RISK PERCEPTION OF HIV/AIDS AMONG ADULT POPULATION: THE CASE OF NAZARETH TRACTOR ASSEMBLING FACTORY WORKERS

TSEGAYE ABEBE BEYENE

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Risk Perception of HIV/AIDS among Adult Population: The Case of Nazareth Tractor Assembling Factory Workers

Tsegaye Abebe Beyene

Approved by board of Examiners

Abdulaziz Hussien _____

Chairman, Department Graduate Committee

Wonbe Kassaye _____ Signature _____

Advisor

Getachew Adugna _____ Signature _____

Internal Examiner

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Acronyms and Abbreviations

ABC	Abstinences, Be Faithful, Condom Use
AIDS	Acquired Immune Deficiency Syndrome
BCC	Behavioral Change Communication
CSW	Commercial Sex Workers
EDHS	Ethiopian Demographic and Health Survey
EFA	Education for All
EPHA	Ethiopian Public Health Association
FGD	Focus Group Discussion
FHAPCO	Federal HIV/AIDS Prevention and Control Office
FHI	Family Health International
HIV	Human Immunodeficiency Syndrome
IEC	Information Education and Communication
ILO	International Labor Organization
MOH	Ministry of Health
NACS	National AIDS Council Secretariat
NGOs	Non-governmental Organizations
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
UNAIDS	Joint United Nations Program on HIV/AIDS
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

Abstract

The purpose of this study was to investigate how adult workers perceive their risk of HIV infection in relation to their sexual behavior in a setting of high HIV prevalence. To this end, a descriptive survey method was employed. The study employed both primary and secondary data sources. The primary sources of data were adult workers employed in Nazareth Tractor Assembling Factory. Three principal data collecting tools were employed, namely, questionnaire ,semi- structured interview and focus group discussion to access first hand data. The secondary source of data were generated from pertinent government policy and strategic documents and also from literatures developed both nationally and internationally by prominent figures and institutions. A total of 170 adult workers in Nazareth Tractor Assembling Factory, were used as respondents. Purposive sampling technique was used to select the interviewees and random sampling technique was used to select FGD respondents.. Data analysis was conducted using both descriptive and inferential statistics. In addition, bi-variate analysis with Chi-square test was employed to see the relationship of the independent variables with the dependent variable. As a result the following major findings were obtained: 59.8% of the respondents knew that HIV is a virus, 21.3% have undergone VCT to know their status, 17.3% have ever used condom, more than 70% have involved in multiple sexual practices, and about 53.3% leveled themselves as higher risk perceivers due to various factors associated to their sexual behaviors. In addition, the bi-variate analysis has shown the existence of strong relationship between some of the independent variables (sex, VCT, alcohol consumption and multiple sexual partners) and dependent variable (risk perception of HIV/AIDS among adult populations). Based on major findings, conclusions were drawn and recommendations were forwarded some of these include;: Sound and viable information, education and communication (IEC) and/or behavioral change communication (BCC) interventions should be initiated and further strengthened by Nazareth Tractor Assembling Factory Management; VCT for HIV should be encouraged by productive sectors and supported by workplace specific functional HIV policy and the intervention in the world of work should necessarily consider adult education to impart an integrated and holistic knowledge; Concerted efforts of all the factory community are critically important to mitigate the spread and devastating impact of HIV/AIDS.

CHAPTER ONE

The Problem and Its Approach

1.1 Background of the Study

HIV is a relatively newly discovered infection that has not even scored three decades of existence. However, soon after the time it was first reported in 1981, the infection has rapidly developed into an epidemic and has caused great suffering and has become a profound development challenge.

Since the advent of the epidemic, the sub-Saharan Africa continues to be the region worst affected by the HIV/AIDS pandemic, associated with multitude of socio-economic, demographic and cultural problems. The working age population of the area is the most threatened by the epidemic. The available studies indicate that, some times people who are at risk of HIV/AIDS infection may not perceive their risk and are therefore less motivated to protect themselves and others from HIV/AIDS infection.

On the other hand, education particularly, adult education is given less attention in spite of its far reaching importance and its significance, to mitigate the challenge of HIV/AIDS in the adult community.

(UNAIDS, 2007) reports that so far, AIDS has killed more than 25 million people globally and 33.2 million people are living with HIV/AIDS. In the world today, everyday over 6800 persons become infected with HIV/AIDS and over 5700 persons are dying from AIDS. In 2007 alone 2.1 million people died of AIDS and 2.5 million were newly infected by HIV

Similarly, the information released by International Labor Organization (ILO) in 2004, of the estimated people living with HIV, at least 26 million are workers aged 15-24, who are in the prime age of their lives (ILO, 2004). This harmfully affects enterprises, national economies, as well as workers and their families in many ways.

