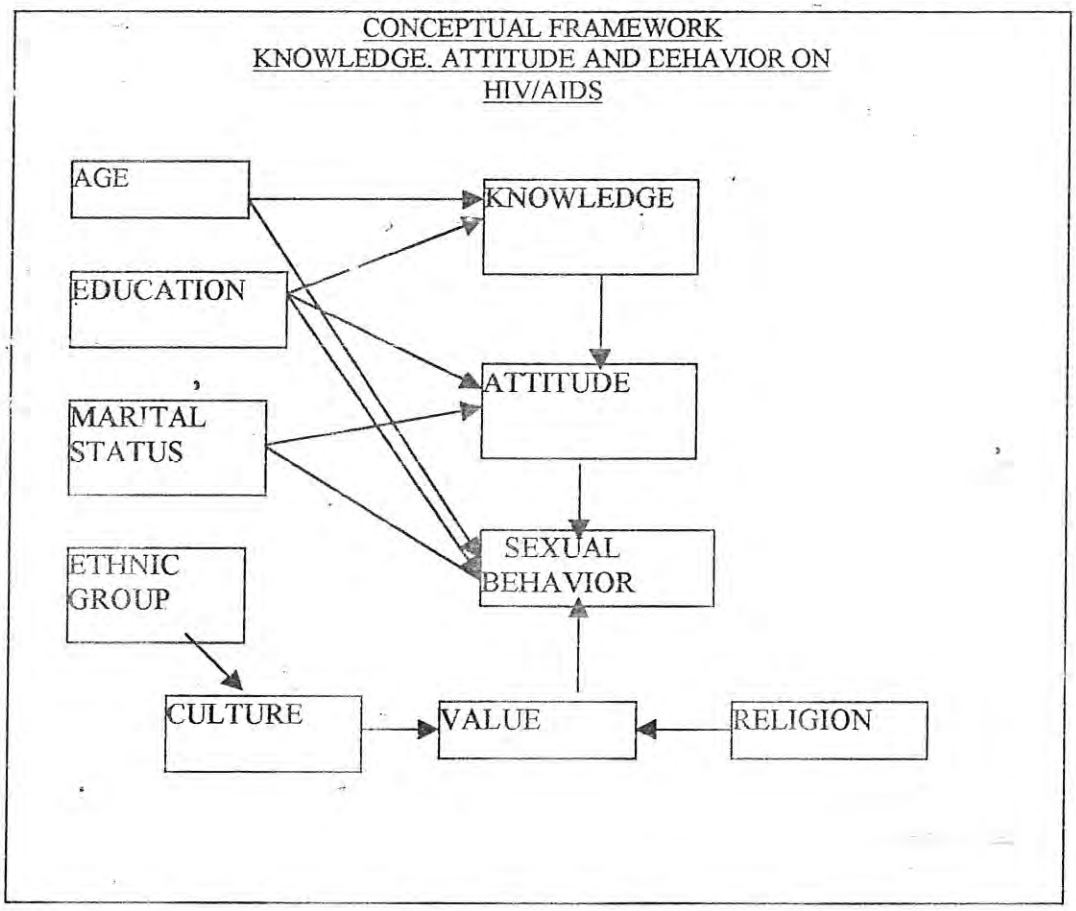
Telahun Teka (1997), after conducting a comparative study in 1990 and 1992, among students at the Gondar College of Medical Sciences, reported that despite the fact that the prevalence of high knowledge about AIDS and in modes of prevention, still a large proportion of Students (22%) had sexual contact with high risk individuals and only 33 percent of them were using safe methods. The result of similar study made by Charles Larson (1991), in Jima town, among 495 males (15-49), has documented the existence of high risk behavior (47.2 % had sex with CSW a month before the survey) and concluded the inverse relation between knowledge and poor practice. Beyene Petros et. al (19970 after the study made among college Students in Addis Ababa, concluded that: although College Students would have a relatively better access to information on AIDS, compared to the general population, this does not seem to have brought about the necessary behavioral changes required for protection against AIDS.

Self-reported STD infection in Malawi (DHS, 1996) was related in a positive direction with knowledge of AIDS or poor practice was inversely related with knowledge. As to the background characteristics, men were infected more than women, 5.3 per cent and 1 per cent respectively. More women, at a secondary and higher educational level, were infected than men in the same educational level. For both sexes, STD infection was concentrated in the ages 20-39. Similar study on STD infection in Zimbabwe (DHS, 1994) reported that more men than women were infected, 4.5 per cent and 2.7 per cent respectively. As compared to the Malawi report above, in this report, educational level and STD infection for men and women were in the opposite direction. More men, at a secondary and above educational level were infected than women in the same level. In Zimbabwe, as that of Malawi, STD infection was concentrated in the ages 20-39.

1.5.2 CONCEPTUAL FRAMEWORK

The conceptual framework, which has been developed for the assessment of sexual behavior in the study population, is presented schematically on the next page.

Diagram 1: **Conceptual Framework**



In the diagram, the arrows show how the independent variables (age, education, and marital status) directly and (ethnicity and religion) indirectly affect knowledge, attitude and sexual behavior of an individual as far as HIV/AIDS/STDs are concerned.

In this study, those independent variables that has a direct effect on knowledge, attitude and sexual behavior taken into an account. This is because the workings of other independent variables are not well established by available literatures.

1.6. OBJECTIVES OF THE STUDY

The main objectives of this study are to explore the level of knowledge, attitude and sexual behavior on HIV/AIDS and STDs among workers in the informal sector and to identify some of the potential risk factors helpful in strategy designing.

Specific objectives are:

1. To explore the knowledge, attitude and sexual behavior of the study population based on their socio-demographic variables, such as age, sex, marital status, education, religion and ethnicity.
2. To describe the sexual practice (prevalence of STD among this group, multiple sexual partnership, the use of condom to avoid getting HIV/AIDS) which are risk factors for HIV transmission.
3. To look at the extent of social stigma attached to HIV/AIDS in the study group through indirect questions.

1.7 HYPOTHESES

This study will try to test the following hypotheses.

1. Knowledge about HIV/AIDS and Sexual behavior of respondents depends on age. This is to say that, as age increases knowledge also increases; and safe sexual practice also increases.

2. Education has a direct impact on Knowledge, Attitude and Sexual behavior of the study population .As educational level of the respondent increases so does knowledge. Attitude, the perception of a respondent towards the disease whether it can be curable or not, the chance that he or she will contract HIV/AIDS, increases as educational level increases.
3. Current marital status has an impact on Attitude and Sexual behavior of the study population. Those who are currently In Union are better than those Formerly In Union and Never Married in both attitude and behavior.
4. There is no difference between males and females in their knowledge, attitude and sexual behavior in relation to HIV/AIDS in the study population.

2.2. SIGNIFICANCE OF THE STUDY

The findings of this research will be a valuable input for intervention strategy designers. It will give an opportunity to capture the risk factors for the transmission of the disease in this specific study group. Further it will help them to draw a sound and effective intervention strategy as a vital input towards the control of the spread of HIV/AIDS.

CHAPTER II. THE STUDY POPULATION AND METHODOLOGY

2.1 THE STUDY POPULATION

Since the onset of the HIV/AIDS epidemic in Ethiopia, different efforts have been made and continue to be made to disseminate information to the general public on the nature of the disease and the means of curbing its spread.

The only effective means of fighting the fast spread of HIV/AIDS is prevention through unreserved effort in changing individual sexual behavior. The best means of curbing the spread is to stick to one sexual partner with fidelity. If this can not be practised, use of condom during sexual intercourse will be the last resort. To accomplish this heavy task of changing individual sexual behavior, the Information, Education and Communication (IEC) must be supported by adequate research that identifies the Knowledge. Attitude and Behavior (KAB) of each specific group.

This study, therefore, focuses on workers in the Informal sector in Addis Ababa. The question that may be posed outright will be " how can we define this group?". For this study, the definition given by Central Statistical Authority (CSA) and Ministry of Labor and Social Affairs (MOLSA) 1997 is adapted.

Accordingly, Informal Sector is defined as household type establishments/activities:

1. Which are mainly engaged in marketed production, and
2. Which are not registered companies or cooperatives, and

3. Which have no full written book of accounts, and
4. Which have less than 10 persons engaged in the activity, and
5. Which have no license.

The establishment/activity is considered informal if it meets the above five criteria. At the same time a person who is working (whether paid or not) in such activity is considered a worker in the Informal sector. This sector is probably the last resort for earning a living for many who failed in achieving their aspirations with regard to education, employment, successful marriage, etc. and as such have been selected out of decent living.

As indicated earlier, in order to curb the spread of the epidemic, it is of paramount important to conduct a KAB survey for each group of the society. This is due to the fact that each group differs in its sexual behavior. It is important to study sexual behavior in the different strata of the population because modification of behavior is still the main weapon for controlling the spread of AIDS (Lule-Kunde et.al 1997).

Till the writing of this study, the researcher did not come across such a study conducted on this group particularly by domestic researchers.

2.2 CHARACTERSTICS OF WORKERS IN THE INFORMAL SECTOR

The sector contributes a lot both in production and creation of employment opportunity for the society and for the individual worker. Moreover, workers in this group are characterized by low income and lower educational level (CSA 1997) where these factors may put them at

risk. Educational level has a contribution in shaping one's behavior and helps someone to understand and perceive himself/herself whether he/she is at risk. The other side of the coin may also suggest the same thing. The meager income earned by the workers may play a significant role for higher risk. This may happen in such a way that to subsidize their living they either accept or give gifts in favor for sex. Even the type of their activities may tempt them into such behavior.

The Informal Sector does, provide a range of goods and services on which city life very much depends. Yet government and municipal policies have often opted for eviction and harassment. The Sector provides income-earning opportunities for a large number of persons in a way that is both labor and skill intensive (Laquin,1981 as cited in Adepoju, 1988).

Law, as stated above, does not protect the Sector. The survey report by CSA and MOLSA (1997) has also described the extent of marginalization as follows: Most of them have low level of productivity and income. They tend to have little or no access to organized markets, to formal credit institutions, to modern technology, to formal training, and to many public services and amenities. A large number of them carry out their activities without fixed location or in places such as small shops, outlets or home based activities. They are not supported by the government. They are beyond social protection, labor legislation and protective measures at work place.

Furthermore, Hayat Abdulahi, 1996, in her survey of the Informal Sector, has noted: Most of the trade are illegal or unlicensed, and is carried out in the street. Thus they face police harassment as they operate without license. To escape police harassment they bribe the police

out of their meager income. At worst it is the official harassment contributing to upheaval and subsequent loss of income and psychological instability.

Comparing Workers in the Informal Sector to Workers in the Formal Sector, one can establish the following distinguishing points:

1. Their (Workers in the Informal Sector) work is mainly based on backward technology, labor intensive, and low productivity.
2. The sector is characterized by small-scale production, usually for domestic consumption.
3. Low and unstable income.
4. Inaccessibility to formal credit institutions.
5. Absence of legal protection and as a result feeling of insecurity and psychological instability.

Despite all this problems, the sector is open at any time for easy entry due to its distinct features; such as:

- small capital requirement
- labor intensive method of production
- operation at small scale
- marked dependency on domestic raw materials and
- Low skill requirement.

Therefore, it is significant to undertake such a research to shed some light on the level of knowledge, attitude and behavior on HIV/AIDS among Workers in the Informal Sector.

2.3 STUDY DESIGN

This is a cross sectional and exploratory study about Knowledge, Attitudes and Behavior (KAB) on HIV/AIDS among workers in the informal sector in Addis Ababa.