According to the MOH (2006), HIV prevalence in Ethiopia is estimated to be 3.5 % (10.5% among urban and 1.9% among rural population). The estimated HIV incidence was 0.26% in 2005, while the projected incidence rate shows a rising trend up to 2010 where it will be 0.28% (MOH, HAPCO, 2006). The same source also indicated that a total of 1,319,795 persons (nearly 1.4 million) were estimated to be living with HIV/AIDS in 2005 and the estimated number of new HIV infection was 128,922 in 2005. Furthermore, the projected number of new HIV infections is expected to rise up to 2010 whereby it will be 144,737 persons.

Thus, at this high prevalence rate of HIV/AIDS and high potential risk of spreading, it is critically important to study the sexual behavior of adults and the causal relationship of risk perception, especially the adult workers who are at a great risk of getting and spreading the epidemic and forward appropriate recommendations that could help in planning functional preventive intervention of the epidemic in the world of work.

In addition, workplaces are among major strategic locations where HIV/AIDS prevention and control interventions can effectively be implemented. Workplace intervention is desired in order to promote a work environment where the impact and severity of the HIV/AIDS pandemic is acknowledged as serious problem. To this effect, addressing adult workers risk perception of HIV/AIDS would be indispensable. Identifying the gap far-reaching impact of HIV/AIDS on employees and their family members, could be minimized by adopting appropriate and specific workplace interventions, policies, programs and strategies.

Ensuring accessibility of workplace services which include Information, Education and Communication (IEC) programs are recommended as an essential means to fight against the spread of the epidemic and at the same time, to foster greater coping mechanisms for workers living with HIV/AIDS.

1.2 Statement of the problem

In 2006, nearly two-thirds (63 percent) of persons infected with HIV were living in sub-Saharan Africa (UNAIDS 2006: 75). According to MOH (2005: 19), in high HIV/AIDS prevalence Sub-Saharan Africa, the major mode of transmission of HIV is heterosexual sex. Ethiopia, as part of the region, cannot escape this phenomenon and it is one of the Sub-Saharan African countries where HIV/AIDS is affecting its population of all ages.

In Ethiopia, about 1,319,795 (1.4% of) adults aged 15-49 were living with HIV during the time from 2005 to 2007. Many, especially the youth, are very much exposed to conflicting ideas about sexual values, norms and behaviors due to various factors when they enter into sexual activities. This idea is further proved by International Organizations like UNICEF & UNAIDS when they argue that these values and behaviors have a profound negative influence on their current and future health most directly through exposure to unsafe sexual practices (UNICEF, 1995; UNAIDS 2004). And thus, unprotected sexual relation is taking place at an alarming rate giving rise to increased risk of different reproductive health problems, most critically HIV infection.

As stated by Adih and Alexander (1999:45), studies have found that perception of risk is strongly related to an increased self-protecting behavior. In this regard Ndola. et al, (2006:56), confirmed that the adoption of protective behavior is unlikely to occur unless the person is aware of the risk of HIV infection. Even though individual's knowledge of HIV transmission and accurate assessment of their own risk are among the key factors in adoption of safer sexual practice, these relationships are poorly investigated and understood in Ethiopia.

As HIV infection in Ethiopia is mainly transmitted through heterosexual contact, information on sexual behavior is very much important in designing, implementing, and monitoring programs to control the spread of the epidemic (EDHS, 2005:193).

Accordingly, this particular study tries to show the gap that exists among adult workers through addressing the following two basic questions:

1. What is the level of risk perception of adult workers towards HIV infection?

- Experiences tell that many people publicly appear and reflect strict moral and social norms, while at the same time, privately behave quite differently;
- It is a common knowledge that sex is said to be the area of human experience most lied about, and as a result, some respondents may not be honest.

In spite of the limitations, the researcher has made maximum effort regarding respondents to elicit reliable information through;

1. Maintaining consistently the issues of confidentiality;
2. Making clear the purpose of (as it is purely academic) the study;
3. Creating close and friendly relationship with the respondents.

1.7 Conceptual Framework

As gravely indicated by health behavior models the perceived level of risk of HIV/AIDS is associated to a great extent with the level of risky sexual behavior. Understanding these relationships could assist interventions aimed at encouraging protective behavior. Hence, to examine the risk perception of HIV/AIDS among adult workers in relation to their sexual behavior, the researcher developed conceptual framework of his own.