The desired sample size of the study was about 1200 individuals as estimated using the following formula:

$$N = \frac{Z^2 \times P(1-P)}{E^2}$$

Where:

N= required sample size

Z= confidence level (95%)

P= expected frequency

E= level of error

Assumptions

Z= 1.96 from statistics table

P= 50% (in the absence of prior knowledge)

E= 0.03 (3%) level of error

Therefore,

$$N = 1.96^2 \times 0.5(0.5) / (.03)^2 = 0.9604/0.0009 = 1067$$

2.3.1 SAMPLING TECHNIQUE

The sampling techniques used in this study were both purposive and random sampling techniques based on multi-stage sampling techniques.

The overall umbrella to the sampling technique was governed by the very nature of the study group itself. Most of the workers in the study population are concentrated in the central part of the city where the market for their product is available. Therefore, in this research the classification given by the city administration of Addis Ababa was followed. The city administration classified the city into three business areas, namely, the core, semi-core, and expansion area. But for the sake of avoiding confusion, with regard to delineating which is which, the classification has been modified and data was collected from core business and non-core business areas (any place out of core business area was used to represent the Non-core business area). The list of Kebeles (the smallest administrative unit in the urban set up) categorized as the core area is given in Appendix 1.

Accordingly, five Weredas were selected purposively: two Weredas from the core and three from the non-core. From the core (central business) area, Woreda 5 (commonly known as Merkato) and Woreda 3 (Teklehaimanot area). From the non-core, Wereda 8 and 25 (commonly known as Asco) and Woreda 19 (Saris area).

The second stage in the sampling procedure was the selection of Kebeles. The selected Kebeles are presented in Table 3.

Table 3: **Sample Area Distribution**

Business Area	**Woreda**	**Kebele**
Core	5	15, 21
Core	3	30, 31, 42
Non-core	8	02
	25	16
Non-core	19	55, 56, 57

Following this, a Household roster was prepared. Here, relatively reliable partners were looked for. In this survey, the local NGOs operational in the selected Weredas were found to be very helpful. These NGOs have their own rosters prepared for the purpose of base-line survey. On the other hand, in the absence of such NGOs, the Kebele rosters were used. In both cases, the rosters were updated. From the roster, those Households who were engaged in the Informal sector were picked and then with the method of simple random sampling those households in which the business was running were selected. The approach used at this level was an Establishment approach, where all workers engaged in that business were interviewed. In the same way, an open air market (Gulit) traders and open space manufacturers were also interviewed. In this case first such places were identified and only the randomly selected ones were considered as an Establishment.

Finally, to make the study representative, an equal number of sample sizes were allotted to both core and non-core business areas, 600 each. At the end, 594 respondents from the core business area and 583 respondents from non-core business area were successfully interviewed. The proportion shows 50.5 percent from the core business area and 49.5 percent

from the non-core business area.

The eligibility criterion of inclusion of respondents for the interview was only age. Males and Females between the age of 15-49 were interviewed.

2.3.2 DATA COLLECTION

For data collection, both qualitative and quantitative methods were used.

In Qualitative data collection, key informants, individuals who have deep knowledge in the subject were asked to fill the gap in quantitative analysis.

The Quantitative data was collected through standard questionnaire prepared in English and then translated into Amharic. In the development of the final questionnaire, valuable and important advice from appropriate people was obtained. The questionnaire was categorized into four parts: the first part dealt with the collection of socio-demographic or background information, such as sex, age, educational level, religion, and current marital status. The second part was concerned with the questions related to the knowledge of Sexually Transmitted Diseases (STDs) and the prevalence of STDs. The third part, the knowledge and attitude on HIV/AIDS together with AIDS related health issues. The final part, part four, incorporated questions that proximate the sexual behavior, such as the use of condom during sex in order to avoid the transmission of AIDS, number of regular and non-regular sexual partners.

For the field data collection, 18 (nine males and nine females) interviewers and 3 supervisors were involved. Before the actual data collection, a 5-day intensive training was conducted. Within these training days, the instrument was pre-tested prior to data collection. Field data

editing and coding was undertaken on the spot. The data was collected between mid February to mid March 1999.

The study desired to collect data from 1,200 individual respondents, however, it was managed to collect 1,177. This means a 98 percent response rate or 2 percent non-response rate was registered. For the quality of information, respondents were assured of strict confidence and were asked to be honest.

2.4 METHODS OF ANALYSIS

Data entry and cleaning were processed using SPSS statistical package.

The analysis employed uni-variate, bi-variate and multi-variate statistical methods. In multi-variate analysis, logistic regression model was used.

Chi-square test is the main statistical device used to test the hypotheses and P-Value to determine the significance of the test.

Logistic regression model is one of the powerful tool frequently used in demographic researches, where the dependent variable of interest is dichotomous.

One advantage of this model is that the analysis and interpretation are quite similar to the well-known procedures of multiple regression.

The odds ratio concept forms the backbone of logistic regression. The odds ratio is the ratio of two odds. Odds, in turn, are themselves ratios of the number of events to the number of non-events. For example, if our variable of interest is use of condom, the odds are calculated as the number of individuals using condom to the number of individuals not using condom.

Conversion between odds and proportions can be expressed as O (odds) = P/(1-P), where P is any proportion. The logistic equation is one where the natural logarithm of the odds of the dependent variable is predicted by a linear function of the independent variables. This technique operates on individual or micro level, rather than aggregated data, and is analogous to linear regression in that a continuous response variable is modeled as a linear function of a set of continuous predictors. As in OLS regression, a categorical predictor can be entered into the equation as a set of dummy variables (Kuttan Mahadevan and Parameswara Krishanan, 1993).

Logistic regression assumes that each member of the population has some underlying probability of success on a given independent variable. Therefore, in the population, each member with a given set of characteristics has a P chance of success and 1-P chance of failure. If one is using individual data, each member has either a 1 or 0 chance of success.

Let Pi be the probability that the i^{th} person in the sample is in the category of interest on a dichotomous dependent variable and (1-Pi) the probability that he or she is in the other category. Clearly, Pi/(1-Pi) equals the odds of being in the category of interest for the i^{th} individual. Now log (Pi/(1-Pi)), the log odds of being in the category of interest, is a continuous variable that theoretically can take on any value in the range positive and negative infinity. Also let $X_{i1}, X_{i2}, \ldots X_{ik}$ be a set of K continuous (and/or dummy) variables measured on the i^{th} individual in the sample. Then the logistic regression model for the log odds, given a particular vector of scores on the K predictor variable, is

$$\text{Log } P/1\text{-}P = \beta_o + \beta_1 X_{i1} + \beta_2 X_{i2} + \text{---} + \beta_k X_{ik} \text{----------} 1$$

nd the corresponding multiplicative model for the odds is

$Pi/1-Pi = e^{\beta o}\ e^{\beta 1 Xi1}\ e^{\beta 2 Xi2} \ldots e^{\beta k Xik}$ ---------- 2

Individual predictors can be tested by examining the ratios of the coefficient estimates to their standard errors, which are approximately standard normal under the null hypothesis that the coefficient is 0 in the population. The interpretation of regression coefficients is quite straightforward. For example, β_1 represents the increment to the log odds for every one-unit increase in X_1, holding all other factors constant. Or, $\exp[\beta_1]$ represents the multiplicative factor by which the odds change for every one unit increase in X_1, controlling for the other predictors.

2.5 MODEL SPECIFICATION

The logistic regression model was run to identify those key independent variables that can explain the dependent variables. The independent variables are both categorical and non-categorical. Whereas, the dependent variables were dummy coded.

The dependent variables were:

1. Can AIDS be cured? (It measures Knowledge) (Q78)

2. Is it possible for a healthy looking person to have HIV/AIDS? (It measures Knowledge) (Q79)

3. Self-perception of the chance of getting HIV/AIDS. (It measures Attitude) (Q70)

4.Do you now have Non-regular sexual partner? (It measures Behavior) (Q50)

* The operational definition of the term " Non-regular partner" is sexual partners who could not often live together and who do not have an intention to live together in the future.

The independent variables were:

1. Sex (Q3) = X_1
2. Place of work (Q14) = X_2
3. Educational level (Q 71) = X_3
4. Sample area (Q 65) = X_4
5. Current marital status (Q 72) = X_5 and
6. Age (Q77) = X_6

CHAPTER III. RESPONDENT CHARACHTERSTICS AND FINDINGS

3.1 CHARACTERSTICS OF RESPONDENTS

The profile of respondents was organized based on selected key background characteristics where their knowledge, attitude and behavior about HIV/STDs may be well explained. As shown in Table 4, the respondents were selected from both core-business area and non-core business areas. The ground for classification of the respondents in such grouping was based on the information obtained from the city administration of Addis Ababa as indicated in the earlier chapter. The total number of respondents was 1177 and of which 50.5 percent from core business area and 49.5 percent from non-core business area. The proportion of males and females from both areas were almost close to each other. This proportion between males and females corresponds with the report released about workers in the informal sector by CSA and MOLSA in May 1997 for Addis Ababa City.

The place of work released an information about the respondents' work place. Accordingly, about equal number of respondents were working at Home and outside Home, 589 and 588 respectively. It was found that, slightly greater number of males was working at home and females were dominantly engaged in business outside Home.

The Age of respondents was classified into four age groups. The first group is from age 15-19. This group mostly includes the young characterized by entering into sexual activities at an early s. age.

TABLE 4. A PROFILE OF RESPONDENTS

Background Characteristics	MALE	%	FEMALE	%	TOTAL	%
Sample Area						
Core-Business	278	46.8	316	53.2	594	50.5
Non-Core Business	270	46.3	313	53.7	583	49.5
Place Of Work						
At Home	308	52.3	281	47.7	589	50.0
Out Side Home	240	40.8	348	59.2	588	50.0
Age Group						
15-19	125	55.8	99	44.2	224	19.0
20-29	287	52.3	262	47.7	549	46.6
30-39	106	33.8	208	66.2	314	26.7
40-49	30	33.3	60	66.7	90	7.7
Educational Level						
Illiterate	45	22.8	152	77.2	197	16.7
Read and Write	18	36.0	32	64.0	50	4.2
Elementary	135	44.7	167	55.3	302	25.7
Junior	104	51.5	98	48.5	202	17.2
Secondary+	246	57.7	180	42.3	426	36.2
Current Marital Status						
In Union	160	38.1	260	61.9	420	35.7
Formerly In union	30	18.9	129	81.1	159	13.5
Never Married	358	59.9	240	40.1	598	50.8

The Second and the Third age Groups, 20-29 and 30-39 are the most sexually active and vulnerable for such Sexually Transmitted Diseases including HIV/AIDS. As to the report of MOH, 1996, about 75 percent of AIDS cases were in these age groups. In this survey, these age groups constitute about 73 percent of the study population.

The proportion of males and females was 46.5 and 54.5 percent respectively, which corresponds with the break down by sex report released by CSA and MOLSA in May1997. The fourth age group, 40-49, is the group where sexual activity starts to decline.

Respondents were further classified according to their educational level that follows the educational system of the country. The first group, Illiterate, (who could not read and write), the second, those who only read and write, the third, who reported in the elementary followed by junior and the last group, secondary and above. Of the total 197 respondents reported as illiterate, 77.2 per cent were females. The proportion of females declined as the years of educational level increased. In general, about two-third of the study population is below Junior level.

The current marital status of the respondents was one of the key background variables to attain the study objectives. The term "In Union" is used to show those respondents who were in marital union during the interview. "Formerly In Union" included those who were widowed, separated and divorced. The third group was "Never Married" who had never married. Of the total study population, about half, 50.8 per cent were Never Married, 35.7 per cent were In Union and 13.5 percent were Formerly In Union. As depicted in Table 4, females In Union and Formerly In Union were dominant in number than females in the Never Married group.

Mean daily working hours for the study population was 10.3 hours. For males, 10 hours and for females 11.0 hours. Females work longer hours than males.

Mean age at first sex for the study population was 19 years. For males 21 years and for females 18 years.

Limitation of the Study.

The cultural set up of our society and the sensitiveness of the issue put some limitation on this study. Discussing on sexual issue and sexual behavior, in Ethiopian society, is uncommon. Even, among the educated it has a limit. Therefore, in this study too, I doubt that respondents have given information openly. In order to minimize such doubt, respondents were interviewed alone and they were also told the purpose of the study. The name or address of the respondent was asked.

3.2 FINDINGS

3.2.1 AWARENESS OF STDs

All respondents were asked, "Have you ever heard of a disease that can be transmitted through sex? " Respondents were not prompted with the names of specific STDs. AIDS is by far the best-known STD. Knowledge of STDs is more prevalent among males than Females, but the difference in knowledge between the sexes is less for AIDS than other STDs. The deadly nature of AIDS and the many Information, Education, and Communication (IEC) programs that have focused on it probably account for the fact that it is the most widely recognized STD.

As seen in Table 5, 92 percent of males and 86 percent of females reported that they knew STDs in general. Females were more informed about AIDS than males 97 per cent and 95 per cent respectively. On the other hand, Females were less informed about other STDs than the males. Fourteen percent of females and eight percent of males were unable to name any STDs.

Those respondents from the core-business area were less informed than those from non-core business area about AIDS. This could probably be due to the lack of social interaction and dissemination of information in the core business area, where respondents would be busier than those operating in the non-core business area.

In all cases, those who were working at home were at an advantageous position to be more aware of AIDS and other STDs than working outside home. This would be possible because they (those who are working at home) could have spare time and an opportunity to discuss among family members or friends than those who were operating out side home. Thirteen percent of those operating outside home and nine percent of those operating at home couldn't mention any name of STDs.

As far as the age of respondents and awareness of AIDS was concerned, awareness of AIDS declined as age increased (r-negative, $P<0.005$), but the reverse was true about the other STDs. The age group 15-19 was less aware about other STDs than AIDS as compared with the higher age groups. This result calls for an attention to the on going sensitization program where more emphasis has been given only to HIV/AIDS than the other STDs.

Table 5 shows percentage of study population who knows of Specific sexually transmitted diseases, by Selected background characteristics.

Table 5. Knowledge of sexually transmitted diseases (STDs)

Background Characteristics	Ever heard of STDs	Syphilis	Gonorrhea	HIV/ AIDS	Chancroid	Genital Warts	Others	Do not Know	Total
Sex									
Male	92.0	67.9	72.2	95.4	45.2	13.3	2.8	8.0	548
Female	85.9	64.1	54.3	97.0	27.2	5.6	6.6	14.1	629
Sample Area									
Core	87.5	62.7	63.5	95.4	36.2	10.8	1.9	12.5	594
Non-core	89.9	69.1	62.4	97.1	35.7	7.8	1.3	10.1	583
Place of Work									
At home	90.8	69.0	65.2	97.6	37.4	10.3	1.3	9.2	589
Outside Home	85.6	62.7	60.5	94.9	34.4	8.3	2.0	13.4	588
Age Group									
15-19	84.4	49.7	52.4	97.9	24.3	4.8	1.1	15.6	224
20-29	91.8	67.7	64.1	97.0	39.3	11.3	1.8	8.2	549
30-39	87.6	72.7	68.4	94.5	38.5	7.6	2.2	12.4	314
40-49	84.4	69.7	61.8	93.4	32.9	13.2	0.0	15.6	90
Educational Level									
Illiterate	70.6	59.7	54.0	93.5	32.4	7.2	1.4	29.4	197
Read and Write	86.0	86.0	74.4	81.4	41.9	9.3	0.0	14.0	50
Elementary	88.7	57.5	54.5	95.1	24.6	5.6	1.1	11.3	302
Junior	90.1	58.8	59.9	97.3	31.3	4.9	1.6	9.9	202
Secondary+	96.7	74.5	71.6	99.0	45.9	14.3	2.2	3.3	426
Current Marital Status									
In union	88.1	70.3	62.7	95.1	37.3	9.2	1.1	11.9	420
Formerly In Union	81.8	63.1	63.8	93.8	34.6	6.2	2.3	18.2	159
Never Married	91.0	63.6	62.9	97.6	35.3	10.1	1.8	9.0	598

Note: Figures are based on Spontaneous knowledge of sexually transmitted diseases (i.e. without probing).
See table 8 for level of knowledge of HIV/ADS after probing.

For the basic question, ever heard of STDs, and in particular for AIDS, educational level of respondents was found to be positively associated; as the educational level increased awareness, also. This finding is in conformity with the findings in other studies.

With regard to Current Marital Status, awareness of STDs was lower for those who were Formerly In Union. This was also true for AIDS awareness. Further, the Never Married were more aware than others in both STDs and AIDS. For the other STDs, the level of awareness among respondents in three marital status categories was not wide enough to seek further explanation.

3.2.2 SELF-REPORTING OF RECENT SEXUALLY TRANSMITTED DISEASES

The question, " Did you fall sick of any STD in the past 12 months?" was asked for those respondents who ever had sexual intercourse. A total of 841 respondents were asked and 4.9 percent responded affirmatively. As shown in Table 6, 7.5 percent of males and 2.7 percent of females were reported sick. This might be an underestimate for three reasons: having an STD is a sensitive issue, which is not easily admitted; many women with STD infection are asymptomatic; and some symptoms may not have been recognized as STDs by respondents. However, compared to other studies, this is a reasonable figure as far as sexual behavior is concerned.

Gonorrhea was the most widely spread STD for both sexes while Chancroid was a typical STD for males. The prevalence of STD was higher in the core-business area than in the non-core business area. This could be probably due to the relatively higher concentration of commercial sex workers in the core business area where easy access for males is possible and partly females may look as an alternative income source. Those who were working at home were less infected than those working outside home. This might be the outcome of lower awareness about STDs for the study population working in the core business area. Again it

could be that, as a result of frustration in life, particularly due to marginalization by the official policy, which pushed them to practice unsafe sex. As shown in Table 5, those who were working outside home were less aware of STDs than those working at home.

There is a slight increase in STD infection from age groups 15-19 to 20-29 and then declined to the age group 30-39. No STD was reported from respondents of age group 40-49. Significant at $P<0.001$. This result is in line with the hypothesis. This could help us to understand that utmost effort should be made on younger age groups in order to save the human life from the eminent danger. Because, literatures argue that, STDs are a co-factor for HIV infection.

Table 6 gives the Percentage of study population who reported having specific sexually transmitted diseases (STDs) or symptoms during the 12 months preceding the survey, by selected background characteristics.

Table 6. Self reporting of sexually transmitted diseases in the past year

Background Characteristics	Any STD	Syphilis	Gonorrhea	Chancroid	Others	Total
Sex						
Male	7.5	0.5	5.1	1.2	0.7	389
Female	2.7	0.4	1.8	0.0	0.4	452
Sample area						
Core	6.1	0.5	4.1	1.0	0.5	392
Non-core	3.8	0.4	2.8	0.2	0.4	449
Place of Work						
At home	4.5	0.4	3.2	0.9	0.0	444
Outside home	5.3	0.5	3.5	0.3	1.0	397
Age Group						
15-19	5.7	1.4	2.9	0.0	1.4	70
20-29	6.7	0.5	4.7	1.2	0.9	381
30-39	4.2	0.3	2.7	0.3	0.3	301
40-49	0.0	0.0	0.0	0.0	0.0	89
Educational Level						
Illiterate	2.5	0.0	1.9	0.0	0.6	162
Read and Write	2.1	0.0	2.1	0.0	0.0	47
Elementary	4.1	0.5	1.8	0.9	0.9	222
Junior	7.2	0.0	6.5	0.7	0.0	138
Secondary+	6.5	1.1	4.0	0.7	0.7	272
Current Marital status						
In union	2.8	0.3	1.5	0.2	0.8	403
Formerly in Union	4.5	0.7	3.2	0.6	0.0	155
Never Married	8.4	0.7	6.0	1.1	0.6	283
Total	4.9	0.5	3.3	0.5	0.6	841

It has been hypothesized that as awareness about STD increases, individuals may take the necessary precautions to protect themselves from such diseases. As it has been indicated, awareness was positively associated with educational level. Significant at $P<0.002$. However, the prevalence of STD increased, except showing a slight decline for those respondents who had secondary and above educational level. This result is against the

hypothesis. The study made in Jimma town conforms with the result of this study. This result can be the basis for further in-depth research.

Faithfulness in marital life is the key factor for safe and healthy family formation and for prevention from HIV/AIDS. As Table 6 depicts, STDs were also reported by those respondents In Union. This may be an indication for multiple sexual practice within union or sex outside union. For those respondents who were Formerly In Union and Never Married, the rate was 4.5 percent and 8.1 percent respectively. Possibly, those who have Never Married could be younger than those respondents who were In Union and Formerly In Union. That was why, the rate of STD for Never Married respondent was very much higher than other groups. This finding further strengthens the need to give attention to the youth.

Of the total of 29 males and 12 females, those who reported having STD during the preceding 12 months, were asked about what they did to treat the STD. Twenty seven (93 per cent) of males and 11 (92 per cent) of females reported having sought treatment, while 22 (74 per cent) of males and 10 (91 per cent) of females said they obtained medicine after proper diagnosis. Two males and one female obtained advice from traditional healers.

Infection of partner(s) is an important issue in STD control. Respondents, who reported an STD infection, were therefore, asked whether they had informed their partners. Only 13 (45 per cent) of males reported that they had done so. In comparison, 7 (58 per cent) of females stated that they had informed their partners. Even if females were better in informing their partners vis-a-vis the males, in general, the result depicted the existence of some openness, between males and females in such sexual issue. This finding may necessitate hard work to

develop openness in the society.

Males and Females who reported an infection were also asked if they had adopted any specific means to avoid infecting their partners. Eighteen (62 per cent) of males and 4 (33 per cent) of females claimed to have taken some precaution. Seventeen males stated that they had avoided sexual intercourse, and two of them mentioned using condom. Three females reported abstinence from sex, and only one female mentioned using condom.

Both actions not to infect partner, abstaining from sex and using condom, reflect the lower bargaining position of females as far as sexual intercourse is concerned. Four females and two males reported that they didn't take any action not to infect their partners on the ground that partner was already infected. This may show that males are the main agents importing STDs to their female partners.

3.2.3 HIV/AIDS KOWLEDGE AND AWARENESS

Acquiring knowledge of AIDS is an important step towards adopting behavior, which will prevent transmission of HIV. Table 7, reports the prevalence of knowledge about AIDS based on selected background characteristics and their sources of information about the disease.

It is important to note that the prevalence of AIDS knowledge reported in Table 5 is based on a different question from the one asked for Table 7. For Table 5, respondents were asked

"which STDs do you know?" In contrast, for Table 7, respondents were asked the following question in which AIDS was specifically mentioned: "Have you ever heard of an illness called AIDS?"