Conceptual framework, according to Mujer Sana Comunidad Sana (2003; 5), can be any or all of the following:

- *A set of coherent ideas or concepts organized in a manner that makes them easy to communicate to others;*
- *An overview of ideas and practices that shape the way work is done in a project;*
- *A set of assumptions, values, and definitions under which we all work together.*

Hence, on the bases of the above comprehensive meaning of conceptual framework, the researcher uses it as a travel map to reach to the destination of the set objectives.

2. Do socio-economic and demographic factors have associations with risk perception of HIV infection among adult workers?

1.3 Significance of the Study

Adama (Nazareth) is claimed by many, as one of the urban centers which is highly affected by HIV/AIDS in Ethiopia. The city is one of the largest and representative urban centers of trade, located on the main route to the South-Eastern direction of the country. It has relatively large and socio-economically diversified population.

As the city's location is on the main route to the country's import and export trade line, having a high in and out movement of people from all directions, contributes to have potential effect on the spread of HIV/AIDS. The entire environment of the city coupled with its strategic site for high population movement has, greater pulling effects towards uncontrolled and unsafe sexual behavior which aggravates risk perception of HIV/AIDS. To this end, effective information through adult education could create awareness and bring about the desired behavioral change among adult workers and thereby protect themselves as well as from further spread and harmful impacts of HIV/AIDS in the community. More specifically this particular study is significant to:

- Inform and influence policy and decision makers and all concerned bodies to provide remedial actions to the devastating impacts of HIV/AIDS in the workplaces;
- Appraise the relevance of HIV/AIDS program interventions in productive environment;
- Contribute to indicating the gap regarding the understanding of the adult workers risk perception of HIV/AIDS infection;
- Since there is scarcity of research output in the area, this investigation may initiate other researchers and serve as reference tool for further detailed and wider scope of studies on the area.

Thus the following pattern of relationship between variables is developed by the researcher.