When asked if they had heard of an illness called AIDS, almost all (99.6 percent) males and 98 percent of females responded affirmatively. For the other selected background characteristics, the level of AIDS knowledge was very much close to one another ranging from 98 percent to 100 percent.

Regarding the sources of information from which they had learned about AIDS, the most commonly mentioned source was the Radio, which stood from 97 percent to 99 percent for all selected background characteristics. TV was the second largest source of information in all cases, but with a certain degree of difference among different groups of respondents.

In Table 7, Percentage of study population who have ever heard of AIDS, percentage who received information about AIDS from specific sources, and mean number of sources of information about AIDS, by selected background characteristics.

Table 7. Knowledge of AIDS and sources of AIDS information

Background Characteristics	Ever heard of AIDS	Sources of AIDS Information: Radio	TV	Health workers	Church/ Mosque	School/ Teacher	Comm. Meeting	Friends /Relatives	Work Place	MNS	Total #
Sex											
Male	99.6	98.7	73.0	42.7	27.4	26.5	20.4	62.6/23.0	33.9	4.0	548
Female	98.1	97.3	55.5	67.6	30.4	13.8	22.4	40.7/25.3	13.8	3.5	629
Sample Area											
Core	98.5	97.8	70.4	51.5	24.6	16.7	10.8	41.4/10.1	20.9	3.4	594
Non-core	99.1	98.1	56.8	60.5	33.4	22.8	32.4	60.5/38.6	25.6	4.3	583
Place of Work											
At home	99.8	99.2	66.0	58.9	30.4	21.2	23.6	56.0/27.0	25.1	4.1	589
Outside Home	97.8	96.8	61.2	53.1	27.6	18.2	19.4	45.7/21.4	21.3	3.6	588
Age Group											
15-19	98.7	96.9	71.0	38.4	21.0	34.8	13.4	51.8/18.6	23.7	3.7	224
20-2	98.5	99.6	72.3	56.3	32.4	24.0	21.1	55.6/22.0	25.7	4.1	549
30-39	99.0	98.1	50.6	67.5	28.7	7.0	24.5	45.9/30.3	19.4	3.7	314
40-49	100.0	98.9	37.8	57.8	28.9	0.0	33.3	37.8/30.0	17.8	3.4	90
Educational Level											
Illiterate	97.5	97.4	29.2	58.3	24.0	0.0	24.0	43.8/29.2	12.5	3.0	197
Read and Write	100.0	99.1	36.2	41.4	27.6	6.0	19.8	37.1/18.1	16.4	3.4	116
Elementary	98.4	99.0	60.9	50.6	28.8	13.8	20.5	47.4/19.6	21.8	3.9	317
Junior	99.4	99.7	80.8	62.8	30.4	31.6	22.1	54.9/24.5	28.0	4.6	341
Secondary+	99.0	100.0	91.7	62.7	34.3	35.8	22.1	67.6/31.4	32.8	4.6	206
Current Marital status											
In union	98.3	98.1	49.8	64.0	31.9	7.1	26.2	44.8/28.1	20.0	3.7	420
Formerly in union	99.4	96.9	41.5	59.1	23.3	3.8	21.4	40.9/22.0	13.9	3.2	206
Never Married	99.0	98.2	79.3	49.5	28.4	32.8	18.2	57.9/22.1	27.9	4.1	598
Total	99.0	98.2	63.7	56.3	29.1	19.8	21.6	51.1/24.5	23.3		117

Note: Mean number of sources (m.n.s.) is based on respondents who have heard of AIDS

AIDS has been detected in Ethiopia about two decades ago and as it is a health issue, health workers as a source of information were expected to be the forerunners. But for the study population, information from the health workers has reached slightly above half of the population. The disparity between males and females is still high. Only 43 percent of males reported health workers as a source of their information and 68 percent of females affirmed health workers as their source of information.

Respondents, working out side home, were less informed from health workers about the disease (AIDS). Workers in the age group 15-19 were the least informed from the health workers as compared to the other age groups.

Health workers as a source of information by respondents can be well visualized through their classification in marital status. Respondents, In union, were well informed (64 percent) from health workers, while those who were never married were less informed (50 percent).

Here, one may say that such a gap between males and females perhaps is the result of females may use health facilities more than males to attend ante natal clinics or acceptors of family planning program.

Churches or mosques as a source of information remain very low for the entire study population. In the era of pandemic disease, such as AIDS, the role of organized institutions, such as Schools/ Teachers are one of the best ways to disseminate information. Based on this premise, on average, only one-out-of five respondents in the study population mentioned Schools/Teachers as a source of information. From the total respondents, three-forth has passed through the school system but only about 20 percent responded in favor of Schools/Teachers as a source of information, even the disparity between selected background characteristics was wide. Twenty-seven percent of males and fourteen percent of females responded Schools/Teachers as a source of information about AIDS. Respondents in the non-core business area were better informed from Schools/Teachers as compared to the respondents in core-business area. Those respondents workings out side home were less informed from School/Teachers about the disease, AIDS.

The youngest age group, 15-19, probably who were born after or at the time when the disease was detected in Ethiopia, astonishingly small number of them responded Schools /Teachers as a source of information. Of the total 224 respondents in this age group, only 26 of them (12 percent) didn't encounter formal education. The rest declared that visiting a formal education.

But reported rate was only 35 percent. Report rate for School/Teachers a source of AIDS information declined as age progressed. This could be expected, because respondents particularly the age group 40-49 were almost all of them were out of school at that time or the majority (sixty-nine percent) of respondents didn't visit formal education at all.

To conceptualize the social impact of AIDS, as discussed in the introductory part, yet is hard to believe that the issue as a problem discussed in the society despite the opportunity at different meetings that they may enjoy such as: at kebele meetings, Senbete meetings (the meeting common for Orthodox religion followers), Equb (a sort of informal credit institution), Mahber, etc. Community meeting, as a source of information for the study population, on average, was only about 22 percent. Respondents operational in core business area were less informed through the community meeting, 11 percent, compared to 32 percent in non-core business area. This could be due to the fact that the majority of respondents in non-core business area were more establish family members operating their business at home. The result depicted that about 60 percent of respondents were so. Therefore, their participation in community meeting would be higher than those working in the core business area.

On average, about 51 percent of the total respondents confirmed obtaining information from their friends. Males seem to discuss among themselves about the disease, 63 percent, and the disease, as an issue, was less discussed among females, 41 percent. Sixty one percent of respondents working in non-core business area while 41 percent of respondents operating in core-business area reported friends as a source of information. Those respondents operating out-side home were less informed from their friends as compared to respondents working at home, 46 percent and 56 percent respectively.

The disease as an issue was well discussed among age groups from 15-29 as compared to 30-49 years of age. Friends as a source of information about AIDS was mentioned as educational level increases except for the illiterate. AIDS as an issue was well discussed among never married than those In Union and Formerly in union.

In almost all selected background characteristics, it seems that relatives do not discuss AIDS as an issue. On average only 25 percent of respondents affirmatively responded relatives as a source of information. This could be an indication that both the community and the family are crippled by the social taboo to discuss matters related with sex.

Discussing AIDS, as an issue at work place is still at a rudimentary stage among workers in the informal sector. Thirty-four percent of males responded positively work place as a source of information whereas only fourteen percent of females responded in the same direction. The mean source of information for the study population was computed as 3.7.

Knowledge of ways of getting AIDS is presented in Table 8. Ninety-six percent of females responded that sex with multiple partners as means of AIDS transmission. Multiple sex partners was also the risk factor most frequently mentioned by males. However, the proportion of males who mentioned multiple sexual partners (eighty percent) was much lower than the proportion of females. Females appeared to be more conscious than males of the particular danger posed by multiple partner relationship.

Table 8 shows Percentage of study Population who reported different ways in which AIDS can be transmitted, by selected background characteristics.

Table 8. Knowledge of AIDS Transmission

Background Characteristics	Reported ways of getting AIDS								
	Sex with Multiple partners	Sharing appliances with PLWA	Kissing	Mosquito Bites	Shaking hands with PLWA	Using contam. Skin piercing instruments	Sex with prostitutes	not using condom during sex	Total number
Sex									
Male	80.0	8.6	8.4	20.3	3.8	95.6	65.9	60.6	546
Female	95.6	18.6	12.3	43.4	6.2	94.2	63.4	51.5	617
Sample Area									
Core	90.1	10.3	13.0	27.9	2.9	94.7	67.0	57.1	585
None core	86.1	17.6	8.0	40.5	7.3	95.0	62.1	54.5	578
Place of work									
At home	88.1	13.3	10.0	34.2	5.4	95.7	68.2	58.7	588
Outside home	88.5	14.6	11.0	34.1	4.7	93.9	60.9	52.9	575
Age Group									
15-19	86.4	11.8	8.6	28.5	1.8	92.3	60.6	56.6	221
20-29	87.6	10.9	8.1	30.7	4.3	95.9	66.4	61.2	541
30-39	90.4	16.1	13.2	39.5	6.1	94.5	66.6	47.9	311
40-49	90.0	30.0	20.0	50.0	14.4	95.6	56.7	48.9	90
Educational Level									
Illiterate	91.1	24.0	14.6	47.4	13.0	83.9	50.5	30.7	192
Read and Write	93.1	25.0	23.3	52.6	7.8	96.6	69.8	61.2	116
Elementary	88.1	11.2	10.3	34.9	3.8	94.6	64.1	51.0	312
Junior	87.3	11.5	8.6	30.4	2.1	98.8	69.9	63.7	339
Secondary+	84.8	6.4	2.9	16.2	2.9	94.4	66.7	64.7	204
Current marital status									
In union	87.4	17.2	10.7	39.2	6.3	94.4	64.9	50.6	413
Formerly in union	94.3	20.9	15.2	47.5	11.4	91.8	59.5	43.2	158
Never married	87.3	9.8	9.1	27.0	2.5	95.9	65.7	62.0	592
Total	88.3	13.9	10.5	34.1	5.1	94.8	64.7	55.8	1163

From the table, one can make a good comment on the responses given by the study population by comparing a response rate between the risk factors using contaminated skin piercing instruments, sex with prostitutes and non-use of condom during sex. For the first risk factor, both males and females responded strongly while for the following two risk factors, the report rate was very much lower. Such a response is very difficult to be explained. However, one may say that, probably, respondents justify prostitution as a means of living and dislike condom use during sex.

Misconception of the knowledge of AIDS transmission was also widely observed among the study population. Sharing appliances with PLWA, kissing, mosquito bites and shaking hands with PLWA were reported by both sexes at different degrees. Females were a victim of high

misconception as compared to males.

It may be true to say that some of the misconceptions arose from their own logical deduction, like that of mosquito bites which is thought to involve blood transfusion from sick to the healthy. Whereas some of them attribute it to a strong societal stigma attached to the disease, such as sharing appliances with PLWA and shaking hands with PLWA.

The knowledge of AIDS transmission among respondents in core and non-core business areas was almost similar. Sex with multiple partners and using contaminated skin piercing instruments were affirmatively responded while sex with prostitutes and non-use of condom during sex were not satisfactorily responded as they responded in case of risk factors. This finding is also open for discussion than definite explanation. However, misconception about AIDS transmission, except in kissing, respondents in non-core business area were more bound by misconception

The study revealed almost similar knowledge among respondents, operating at home and outsides home in respect of both ways of AIDS transmission and misconception. As knowledge of AIDS transmission was evaluated among respondents in different age groups, it was found that close to each other in major ways of AIDS transmission but still with a lower rate of response as to the risk factors such as sex with prostitutes and non-use of condom during sex. Misconception increased as age increased. For example, half of the respondents in age groups 40-49 responded mosquito bites as a way of AIDS transmission as compared to only twenty-nine percent reported by age group 15-19.

For all major ways of AIDS transmission, the impact of education was not significantly different. However, misconception was negatively related with the level of education level.

The difference among respondents, according to their marital status in respect to the knowledge of major AIDS transmission was not that much wide, but misconception was found to be higher for respondents who were Formerly in union followed by In union. Never married were found at a better position as far as misconception about AIDS transmission was concerned.

On the other hand, respondents were asked about their knowledge of ways to avoid getting AIDs. Table 9. Shows the overall result by selected background characteristics who reported specific ways to avoid getting HIV/AIDS.

Table 9 shows Percentage of study population who have heard of AIDS and who know of specific ways to avoid AIDS, by selected background characteristics.

Table 9. Knowledge of ways to avoid AIDS

Background Characteristics	No way to avoid AIDS	Total Number	Sex with faithful partner	seek protection from traditional healers	Use condom during sex	avoid sex with prostitutes	Total #
Sex							
Male	5.1	546	74.3	9.6	57.1	42.9	499
Female	6.6	617	84.1	14.2	45.6	33.8	535
Sample area							
Core	6.5	585	79.0	8.1	62.1	42.8	528
None -core	5.4	578	79.8	16.0	39.7	33.4	506
Place of work							
At home	4.8	588	81.8	11.5	53.8	41.4	532
Outside home	7.1	575	76.9	12.5	48.4	34.9	502
Age group							
15-19	8.6	221	73.1	8.3	57.0	38.3	193
20-29	4.1	541	76.8	10.4	54.7	38.3	499
30-39	5.8	311	87.5	14.4	46.1	39.1	271
40-49	11.1	90	84.5	23.9	29.6	33.8	71
Educational Level							
Illiterate	10.9	192	79.7	20.3	31.1	34.5	148
Read and Write	10.3	116	76.1	26.1	34.8	29.3	92
Elementary	5.4	312	79.4	11.9	50.0	40.6	286
Junior	4.1	339	78.8	8.2	59.2	35.4	316
Secondary+	2.5	204	81.8	5.2	63.0	46.4	192
Current Marital status							
In union	7.0	413	87.6	15.2	40.2	38.3	363
Formerly in union	5.7	158	84.5	17.1	47.3	38.0	129
Never married	5.2	592	72.7	8.7	59.4	38.2	542
Total	5.9	1163	79.4	12.0	51.2	38.2	1034

Respondents who had ever heard of the diseases, AIDS, were further asked the question, "Is there any thing a person can do to avoid getting AIDS or the virus that causes AIDS?" accordingly, 5 percent of males and 7 percent of females responded that there is no way to avoid getting AIDS. If this response had been coupled with those who responded as, 'Do not know', the rate would have been increased to 9 percent and 13 percent for males and females respectively. This is quite a high response rate that seeks an attention.

In terms of valid ways to prevent AIDS, having sex with faithful partner only was cited by 74 percent of males and 84 percent of females.

From this premise, it is interesting to note that the recognition by both males and females, to

avoid sex with prostitutes as a means for AIDS prevention was by far lower than the response rate that sex with prostitutes as a mechanism of AIDS transmission.

Use of condom during sex as a means to avoid AIDS was still reported by lower number of males and females.

An important clue for interventionists, to draw sound strategy, is that the response rate in favor of seeking protection from traditional healers as a way to avoid AIDS. In this regard, 10 percent of males and 14 percent of females responded affirmatively. Seven percent of respondents in core business area reported as no way to avoid AIDS and 5 percent in non-core business area.

Even if respondents in core-business area responded a high rate of non-avoidance of getting AIDS, stood at a better position in recognizing condom use during sex as a mechanism to avoid than respondents in non-core business area.

Seeking protection from traditional healers as a way to avoid AIDS was responded to by both respondents but the rate by respondents in non-core business area was twice that of those in the core-business area.

Seven percent of respondents who were operating out-side home and five percent of respondents operating at home responded positively stating "No way to avoid AIDS". On the other valid ways to avoid AIDS, respondents who were operating outside home exhibited their lower level of cognition.

Nine percent of respondents in age group 15-19 and eleven percent in age groups 40-49 responded as no way to avoid AIDS. Respondent in other age groups responded in between these extreme rates. The attitude "no way to avoid AIDS" needs a close attention.

Sex with faithful partner as a way to avoid AIDS was reported on the increasing rate except a slight decline for higher age groups. Condom use during sex as a mechanism to avoid AIDS was negatively associated with an increase in age. On the other hand, the percentage of response, seeking protection from traditional healers, as a means to avoid AIDS increased as age progressed. Avoiding sex with prostitutes as a way to avoid getting AIDS did not show a significant variation among respondents in different age groups.

Educational level and the response "No way to avoid AIDS" followed the expected pattern (r-negative, $P<0.005$). It was observed that those who believe there is no way to avoid AIDS, declined as educational level increased. The same was true for the response 'seeking protection from traditional healers' as a means to avoid AIDS. Use of condom during sex, as mechanism to avoid AIDS, showed a relative increase with a progress in educational level.

Avoiding sex with prostitutes still remained with out any significant variation among respondents at different educational level.

Seven percent of respondents In union, six percent of those Formerly In Union, and five per cent of Never Married responded in favor of "no way to avoid AIDS". The reverse was true for the response, sex with faithful partner, as a way to avoid AIDS.

No difference was observed as to avoiding sex with prostitutes as a mechanism to avoid

AIDS among respondents from different marital status.

Knowledge about AIDS can be asked in various ways in order to understand the study population. Therefore, respondents were asked about their awareness of AIDS –related health issues.

Table 10 gives the Percentage of study population who were aware of certain AIDS-related health issues, by selected background characteristics.

Table 10. Awareness of AIDS-related health issues

Background characteristics	Can a healthy looking person have the AIDS virus?	Is AIDS almost always fatal	Can AIDS be cured?	Can AIDS be transmitted from mother to child?	Do you personally know someone with AIDS or who has died of AIDS	Total number
	Yes	Yes	No	Yes	Yes	
Sex						
Male	76.9	87.5	83.3	82.8	16.8/22.2	546
Female	58.0	90.3	86.5	90.8	12.3/17.8	617
Sample area						
Core	64.3	89.6	81.7	90.3	13.3/22.9	585
Non-core	69.6	88.4	88.4	83.7	15.6/16.8	578
Place of work						
At home	73.3	90.5	87.4	88.6	14.5/21.4	588
Outside home	60.3	87.5	82.6	85.4	14.4/18.3	575
Age group						
15-19	68.8	90.5	88.7	86.0	15.4/18.1	221
20-29	74.1	89.1	85.0	89.1	13.3/20.5	541
30-39	59.2	86.5	82.3	86.5	14.8/136	311
40-49	45.6	93.3	85.6	78.9	17.8/21.1	90
Educational Level						
Illiterate	41.1	90.6	82.3	74.0	12.5/15.1	192
Read and Write	59.5	88.8	82.8	76.7	11.2/16.4	116
Elementary	63.8	89.4	87.8	85.3	12.5/17.0	312
Junior	76.7	88.5	84.4	93.2	18.6/21.5	339
Secondary+	83.8	87.7	85.8	97.5	14.2/27.9	204
Current marital status						
In union	61.5	88.1	83.8	83.5	17.7/20.6	413
Formerly in union	53.8	90.5	83.5	84.2	10.1/15.8	158
Never married	74.2	89.2	86.3	90.2	13.3/20.4	592
Total	66.9	89.0	85.0	87.0	14.4/19.9	1163

The first question was "Is it possible for a healthy looking person to have the AIDS virus?" Seventy-seven per cent of males and fifty-eight per cent of females responded affirmatively. This question was critical because of the nature of the virus itself, which takes a long incubation period, and the person himself could not know that the virus had infected him. Respondents in the core-business area were less aware of this fact compared with those in

non-core business area. Respondents operating their business outside home were less aware than respondents operating at home. This is significant at P<0.002. Those respondents in age groups 15-19 and 20-29 were relatively at a better position than respondents in 30 – 39 and 40 – 49 age groups. The difference in the degree of awareness about the question among respondents was clearly observed when compared against their educational level. There was an increasing trend of awareness as we move up to the higher ladder of respondents in their educational level. Significant at P<0.001. In terms of marital status, those respondents who were Formerly In Union were less aware, followed by respondents In Union. The Never married respondents were relatively at a better position of awareness. In general, the response rate of 67 percent for the study population as compared with the knowledge of AIDS, 99 percent, was very much lower. This might be due to the unexhaustive nature of the sources of information about AIDS or the relative low attitude of the population itself about the disease.

Eighty-nine per cent of all respondents were aware of the fatality of AIDS and 85 per cent of all respondents confirmed that AIDS could not be cured. This response as compared to the above stated 99 per cent of knowledge, it will be difficult to accept the result of 99 per cent as a true knowledge.

There was a uniformity in response rate for all respondents based on their background characteristics except for usual trend of increase in awareness level with the educational level regarding the question "Can AIDS be transmitted from mother to child?"

The main intention of the question "Do you personally know someone with AIDS or who has died of AIDS?" was to measure the degree of openness in the society about AIDS and thereby determine whether the society discusses AIDS as a disease. The personal knowledge of

someone with AIDS or who has died of AIDS has nothing 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.

The average response rate for the study population was 14 percent and 20 percent for knowledge of someone with AIDS and who has died of AIDS respectively. The result, even if has no reference group, it is the opinion that the figure was very much low. Probably this might be due to the fact that patients do not want to disclose the disease to any one, as they fear the societal stigma. Agyman (1993) reported such circumstance where among 18 patients in Ghana, 16 didn't inform their parents for fear of condemnation and ostracization, and none told their children and neighbors.

It is the right time to mention the result obtained for the question "should a person with AIDS live isolated?" This question was positively responded by about one-third of the respondents. This could be a symptom for the existence of social stigma about the disease or on some one with the disease.

3.2.4 SELF-PERCEPTIONS OF THE CHANCE OF GETTING AIDS

Behavioral modification or change as an ultimate goal of the Information, Education and Communication (IEC) program in curbing the spread of AIDS, can be achieved, first by an individual, through acquiring the knowledge and then creating a desired attitude which finally leads to behavioral modification or change. Thus, self-perception of an individual of the chance of getting AIDS may indicate how the individual is approaching the intended attitudinal development.

Accordingly, all respondents who had heard of AIDS were asked if they thought their chance of getting AIDS was "Moderate", "good" or they had "no chance" at all. Male and female respondents as to their current marital status were asked why they felt their chance was moderate, good or nil. As Table 11 shows, 80 percent of males and 89 percent of females reported themselves as having no chance of being infected. Twenty per cent of males and eleven per cent of females reported themselves as having moderate or good chance of being infected. Seventeen percent of respondents in the core business area reported to have moderate or good chance of being infected by AIDS as compared with that of fourteen percent in non-core business area. The difference between those respondents operating at home and out-side home was not so much to be critical. A greater proportion of respondents in the age groups 15-19 and 20-29 perceived themselves as having high chance to be infected as compared to the age groups 30-39 and 40-49.