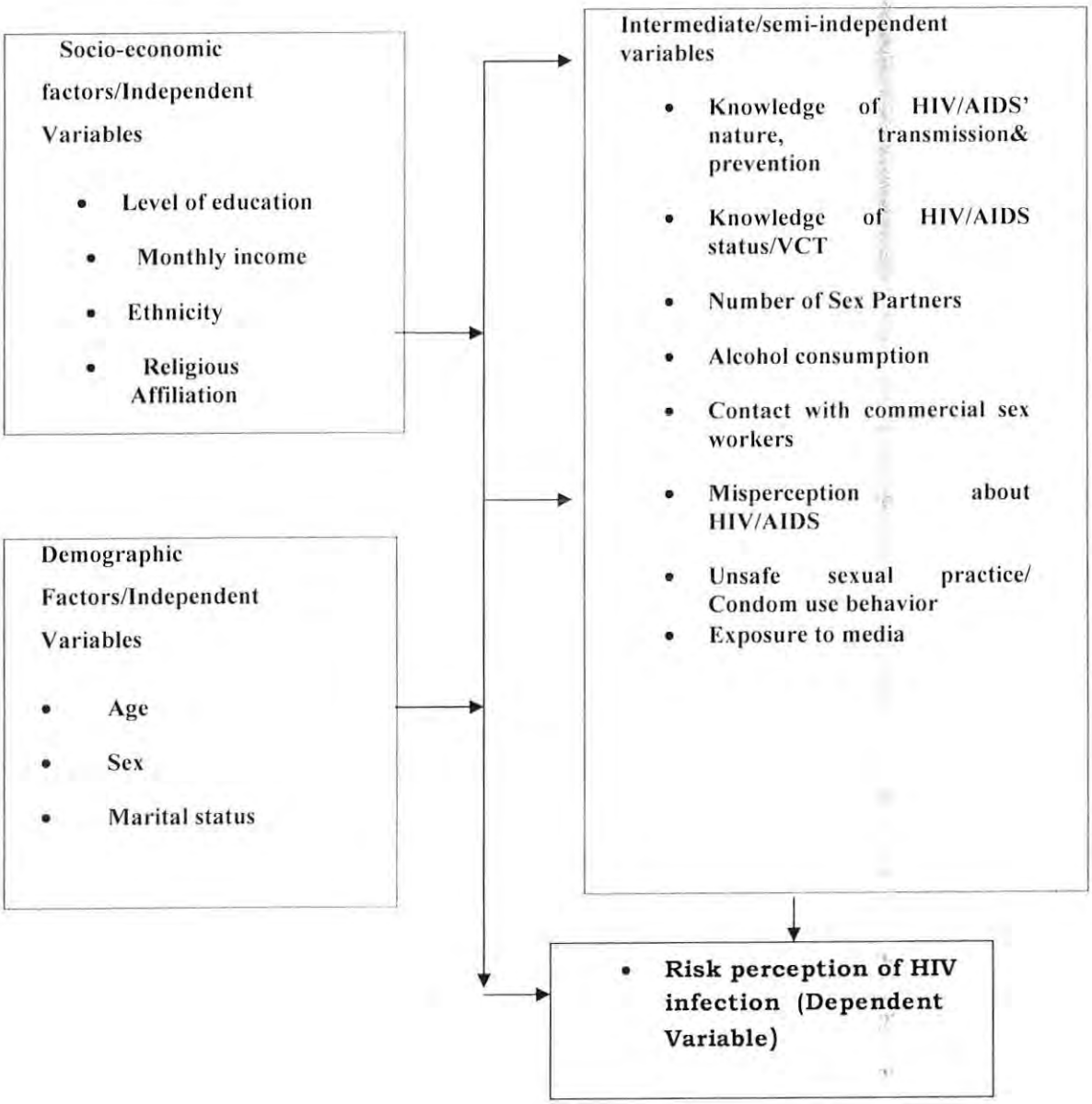

Fig. 1 Conceptual frame work

Source: Developed by the researcher

1.8. Definitions of Terms

Terms may have various definitions depending on the context they are used. Thus, in order to make the readers clear with meanings of some of the terms and phrases used in this study and avoid ambiguities form the entire text, definitions of some important terms are given contextually as used in this particular work as follows:

Risk perception: One's own judgment about the chance of being infected by HIV/AIDS based on his/her own sexual behavior.

Sexual behavior: Any activity between two persons (heterosexual) or in a group that includes sexual arousal. In addition, in this context, sexual behavior is the investigation of issues related to sexual intercourse and the number of sexual partner with in specific time period as well as the use of prevention methods of HIV/AIDS (Encyclopedia of Britannica, 1982).

Sexually Transmitted Infections (STIs): STIs are caused by viruses' bacteria, or parasitic micro organisms that are transmitted through sexual activity with an infected partner. About 30 different STIs have been identified, some of which are easily treatable, many of which are not. HIV, the virus that causes AIDS, is perhaps the most serious STIs as it eventually leads to death (Encarta, 2006).

Comprehensive Knowledge: Comprehensive Knowledge of HIV/AIDS prevention and transmission is defined as: knowing that both condom use and limiting sex partners to one uninfected person are HIV/AIDS prevention methods; being aware that a healthy-looking person can have HIV; Rejecting the two most common local misconceptions-that HIV/AIDS can be transmitted through mosquito bites and by sharing food (EDHS 2005: 203).

Life skill: Life skills are set of psycho-social competencies and interpersonal skills that help people make informed decisions, solve problems think critically and creatively, communicate effectively, build healthy relation ships, empathize with others and manage their lives in a healthy and productive way (WHO,2006).,.

Adult: An adult could be defined on factors that the individual exhibits such as entry to adultery, psychological and mental maturity, self concept and social roles. Besides, the

term adulthood in this paper is taken in relation to individual's physiological, legal, psychological and social factors (Knowles, 1982).

CHAPTER TWO

Literature Review

2.1. The Concept of HIV/AIDS

The concept of HIV/AIDS has been argumentative. There is no commonly agreed upon definition of HIV/AIDS. HIV/AIDS has been given various interrelated but slightly different definitions by different scholars. To mention all the definitions provided by different scholars, though important, at this particular point would be worthless. For the sake of convenience and for its comprehensive conceptual meaning, the researcher prefers the definition appeared in the Viet Nam Ordinance on the Prevention and Fight against HIV/AIDS Infection (Jane, 2004:9).It reads:

> *1. HIV is the virus causing the Acquired Immune Deficiency Syndrome in human beings. HIV may be contracted through sexual intercourse, through blood transfusion, or passed on by the mother- to - child during pregnancy, childbirth or breast feeding.*
>
> *2. AIDS is the terminal stage of the process of HIV infection which damages the immunity system and deprives the body of capability of resisting disease – causing factors that finally lead to death (Jane, 2004:9).*

Scientists in the field failed to indicate the exact time and place, when and where HIV/AIDS originated on the globe. However, in 1981 the first case of HIV/AIDS epidemic was reported in United States of America, after a number of (gay) men had developed a rare lung infection called Pneumocystis carina (Evian, 2000:3)

Two years later, scientists confirmed that HIV is the cause for AIDS. AIDS is the advanced form of infection with the HIV Virus, which may not cause recognizable disease for a long period after the initial exposure. No vaccine is currently available to prevent HIV infection. At present, all forms of AIDS therapy are focused on improving the quality and length of life for AIDS patients by slowing or halting the replication of

the virus and treating or preventing infections and cancers that take advantage of a person's weakened immune system.