Table 11 depicts the Percent distribution of study population who know about AIDS by their perception of the chance of getting AIDS, by selected background characteristics

Table 11. Perception of the chance of getting AIDS

	Perceived chance of getting AIDS			
Background Characteristics	No chance at all	Moderate chance	Good chance	Total number
Sex				
Male	79.5	16.4	4.1	536
Female	88.8	10.2	1.0	617
Sample area				
Core	83.4	13.3	3.2	585
Non-core	85.6	12.9	1.6	568
Place of work				
At home	83.8	13.3	2.9	580
Outside home	85.2	12.9	1.9	573
Age group				
15-19	83.6	14.1	2.3	220
20-29	80.5	15.8	3.7	538
30-39	88.3	10.7	1.0	308
40-49	97.7	2.3	0.0	87
Educational Level				
Illiterate	94.2	5.2	0.5	191
Read and Write	86.6	11.6	1.8	112
Elementary	87.5	10.3	2.3	311
Junior	78.9	18.2	3.0	336
Secondary+	78.9	17.2	3.9	203
Current marital status				
In union	93.1	6.9	0.0	407
Formerly in union	86.1	12.0	1.9	158
Never married	78.1	17.7	4.3	588

Educational level and the chance of getting AIDS, at a normal condition, should go in the opposite pattern rather than positively. The result from Table 11 might be a manifestation of the Schools/Teachers mentioned earlier as a source of information. If that is the case, the reported result would be accepted as to inflict a reasonable doubt on the relevance the educational system or on the efficacy of intervention program targeted at Schools.

Respondents In Union reported to have lower chance to be infected than respondents Formerly In Union and Never Married. Twenty-two percent of Never Married respondents reported having a moderate or good chance of being infected by AIDS. This could be obviously the result of age factor.

Table 12 summarizes the reasons given by male and female respondents for their stated "no" chance of getting AIDS. Among those who claimed they had "no" chance of getting AIDS, 80 percent of males and 66 percent of females attributed their 'no' chance due to having sex only with regular partner. Abstaining from sex was reported by both males and females, 37 percent and 21 percent respectively. Using condom attributed 15 percent for males and only 2 percent for females. Two probable facts that may contribute to a lower use of condom by female respondents are; first, in our country female's condom is not widely known and secondly, the negotiating power of females is very low as far as condom use is concerned. That is to say, females may not have power to influence their sexual partners to use condom.

Table 12 gives the Percentage of males and females that think they have no chance of getting AIDS, by reasons for that perception and marital status.

Table 12. Reasons for Perception of No chance of Getting AIDS

Current Marital Status	Abstain from sex	no sex with prostitutes	Sex only with regular partner	no injection	no blood transfusion	use condom	others	total of men/women
MALES								
In union	NA	80.1	94.3	91.5	90.8	2.8	0.7	141
Formerly in union	24.0	84.0	68.0	96.0	96.0	16.0	0.0	25
Never married	50.0	84.2	76.2	95.4	95.4	25.0	2.6	260
Total	37.0	83.0	79.5	94.3	94.0	14.6	1.1	426
FEMALES								
In union	NA	NA	94.2	90.3	92.9	0.4	0.4	238
Formerly in union	18.9	NA	86.5	99.1	81.1	0.9	0.9	111
Never married	23.6	NA	16.6	93.5	92.0	4.0	0.0	199
Total	21.3	-	65.7	94.3	88.7	1.8	0.4	548

NA= Not Applicable

Furthermore, Table 13 Summarizes the reasons given by males and females for their stated "moderate or good" chance. In the study population, one my say that, multiple sexual partner was practiced by both males and females widely. The result in the table depicts that 15 percent of males and 13 percent of females reported multiple sexual practices. On the other hand, both sexes reported that the chance of getting AIDS is attributable to a major factor – infidelity on the part of their spouse or partner. Non-use of condom was also reported by both sexes but with different rates, 23 percent and 9 percent for males and females respectively.

Table 13 gives the Percentage of Male and Females who think they have moderate or good chance of getting AIDS. Reasons for that perception and marital status.

Table 13. Reasons for perception of moderate or good chance of getting AIDS

Current Marital Status	Multiple sexual partner	Had sex with pro-stitute	Spouse/ partner has other Sexual Partner	Do not use condom	Had Inje-ction	Others blood trans-fusion	Total number
MALES							
In union	23.1	38.5	15.5	15.4	30.7	7.7	0.0	13
Formerly in union	0.0	60.0	40.0	40.0	0.0	0.0	0.0	5
Never married	21.7	19.4	16.3	14.1	34.8	12.0	12.0	92
Total	14.9	39.3	23.9	23.2	21.8	6.6	4.0	110
FEMALES							
In union	0.0	NA	40.0	0.0	46.7	26.7	6.7	15
Formerly in union	11.8	NA	23.5	11.8	47.1	11.8	11.8	17
Never married	27.0	NA	13.5	16.2	40.5	13.5	8.1	37
Total	12.9	-	25.7	9.3	44.8	17.3	8.9	69

NA= Not applicable

The main reason given for the non-use of condom was that its reduction of sexual gratification. As obtained from interviewers note, there are different sayings in the community regarding the dislike of condom use. Males say "using condom is the same as having a shower witn rain coat", and females say, "using condom is synonymous to eating a banana with out peeling".

On the other hand, for the good chance of getting AIDS, close to 40 percent of males reported having sex with prostitutes. This could be the reason that sex with prostitute was less reported as a way to avoid getting AIDS.

3.2.5 WILLINGNESS TO HAVE HIV TEST

Even if, this question; willingness of respondents for having HIV test, was unrealistic, the prime motive behind it was to measure the attitude of the respondents towards the disease. And once the respondent has responded positively, the second objective was to know his/her reaction, if the result happens to be positive.

Table 14 provides the Percent distribution of men and women who are willing to have HIV test and the action that they may take if it happens to be positive; by selected background characteristics

Table 14. Willingness to have HIV Test and reaction if it happens to be positive

			Possible reactions					
Background Characteristics	Are you willing to have HIV Test	Total number	Tell to Family	Tell to Friends	Commit suicide	Do not know what to do	Others	Total numbers
Sex								
Male	85.9	546	57.1	35.6	4.7	19.6	17.1	469
Female	66.3	617	42.5	22.2	6.8	30.8	17.1	409
Sample Area								
Core	74.7	585	52.2	25.6	7.8	17.6	19.7	437
Non-core	76.3	578	48.5	32.4	3.6	32.0	14.5	441
Place of work								
At home	77.7	588	53.6	33.0	4.8	26.3	16.8	457
Outside home	73.2	575	46.8	24.7	6.7	23.3	17.3	421
Age group								
15-19	77.8	221	48.3	27.9	7.0	27.3	15.1	172
20-29	81.9	541	51.2	30.5	6.1	21.7	18.1	443
30-39	69.1	311	49.3	27.9	4.2	27.0	16.3	215
40-49	53.3	90	57.2	25.0	4.2	35.0	18.8	48
Educational Level								
Illiterate	55.2	192	46.2	27.4	2.8	34.0	17.0	106
Read and Write	62.1	116	55.6	23.6	6.9	23.6	20.8	72
Elementary	79.2	312	47.0	27.5	9.7	27.1	13.8	247
Junior	81.7	339	52.0	29.6	4.0	22.0	16.2	277
Secondary+	86.3	204	52.8	33.5	4.0	21.0	21.6	176
Current marital status								
In union	66.8	413	55.8	29.0	4.3	24.6	15.2	276
Formerly in union	72.2	158	39.5	24.6	5.3	36.8	14.9	114
Never married	82.4	592	49.8	30.1	6.6	22.1	18.6	488
Total	74.0	1163	50.0	29.2	5.6	24.8	16.9	878

Table 14 summarizes the result against selected background characteristics. Males and females responded apparently for the question " If the facility is available, are you willing to have the HIV test?" The question was responded positively by 86 percent of males and only 66 percent of females. For those respondents who were willing, a second question, "If the test happens to be positive, what do you do?" The reaction of respondents was obtained through different alternatives. More males responded than females to tell the result to the family, 58 and 43 percent respectively. Significant at $P<0.001$. Still females were very much secretive to disclose the fact to their friends as compared to males. One should note that it does not mean that the overall response by the study population was encouraging, rather than making a simple comparison and analysis. The alarming reaction proposed by respondents themselves was "committing suicide". If one assumes a step forward, and calculate the end product of the response "Do not know what to do" as being to lead to the worst reaction, the picture will be much alarming. Five percent of males and seven percent of females responded to 'commit suicide' if the result happens to be positive. For 'Do not know what to do' response, still females were at a riskier position. The attitude to accept the disease and to live positively with it might probably be frustrated by the high societal stigma attached to the disease and the patients of AIDS.

Unlike the results in previous tables, in this table the reaction responded under "others" calls the attention of interventionist on this issue. Among few responses under "others" include: to take revenge, to change the place of residence, not to tell any one till death, and very few responded to save the society by exposing themselves.

If "committing suicide" is taken as an index, female respondents, respondents who were

working in the core business area, who were working outside home, and in the age group 15-19 were at risk and need to be protected.

3.3 MULTI-VARIATE RESULT

1. The first dependent variable tested was related with the Knowledge of the respondent concerned with fatality of AIDS. As it was seen in descriptive analysis, the Knowledge of respondents was found to be very high. However, in the part that asks whether AIDS can be cured or not, the response rate was found to be less than what has been said in response to their knowledge. The assertion of the researcher was that as far as respondents have such a high Knowledge, they could also be aware of the deadly nature of the disease. Thus, the question, can AIDS be cured, was taken as dependent variable and selected independent variables were used in the model.

Table 15. Logistic Regression: Knowledge with sex, place of work, sample area, educational level and age, Workers in the Informal Sector in Addis Ababa, 1999.

Variable	B	S.E.	Sig.	Exp(B)
Sex -	-.8242*	.2404	.0006	.4386
Place of Work	.5060	.2325	.0295	1.6587
Sample Area	-.6709	.2381	.0048	.5113
Educational Level			.5733	
Read and Write	.1661	.4033	.6804	1.1807
Elementary	-.1723	.4464	.6995	.8417
Junior	-.4138	.3482	.2347	.6611
Secondary+	-.2018	.3197	.5278	.8172
Age Group			.1360	
30-39	.9991	.5229	.0560	2.7157
20-29	.7236	.3934	.0659	2.0618
15-19	.7673	.3533	.0299	2.1539
Constant	-1.0791	.6353	.0894	
Number of Cases	1163			
-2 Log Likelihood	643.32			

Of the total 1,177 cases, 1,163 cases were included in the analysis. The Chi-square found to be significant at 99 per cent with P-value =0.0006.

Ninety-two percent of the dependent variable was explained by the independent variables.

There is a negative relationship between 'true' knowledge level and sex of the respondent. The result was interpreted, as (the reference category was female, coded 0) in the study population, male's knowledge about the non- curability of AIDS was about 56 % lower than the females. This could be true that females have better access to health institutions as users of Family Planning services or prenatal care and can obtain a reliable information, particularly

from health workers.

The second independent variable was, place of work. This variable labeled as a dummy variable, where 0 was coded for those working outside home and 1 for respondents working at home. The result revealed a positive relationship where respondents working at home have about 1.7 times better knowledge than those working outside home.

The third independent variable, sample area, dummy coded 0 for non- core business area and 1 for core business area. Those operating in the core business area are less aware of the fact that AIDS is a killer. Probably this finding corresponds with the infection of STD in this area, as indicated in the descriptive part of this analysis that is, high prevalence of STD. There is no significant age difference has been observed between respondents in the core business area and in the non-core business area ($P>0.05$).

2. The second dependent variable was also related with the knowledge of the respondents. In this case, the question, is it possible for a healthy looking person to acquire HIV/AIDS, was used as filter question. About Seventy percent of the dependent variable was explained by four independent variables. Chi-square was significant at 99 per cent with P-value < 0.0001.