Based on the increment of the prevalence of HIV/AIDS within a short period of time throughout the world, it then, gave a clue that it might have existed far before the stated period of time. Routh (2005:6) further claims:

> *Although HIV/AIDS first appeared in the United States in the early 1980s; the disease has been around for much longer. When scientists retested some stored blood samples collected decades earlier, they found on HIV infection in some blood collected in Africa during the 1950s (Routh 2005*: 6).

Since its identification until the present time, scientists have been continuing their research to discover the source of this deadly infection. However, how HIV/AIDS is originated is still a puzzle for all. Although no one is able to assure about its original cause, rather various scientists and societies have tried to employ their own different outlandish theories. Some of them argued that the virus came from the African monkey. While others suggested that "HIV is a biological weapon designed specifically to attack non-white" (Jira, 2005:12).

There is also a widely propagated theory claimed by religious people who have been arguing that the disease is a plague ordered by God against human beings who do not obey His rules (Porku, 2005; Routh, 2005; Balkin, 2004).In Ethiopia, there is a common unfounded conception among many traditional people who claim that HIV/AIDS is an evil sprit.

Some of these theories and assumptions seem soundly convincing. However, some of these claims need further investigation and should scientifically be proved. This is because, on the one hand, some of these claims have racial biases, and on the other hand, they are based on common assumptions which are not scientifically proved. Besides, the nature of the HIV virus and the ways of its transmissions are complicated (ever changing and inconsistent).

2.2 Global Picture of HIV/AIDS

After HIV/AIDS was detected in the United States of America in 1983, the World Health Organization (WHO) has got information about its spread in twenty-eight countries of the world. Thereafter, in 1986 the number of countries that were affected by the epidemic became three fold. Also, in 1987 an estimated 10 million people were living with HIV/AIDS globally (Routh, 2005: 13)

According to the UNAIDS (2006: 198) report on global AIDS epidemic, for the last 23-25 years, about 65 million people of the world contracted HIV/AIDS and the people who lost their lives are estimated to be 25 million. From this information, we can understand that how this pandemic disease has become affecting individuals, families, societies as a whole economically, socially, demographically and culturally. By and large, this shows us the severity of the epidemic.

The epidemic is increasing rapidly, and affecting regions of the world unequally. At the end of 2006, over 62.5 percent of those infected were estimated to live in Sub-Saharan Africa and that region's share of the number of HIV infectors' world-wide is still growing in Africa. The most affected population is found in Eastern and Southern Africa. In a broad band running South wards from Ethiopia, Kenya, Uganda to Namibia and South Africa (UNAIDS, 2004:204)

Still HIV/AIDS is continuing to be spread through out the world more seriously and with much more complicated effects. The following table gives a clear picture of the distribution of HIV/AIDS globally.

Table 1: Global HIV/AIDS Distribution by Region, 2007.

Region	PLWHA*	New Infections	AIDS Death	Adult Prevalence**
Sub-Saharan Africa	22.5	1.7	1.6	5
South & South East Asia	4.0	0.34	0.27	0.3
East Asia	0.8	0.092	0.032	0.1
Latin America	1.6	0.1	0.058	0.5
North America	1.3	0.046	0.021	0.6
West & Central Europe	0.76	0.031	0.012	0.3
East Europe & Central Asia	1.6	0.15	0.055	0.9
Middle East & Africa	0.38	0.035	0.025	0.3
Caribbean	0.23	0.017	0.011	1.0
Oceania	0.075	0.014	0.0012	0.4
Total	33.2	2.5	2.1	0.8

PLWHA*=people living with HIV/AIDS.

Adult Prevalence** adults of reproductive age (15-49)

Source: UNAIDS/WHO (2007)

According to the information provided on Table 1, we can observe that in the world, 33.2 million people were living with HIV/AIDS in 2007. Additionally, in the same year 2.5 and 2.1 million people were newly infected by HIV and had died due to AIDS related infections.

At regional level, Sub-Saharan Africa is the worst affected region in Africa as well as in the world. Scholars have given various reasons for the disproportionately wide spread of HIV/AIDS in this region at alarming rate. The reasons can be connected with economic, social, cultural and political phenomena.

As reflected in Table 1, the region as a whole bears the burden of about 62.5% PLWHA, 65.1% new HIV cases and 72.4% AIDS deaths of the global total.

Contrary to the high prevalence of HIV/AIDS in sub-Saharan African countries and in the presence of high risk factors for acquisition of HIV (multiple sex partners, sex with commercial sex workers, and failing to have a protective sex, to mention few among many others). Despite these problems, people in general and workers in particular, often perceive themselves as being they are at low risk of HIV infection (Macintyre, 2004:112).

Various explanations could be given to this problem. One explanation for this could be that people may underestimate risks in general because of feeling of invulnerability. Persons in this situation are therefore less motivated to protect themselves and others from being infected by HIV. The other explanation could be that the recognition and provision of adult education in the process of HIV/AIDS prevention and control system is poor and given little or no attention.

2.3 HIV/AIDS Situation in Ethiopia

Ethiopia belongs to the Sub-Saharan African countries and is located in the Horn of Africa. Since ancient times, Ethiopians were suffering from different kinds of epidemics that had been devastating the health, social and economic conditions of people at large. For instance, the 1768 small-pox, the 1835 cholera and the 1889-1892 great epidemic disease can be mentioned among the recorded ones in the medieval and modern historical times (Punkhrust,1996:19).

The first evidence of HIV infection in Ethiopia was discovered in Serological samples collected in 1984 and followed by the first reported case of AIDS in 1986 (FDRE, 1998).

In 1988, high HIV prevalence was documented among the highly risk groups of people such as truck drivers (13%) and commercial sex workers (17%) who were working and/or living along the main trading roads of the country. The main routes that were identified for the high prevalence of HIV were from Addis Ababa via Adama and Dire Dawa to Djibouti (Abay, 2007:24).

These days, Ethiopians are under serious HIV/AIDS epidemic which is devastating the entire lives of the country's population. HIV/AIDS epidemic is consuming the lives of many Ethiopians and creating complicated socio- economic situations in the country.

Table 2 Adults (15-49 years) HIV/ AIDS Situations in Ethiopia

Variables	Adult Prevalence(%)	HIV positive population	New HIV infection	New AIDS cases	Annual AIDS Deaths
Female	3.8	653,233	56,681	63,812	52,342
Male	2.9	515,490	46,862	51,299	41,883
Total/AV.	3.3	1,168,723	103,543	115,111	94,225

Source: MOH and FHAPCO: AIDS in Ethiopia, Technical Document for the Sixth Report 2006:16.

Table 2 shows that HIV cases are still very high in Ethiopia. Adults (15 and above years) female and male HIV/AIDS infection is so significant; the female covered 3.8% while the male covered 2.9% and the national average is 3.3%. This clearly shows the existence of a big gap of the prevalence of HIV infection between female and male populations. This is further confirmed by information obtained from ILO. ILO reports that a number of gender-related risk factors increase women's exposure to HIV and sexually transmitted infections, and impair their ability to protect themselves from infection (ILO, 2000:8)

The ILO information further indicates these factors specifying as:

- *Behavioral factors, such as the inability to negotiate use of condoms, refuse sexual intercourse or demand divorce, because of adverse economic, social or legal consequences;*
- *Gender- related cultural factors, such as different expectations regarding sexual roles, fidelity and marriage or harmful traditional practices: and*

- *Socio-economic factors, such as inadequate access to health care and unequal educational and economic opportunities, which may promote dependency on a male partner, or even lead to commercial sex (ILO, 2000:8).*

Thus, the female portion of adult society is much more affected by the virus probably due to various factors such as biological, social, economic and cultural.

In 2006, about 94,225 people above 15 years old lost their lives due to AIDS infections (MOH and FHAPCO 2006: 26). Ethiopia, thus, lost significant number of reproductive and productive citizens. This has great impact on the socio-economic development of the country.

In addition, in 2006 alone, 103,543 new HIV infections were reported. In 2006, the adult HIV incidence was 0.26 and estimated to be 0.28 in 2010 (MOH and FHAPCO 2006:26). This condition possibly initiates various problems such as the prevalence of orphans family disintegration, and lack of livelihood and exacerbates anti- social activities such as robbery, prostitution and/or streetism as a living option. This in turn paves the way for further spread of HIV infection.

Hence, HIV/AIDS in Ethiopia is a serious social, health and development problem. Currently it is claiming the lives of a large number of productive and /or skilled human resources. It is also claiming a large sum of wealth to treat the victims and combat the challenges.

On the other hand, based on EDHS 2005 report, knowledge of AIDS is wide spread although it is not yet universal. More specifically, 90 percent of women aged 15-49 years and 97 percent of men aged 15-49 years have heard of AIDS (EDHS, 2005:203).

However, it is true that efforts have been exerted by different stakeholders to raise the awareness level of the population with regard to the ways of transmission of the HIV infection. However, generating deep understanding and knowledge about ways to prevent HIV/AIDS transmission is still an important area that requires effective behavioral change communication. In the context of HIV/AIDS prevention and control, limiting the number of sexual partners and having protected sex are crucial to combating the epidemic. In this regard, HIV/AIDS prevention programs focus their messages and

efforts on three globally accepted important aspects of behavior: delaying sexual debut in young adolescents (abstinence), limiting the number of sexual partners (staying faithful to one partner), of condom use (the ABC message) (Routh. et al.2003:321).