Table 16. Logistic Regression: Knowledge with Sex, Place of Work, Sample Area and Educational Level. Workers in the Informal Sector in Addis Ababa, 1999.

Variable	B	S.E.	Sig.	Exp(B)
Sex	-.6147	.1383	.0000	.5408
Place of Work	-.4357	.1385	.0017	.6468
Sample Area	.3589	.1404	.0106	1.4317
Educational Level			.0000	
Read and Write	-1.8178	.2491	.0000	.1624
Elementary	-1.1685	.2751	.0000	.3108
Junior	-.8725	.2292	.0001	.4179
Secondary+	-.2820	.3901	.2287	.7542
Constant	1.7588	.3901	.0000	
Number of Cases	1153			
-2 Log Likelihood	1329.23			

The result can be interpreted as, sex has a negative relationship with the dependent variable, which is opinion of the respondent whether a healthy looking person have HIV/AIDS. Maies were than females. Educational level also has a negative relationship. Those educated were more aware than the illiterate. However, as educational level increases, the difference in the knowledge level is not affected so much. As to the sample area, those in the core business area could have about 1.4 times higher knowledge than in the non-core business area. This finding contradicts with what has been obtained in the bi-variat result. This could probably be due to the control variables introduced in the model.

3. The third dependent variable was the logical sequence in bringing a desired behavioral

change, which can be done, through the change in attitude after acquiring a necessary knowledge and accurate information. Therefore, to know the attitude of the respondent, the proxy question, "how would you perceive your chance of getting HIV/AIDS?" was asked. This was entered as dummy variable where 0 was assigned for those who respond 'no chance' and 1 for 'moderate or ' good chance'. Here, sex, education and marital status were found to be major explanatory independent variables. These variables explained about 85 percent of the dependent variable.

Chi-square found to be significant at 99 percent with P-value < .0001. Variables used in the equation are shown in Table 17.

Table 17. Logistic Regression: Attitude with Sex, Place of Work, Sample Area, Educational Level and Current Marital Status. Workers in the Informal Sector in Addis Ababa, 1999.

Variables	B	S.E.	Sig.	Exp(B)
Sex	-.4890	.1787	.0062	.6133
Place of Work	-.0165	.1741	.9247	.9837
Sample Area	.0808	.1752	.6444	1.0842
Educational Level			.0162	
Read and Write	-.9652	.3839	.0119	.3809
Elementary	-.1115	.3523	.7515	.8945
Junior	-.3415	.2564	.1828	.7107
Secondary+	.1687	.2250	.4534	1.1837
Marital Status			.0000	
Formerly In Union	-1.0745	.2364	.0000	.3415
Never Married	-.0436	.2861	.8789	.9573
Constant	-12565	.4825	.0092	
Number of Cases	815			
-2 Log Likelihood	926.68			

Sex of respondents was found to be negatively associated with perception. It is significant ($P<0.01$) but B value was weak. However, the result showed that, the perception of males with regard to the chance of males getting HIV/AIDS was about 39 per cent higher than that of females. This may be probably influenced by the fact that males tended to have more sexual partners.

Education has also negative relationship with the chance of getting HIV. This fact was registered for those who were in the lower years of level as compared with those who could not read and write. Among the higher years of level, the difference was very low.

Marital status also had a negative relationship too. At this point also those who were Formerly In Union were found to have a perception of being more at risk than those who were In Union. For the Never Married group, it was difficult to explain because the B value is low and it is also not statistically significant.

4. The question forwarded to respondents was that "Currently do you have non-regular sexual partner?" This question as a complement to the above dependent variable could give us a picture for those groups at risk. Three independent variables were able to explain 88% of the dependent variable with P-value < .0001.

Table 18. Logistic Regression: Sexual Behavior with Sex, Place of Work, Sample Area, Educational Level and Age. Workers in the Informal Sector in Addis Ababa, 1999.

Variables	B	S.E.	Sig.	Exp(B)
Sex	.5581	.2465	.0236	1.7473
Place of Work	.1504	.2359	.5237	1.1623
Sample Area	-.3942	.2366	.0957	.6742
Educational Level			.0358	
Read and Write	2.1596	.7722	.0052	8.6678
Elementary	.7973	.5014	.1118	2.2196
Junior	.2345	.3249	.4704	1.2643
Secondary+	.0092	.3031	.9758	1.0092
Age Group			.0012	
30-39	1.8278	.8061	.0234	6.2201
20-29	1.4113	.4013	.0004	4.1014
15-19	.4852	.3282	.1394	1.6244
Constant	2.0870	.6534	.0014	
Number of Cases	196			
-2 Log Likelihood	522.91			

Except for the first independent variable, Sex, which has a meaningful result, for the second and third independent variables further work is needed. Sex proved to be positively related with Non regular sexual partnership; the result showed that males had, Non-regular sexual partner, 1.7 times higher than females. This result corresponds with the perception about the chance of contracting HIV.

CHAPTER IV CONCLUSION AND RECOMMENDATIONS

4.1 CONCLUSION

Today, HIV/AIDS, one of the killer diseases, has posed a serious challenge to our planet. The mode of transmission (through the critical biological need), its long incubation period and the absence of either vaccination or treatment have complicated the nature of this deadly disease.

The social and economic impact it poses on the individual patient, the family and the community at large are the real challenge to human race. The fast spread of the disease calls for a collective action of all responsible human beings.

HIV/AIDS in developing countries, particularly in sub-Saharan Africa, coupled with their already fragile economies and claiming the live of a number of productive human resource, render the problem more complex.

The absence of cure forced countries to fight HIV/AIDS vigorously to bring a desired behavioral modification or change on individual's sexual activity. One of these strategies is to complement the Information, Education and Communication (IEC) program with extensive research. Of such researches, assessment on Knowledge, Attitude and Behavior among a given group is one.

In Ethiopia, Government organs, International organizations, Non governmental (both International and National) organizations and Individuals have been making unreserved effort to fight AIDS since the advent of the disease. However, the disease is galloping in the major

cities; and if it goes deep into the country-side 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 highly and timely demanded.

This study deals with the Knowledge, Attitude and Behavior about HIV/AIDS/STDs among workers in the Informal sector in Addis Ababa. A total of 1,177 individuals (548 Males and 629 Females) were asked through the structured questionnaire. After the quality of the data was checked, the analysis was undertaken against selected background characteristics: sex, age, educational level, marital status, place of work and sample area.

The main aim of the study was to measure the awareness of HIV/AIDS/ STDs in the study population. Almost all respondents reported HIV/AIDS as one of STDs. However, other STDs were reported by less number of respondents. Females were found to be less aware than males. Those who were working outside the home were also less aware about STDs. Respondents in the age groups 20-39 were found to be more aware than the others. Education has the expected positive effect on the level of knowledge ($P< 0.005$); awareness increased as educational level increased. The Never married were more aware than currently In union and Formerly In Union.

STD prevalence, as self-reported by respondents, is a proxy indicator to the sexual behavior of the study population. Gonorrhea is a wide spread STD. Males were more infected than females. In this regard, one should not overlook the sensitivity of the disease leading to under-reporting Workers operating in the core business area were infected more than workers operating in the non-core business area. STD is concentrated in the age groups 15-29. A slight

decline for the age group 30-39. Respondents in the age group 40-49 reported no STD infection. This proves the hypothesis that, as age increases, safe sexual behavior is practiced. Eventhough the prevalence of STD is high among the Never Married respondents, those currently In Union are also not free from the disease. This finding signifies that sex out-side marriage is practiced in the study population. No respondent reported HIV infection.

A significant number of respondents, who contracted STD, have sought treatment. However, relatively more females obtained drug after proper diagnoses than males. The place traditional healers have in the study population is an important one and calls the attention of strategy designers. Infidelity is manifested more on males, as one-third of females reported that they did not take any measure not to infect partner on the ground that they believed their partner was already infected.

The disease (HIV/AIDS) is well known by the study population with a certain degree of misconception. This would be due to the accuracy of the information base. Only about one-half of the respondents had access to the health workers, among which females were at a better position. It requires a hard work to utilize Churches/Mosques, Schools, Community meetings and work places as modes to disseminate information. In the knowledge of modes of AIDS transmission, a good number of respondents know at least two ways. However, misconception was also observed. This could be also related with the source of information. In the ways to avoid AIDS, about 6 per cent of respondents still believe that there is no way to avoid it and 12 per cent of respondents showed a positive advice and protection from traditional healers. This response would be a good input for strategy designers, to work together with traditional healers.

As to AIDS-related health issues, only about 67 percent of respondents answered that a healthy looking person can have AIDS. This could be a serious point for interventionists to target their IEC programs on females, illiterate or less educated and working outside home. Proportionally more males perceived themselves as at risk to acquire the disease. The young also perceived themselves in the same way. The main reasons given were having multiple sexual partner, sex with prostitutes, and non use of condom during sex. The main focus of investment should be on the attitudinal change that favorably brings a desired behavioral modification or change.

Finally, to assess the degree of liberalization in the study population, willingness to have HIV test was asked. The result was found to be negatively associated with females. Females were less willing as compared to males. Furthermore, those who responded affirmatively were asked about their reactions if the result happened to be positive. They said they would resort to committing suicide or taking revenge or changing their addresses. As such reactions are unhealthy, the issue needs a serious attention.

4.2 RECOMMENDATIONS

General and specific recommendations are presented as follows.

GENERAL

1. The seroprevalence of AIDS is increasing at an alarming rate and before it gets further out of hand, an aggressive intervention strategy must be designed. The first step should be the commitment of policy makers.

It will be worth mentioning the experience of the Ugandan President, Museveni. By recognizing the threat the disease presented, he set up Uganda AIDS Commission (UAC), a body to coordinate technical and operational activities under the President's office. Besides, in Uganda the willingness of political leaders to discuss the HIV/AIDS epidemic has led to behavioral change and favorable attitudes leading to the decline in seroprevalence.

Therefore, fighting HIV/AIDS should not be left to only one organization. An integrated and coordinated effort must be the slogan of every one. It is, therefore, important to coordinate the efforts of Schools, Churches/Mosques, Health institutions, the Community, and both Governmental and Non-governmental organizations. So there is an urgent need to formulate a National Task Force (composed of relevant organs) that can coordinate the intervention program.

2. Strengthening, encouraging and supporting the already established HIV/AIDS victims' Associations. This will help to reduce the societal stigma and the entire population to modify sexual behavior. Above all, the members of this association should be given the chance to involve in the counseling activities.

3. Traditional healers can play a useful role in assisting the community to cope with AIDS. They may help people to cope physically, psychologically, socially and spiritually with the disease, and they can be valuable also in promoting AIDS awareness in the community. Therefore, those organizations that have been involved in sensitization program should closely work with the traditional healers. Particularly, health institutions should educate them about modern concepts of hygiene (safe use of skin piercing instruments), anatomy, physiology and prevention of sexually transmitted disease.

SPECIFIC

1. Both young males and females should be targeted for put in target of intervention in preventing the spread of HIV/AIDS. As much as possible, peer group education should be intensively promoted.
2. Since a considerable number of workers in the Non Formal Sector work outside home, an appropriate sensitization strategy should be designed. Such open-air shows as drama, songs, etc. must be staged or presented at their work places where they are relatively concentrated.
3. A necessary support should be extended to strengthen AIDS clubs at Schools and additional effort should be extended to establish adhoc committees in visible community organizations such as Idir, Mahber, Senbete, Kebele, etc. to enable the society to appreciate the problem and accordingly to liberalize the stigma.