Furthermore, the workers who are the most important and critically determining part of the society, the cornerstone of the economy, are forgotten and were given less attention on their sexual behavior and risk perception of HIV/AIDS.

This situation is further witnessed by ILO (2000: 23) when it calls on the 17th World Congress of the International Confederation of Free Trade Unions (ICFTU) in April 2000, which the world has failed to act effectively to respond to the devastating effects of HIV/AIDS on workers, their families and the community at large. Continuing the call, ILO emphasized that the work place, in both the formal and informal sectors, is one of the most important and effective channels for addressing the disastrous effects of the HIV/AIDS pandemic.

Hence, ILO stressed that the long-term nature of the HIV/AIDS epidemic calls for strong commitment by governments, trade unions, employers and leaders of civil society for the development of a determined education and prevention campaign (ILO, 2000: 32).

According to the EDHS 2005 results, comprehensive knowledge about this deadly disease is still low, only 16 percent of women and 30 percent of men in Ethiopia have comprehensive knowledge of HIV/AIDS prevention and transmission (EDHS, 2005: 202).

It is empirical that low level of comprehensive knowledge coupled with harmful cultural practices further aggravates the epidemic particularly in Ethiopia. In order to protect themselves, men and women need to be well informed about the means available. Hence, adult education is one of the most important means empowering the adult populations with knowledge and skill of HIV/AIDS transmission and prevention.

2.4 HIV/AIDS Policy in Ethiopia

Ethiopia is among the least developed countries in the world in terms of socio-economic development. The main reason for this situation is believed to be the existence of

backward socio-economic system that has prevailed for centuries. In addition, man-made and natural calamities have also fueled and played a significant role in determining the socio-economic progress. Accordingly, the major problems apparent in the health and social conditions are found to be the direct reflections of these states of affairs. And thus, as the trends expressed in EDHS 2000 and 2005, the health service coverage is low and communicable diseases are very rampant causing a heavy toll of deaths.

In addition, these health problems have been made further worse with the emergence of AIDS caused by HIV which has been spreading fast in the last two decades. Currently HIV has already infected many Ethiopians and the prevalence rate has been estimated to be high. This put the country among the group with high levels of infection in Africa (MOH, 2006: 123).

According to the government's recognition on the policy preamble, the prime mode of HIV transmission in Ethiopia is sexual contact among others. It was noted that AIDS will have a large social, psychological, demographic and economic impact on both the individuals and the societies. The government further recognized that the painful stress, disability and death that AIDS causes to the individual patients, the familial, social and economic problems that follow are many and varied.

On top of these, the government recognized that AIDS ravages the prime- age adult population and their children with death rates much higher than usual. Thus, when it affects large productive population groups, it can diminish the quality and quantity of the labor force leading to social and economic crisis in the community.

In response to this pressing need, the Ethiopian government has established National HIV/AIDS Control Program in 1987 under the Ministry of Health and set different strategies to be implemented at different levels to meet the challenge of HIV/AIDS as early as possible. Then, several intervention activities have been undertaken by Governmental, Non-governmental Organizations and other partners. However, all these efforts were not guided by a national policy. As a result, the efforts which were being undertaken to mitigate the effects of AIDS in the country are found to be inadequate, uncoordinated and poorly targeted.

Besides, the government realized that HIV/AIDS is not only a health problem, but also a development problem. It also understood the magnitude of the problem as well as the considerable resources needed in combating the HIV/AIDS epidemic. The government became aware of the need for concerted multi-sectoral effort to control the HIV/AIDS epidemic. Experiences also show that people living with HIV/AIDS very often are subject to social discrimination and stigmatization unless protected through government policies, educational efforts and counseling services.

Therefore, to make the concerted multi-sectoral effort fruitful, Ethiopia adopted a comprehensive HIV/AIDS policy in 1998 to emphasize prevention, care, and support, and target vulnerable groups.

The overall goals of the policy are: To reduce HIV transmission; reduce associated morbidity and mortality; and reduce burdens on individuals, families and society at large.

For more concerted multi- sectoral efforts, the National HIV/AIDS Prevention and Control Council was established in April 2000; including government organizations, nongovernmental organizations (NGOs), and religious bodies. For the successful implementation of the policy the National HIV/AIDS Prevention and Control council, updated a national strategic framework for the year 2000-2004 period. Upon the completion of the period, once again the Government of Ethiopia adopted its strategic plan for increasing multi-sectoral HIV/ AIDS response in 2004, a four-year plan of action for reducing the transmission of HIV/AIDS and improving the lives of those already affected by it (MOH.2006 :31).