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APPENDIX 1

Business area classification by city administration of Addis Ababa.

CORE AREA		SEMI-CORE AREA	
Wreda	Kbeles	Woreda	Kebeles
5	05,06,07,12,15,17,18,19, 21,22,23	1	01,03,06,04,05,07,08
2	09,10,11,12,13,14,15,16,17	3	43
14	07,12,13,18,21,22,23,24,25	4	27,28,29,35,36,37,38,39,40,49, 50
1	07,08,04,05	6	01,02,03,04,08,09,10,11,13,14, 26
3	30,31,32,33,34,42,45,53,54	7	16,17,18,19,26,27,28,29,30,31, 32
13	02	8	20,21,22,23
15	27,30,31,32,28	13	01,03,08,09,10,11,15,16
18	06,07,15	15	19, 20,28,29,35,36
21	01,12,10,04	18	16,17,18,27,33,34,35,36
		19	49,50
		20	08,09,28,29,38,39,40,44,45
		21	09,23,24,30,31,32
		22	01,02,03,04,05,06,07
		23	12

*All other places out of this list are classified in the expansion area.

APPINDIX 2

QUESTIONNAIRE
RAPID ASSESSMENT TOOL FOR WORKERS
IN THE INFORMAL SECTOR IN ADDIS ABABA

ADAPTED FROM DIFFERENT SURVEYS AND THE RESEARCHER'S OWN QUESTIONS

INTRODUCTION

GOOD MORNING/ GOODAFTERNOON

We are conducting a survey to learn what people understand about sexually transmitted diseases (STDs) and about knowledge and sexual behavior. The questions are very personal and related with sexual practices. The result of this survey will help us to see the effectiveness of the intervention on changing sexual behavior in this group.

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

THANKYOU

Interview Identification:

Date of Interview

_____ _____ _____

Day Month Year

Interviewer Name: _____

Interviewer Result 1. Complete

2. Incomplete

Checked by Supervisor.

Name_____

Signature_____

Date _____

SECTION I. SOCIO-DEMOGRAPHIC INFORMATION

1. Area code_____
1. Merkato
2. Tekle Haimanot
3. Saris
4. Gulele

2. To which Industrial Group do you belong?
   1. Manufacturing
   2. Trade

Write down the specific job he/she is doing.

_____.

3. Sex
   1. Male
   2. Female

4. How old are you?
   Age in completed years_____
5. Were you born in Addis Ababa?
   1. Yes (if yes, skip to Q. # 9)
   2. No
6. Where were you born?
   1. Urban
   2. Rural
7. How long have you lived in Addis Ababa?
   Duration lived in completed years _____.
   (if the length of duration is less than a year, write the # of months _____.
8. Before you came here, where did you live?
   1. Urban
   2.Rural
9. Have you visited any other place in the past 12 months?
   1. Yes
   2. No
10. Can you read and write?
    1. Yes
    2. No (if no, skip to Q # 12)
11. If yes, what is the highest grade you completed? _____.

12. What is your current marital status?
    1. In union
    2. Divorced
    3. Separated
    4. Widowed
    5. Single

13. What is your Nationality /Ethnic group?
    1. Amhara
    2. Oromo
    3. Tigray
    4. Gurage
    5. Other, specify _____.
14. Working at home or outside home?
    1. Home
    2. Outside Home

15. What is your Religion?
    1. Orthodox
    2. Catholic
    3. Protestant
    4. Muslim
    5. Other, specify _____.
16. . How many days in a week do you work?
    # of days _____.
17. How many hours do you work in a day?
    # of hours _____.

SECTION II. KNOWLEDGE ON STDs.

18. Have you ever heard of a disease that can be transmitted through sex?
    1. Yes
    2. No (skip to Q.#20)
19. Which disease do you know?
    Record all responses

	YES	NO
Syphilis	1	2
Gonorrhea	1	2
HIV/AIDS	1	2
Chancroid	1	2
Genital Warts	1	2
Others (specify) _____	1	2

20. Have you ever had sexual intercourse?
    1. Yes
    2. No (if no, skip to Q # 29)

21. I would like to ask you some questions about your health in the last 12 months. Some men/women experience pain during urination or discharge from the penis/vagina, during the last 12 months, have you noticed any such pain when urinating or discharge from your penis/vagina?
    1. Yes
    2. No
    3. Do not know

22. During the last 12 months did you have any of these diseases? (Referring to Q. #19)
    1. Yes
    2. No
    8. Do not know (if 2 or 8, skip to Q # 29)

23. Which of the disease(s) do you think that you had? (Record all responses)

	YES	NO
Syphilis	1	2
Gonorrhea	1	2
HIV/AIDS	1	2
Chancroid	1	2
Genital Warts	1	2
Others (specify) _____	1	2

24. The last time you had (indicating the name) did you seek treatment?
    1. Yes
    2. No (skip to Q.#26)

25. Which of the following did you do for the last episodes?
    Record all responses

	YES	NO
Sought advice from friend or relatives	1	2
Used medicine that I have at home	1	2
Sought advice from traditional healer	1	2
Obtained drug from a clinic, hospital or Health Worker after proper diagnose	1	2
Bought medicine from a clinic, hospital or A health worker	1	2
Bought medicine from a pharmacy	1	2
Did nothing	1	2
Others (specify)_____	1	2

26. When you had the last episodes, did you inform your partner?
    1. Yes
    2. No

27. When you had the last episodes, did you do something not to infect your partner(s)?
    1. Yes
    2. No
    8. Partner already infected

28. If yes, what did you do? (probing is required)

_____

SECTION III. KNOWLEDGE AND ATTITUDES ON HIV/AIDS.

Referring to Question # 19, ask question # 29 for those who did not mention 'AIDS' and Q. # 30 for those who mentioned 'AIDS'.

29. Have you ever heard of an illness called AIDS?
    1. Yes
    2. No (skip to Q. # 46)

30. From which source(s) of information have you learned most about AIDS?
    Record all sources mentioned.

	Yes	No
Radio	1	2
TV	1	2
Newspapers/Magazines	1	2
Posters/Pamphlets	1	2
Health workers	1	2
Church/Mosques	1	2
School/Teachers	1	2
Community meeting	1	2
Friends/Relatives	1	2
Work place	1	2
Other (specify)	1	2

31. How can a person get HIV/AIDS?

Read all the answers	YES	NO
Sexual intercourse	1	2
Sexual intercourse with multiple partners	1	2
Sex with prostitutes	1	2
Not using condoms 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 instrument which Have not been sterilesed	1	2
Kissing	1	2
Mosquito bites	1	2
By drinking from a cup used by an Infected person	1	2
Shaking hands SWA	1	2
Wearing the cloth of SWA	1	2
Have sex with SWA	1	2
Talking with SWA	1	2
Sharing tooth brash with SWA	1	2
Other specify	1	2

32. Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?
1. Yes
2. No
8. Do not know (if 2 or 8, skip to Q. # 34)

33. What a person can do to avoid getting HIV/AIDS?
Record all answers mentioned

	YES	NO
Do not have sex until married	1	2
Have sex with only a faithful partner	1	2
Seek protection from traditional healers	1	2
Use condom during sex	1	2
Avoid sharing sharp instruments and avoid Injection except in recognized health institution	1	2
Do not have sex with prostitute	1	2
Insist on tested blood for transfusion	1	2
Abstinence	1	2
None of the above	1	2
Other (specify)_____	1	2

34. Is it possible for a healthy-looking person to have the AIDS virus?
1. Yes
2. No
8. Do not know

35. Do you think that persons with AIDS almost never die from the disease, some times die, or almost always die from the disease?

1. Almost never die
2. Sometimes die
3. Almost always die
4. Do not know

36. Can AIDS be cured?
1. Yes
2. No
8. Do not know

37. Can AIDS be transmitted from infected mother to child?
1. Yes
2. No
8. Do not know

38. Do you personally know someone who has AIDS?
1. Yes
2. No

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

1. Yes
2. No

40. Should a person with AIDS live isolated?
    1. Yes
    2. No

41. What are the chances that you might get HIV/AIDS?
    1. No chance
    2. Moderate chance
    3. Good chance (if 2 or 3, skip to Q. # 43)

42. Why do you think that you have no chance of getting AIDS?

	YES	NO
No sexual intercourse	1	2
No sex with commercial sex workers	1	2
No homosexual contact	1	2
Sex only with spouse or regular partner	1	2
No injection	1	2
No blood transfusion	1	2
Use condom	1	2
Other(specify)	1	2

(skip to Q # 44)

43. Why do you think that you have a moderate or good chance of getting AIDS?

	YES	NO
Multi-partner sexual contact	1	2
Sex with commercial sex workers	1	2
Homosexual contact	1	2
Spouse/partner has multi-sexual partners	1	2
Do not use condom	1	2
Had injections	1	2
Had blood transfusion	1	2
Other(specify)	1	2

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

1. Yes
2. No (if no, skip to Q# 46)

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

	Yes	No
Tell to the family	1	2
Tell to friends	1	2
Do not know what to do	1	2
Commit suicide	1	2
Other specify	1	2

SECTION IV. SEXUAL BEHAVIOUR

46. Have you had sexual intercourse within the last three months?
    1. Yes
    2. No

47. Have you ever used condom?
    1. Yes
    2. No

48. Do you now have regular partner(s)?
    1. Yes
    2. No (skip to Q # 50)

49. How many regular partner(s) do you have?
    # Of regular partner(s)_____

50. Do you now have non-regular partner(s)?
    1. Yes
    2. No (if no, skip to Q# 54)

51. How many non-regular partner(s) do you have now?
    # Of non-regular partner(s)_____

52. How long ago did you last have sexual intercourse with your non-regular partner(s)?
    1. Days_____
    2. Weeks_____
    3. Months_____

53. For the last sexual intercourse with your non-regular partner(s), was a condom used?
    1. Yes (skip to Q # 57)
    2. No (skip to Q # 56)

54. Some people use a condom during sexual intercourse to avoid getting or transmitting disease, such as AIDS or other sexually transmitted diseases. Have you ever heard of this?
    1. Yes
    2. No

55. Have you ever used a condom with your sexual partner during sex to avoid getting or transmitting diseases, such as AIDS?
    1. Yes (skip to Q. # 57)
    2. No

56. What are the main reason(s) for not using a condom?

1. I do not know about it
2. My partner & I trust each other
3. I do not like it
4. Against religion
5. I can not get them

(After this, skip to Q# 59)

57. Has your knowledge of AIDS influenced or changed your decision about having sex or your sexual behavior?

1. Yes
2. No (After this, skip to Q # 59)
8. I Do not know (After this, skip to Q # 59)

58. If yes, in what way?

	Yes	No
Did not start sex_____	1	2
Stopped all sex_____	1	2
Started using condom_____	1	2
Restricted sex to one partner_____	1	2
Reduced number of partners_____	1	2
Avoided sex with prostitutes_____	1	2
Other (specify)_____--	1	2

59. Have you given or received money, gifts or favors or invitation in return for sex at any time in the last 12 months?

1.Yes
2.No

60. At what age did you practice sex for the first time?

Age in completed years_____

61. Remember your first sex experience. Did you make the first sex voluntarily?

1.Yes
2.No
8.Do not know

THANK YOU

DECLARATION

I, the undersigned declare that this thesis is my original work, has not presented for a degree in any other university used for the thesis have been duly acknowledged.

Name : Zenabu Abera

Signature: 

Place and date of submission: A.A.U.

June, 1999