The council was established to implement the National Policy through 10 general strategies, the most important of which includes:

- *Information, Education, and Communication activities.*
- *STD prevention and control; HIV testing and screening;*
- *Adoption of proper sterilization and disinfection procedures;*
- *HIV surveillance, notification, and reporting; and*
- *Provision of medical care and psychosocial support to those affected by HIV/AIDS* (FDRE, 1998: PP.26-27).

The National HIV/AIDS Prevention and Control Office (NHAPCO) was established by proclamation in June 2002, replaced the National HIV/ AIDS Prevention and Control Council. This is considered as a very important undertaking, which provided enabling environment and ample opportunities for all those already involved and potential actors in the prevention and control of HIV/AIDS to align for a concerted effort.

Prior to the adoption of HIV/AIDS policy, the Government of Ethiopia has launched Population and Health Policies in the year 1993, which both policies consider the challenges of HIV/AIDS as one of their priority issues, and carried out the implementation activities through various strategies specific to their respective sectoral goals.

Subsequently, the government has considered the HIV/AIDS issue as a problem of development and hence, perceived it as cross- cutting issue to be treated in all the development programs. However, political will backed by financial support is crucial to expand HIV/AIDS mitigation intervention services and lead to achieve the goals set in the policy.

2.5 HIV/AIDS and Adult Education

Education in general and adult education in particular is taken as one of the most important instruments that can prevent the spread of HIV/AIDS in the world of work. The focus of adult education is to impart knowledge and skill among the adults and expand and strengthen its provision so as to raise the productivity of the society to improve health conditions with easy access and utilization of information.

According to UNESCO's 2006 publication entitled "*Global EFA monitoring Report,*" 58.5% of the country's population aged 15 years and above is illiterate. The role of adult education is emphasized by the world's community in the declaration of commitment on HIV/AIDS; under the title "Global Crisis- Global Action". The importance of the role of adult education is clearly stated as follows:

> *...recognizing the need to achieve the prevention goals set out in the present declaration in order to stop the spread of the epidemic, and acknowledging that*

all countries must continue to emphasize wide spread and effective prevention, including awareness - raising campaigns through adult education (UNAIDS, 2001:322).

Furthermore, from the human rights perspective (2004), *"Every person is entitled to education,"* is indicated under Universal Declaration on Human Rights - Article 26. According to this declaration, education shall be directed to the full development of the human personality and to the strengthening of the respect for human right and fundamental freedoms.

At the same time, the International Guidelines on HIV/AIDS and Human Rights (2004: 16) specifies three broad components of rights which apply in the context of HIV/AIDS.

- *Firstly, both children and adults have the right to receive HIV related education, particularly regarding prevention and care;*
- *Secondly, states should ensure that both children and adults living with HIV/AIDS are not discriminatorily denied access to education because of their HIV status;*
- *Thirdly, states should, through education, promote understanding, respect, tolerance and non-discrimination in relation to persons living with HIV/AIDS UNAIDS (2004:16).*

On the other hand, prevention through the provision of information, education and communication is a fundamental principle of the ILO Code of Ethics in the World of Work. The code of ethics provides guidance on a variety of strategies for prevention, which should be appropriately targeted to national conditions and culturally sensitive.

The ILO Code of Ethics in the World of Work (2002), states that the prevention can be furthered through changes in behavior, knowledge, treatment and the creation of a non-discriminatory environment. Accordingly, measures proposed to encourage behavior change include especially (ILO, 2002: 17):

- *Provision to workers of sensitive, accurate and up-to-date education about risk reduction strategies, and, where appropriate male and female condoms should be made available;*

- *Early and effective STI and tuberculosis diagnosis, treatment and management, as well as sterile needle and syringe-exchange programs;*

- *For women workers in financial need, strategies to supplement low incomes.*

On the other hand, according to Smith (2001), as cited in Demsew (2007), HIV/AIDS education considers intervention programs at all levels of schooling, including work places, which are designed to assist individuals or communities in achieving specific health - improvements, are goal - oriented and ultimately leads to practical actions. This has become acknowledged in HIV prevention programs that involve three levels of interventions (Demsew, 2007: 55):

- *The primary prevention seeks to change behavior by increasing knowledge about how HIV is transmitted and about prevention techniques, by providing the skills to negotiate safer sex, or by changing beliefs about the social acceptability of risk- prevention behaviors such as condom use;*

- *The secondary prevention focuses on reducing the consequences of HIV that includes HIV counseling and testing programs, HIV sero- positive support programs, programs for the prevention of relapse into unsafe sexual or drug-using behaviors and partner notification;*

- *Tertiary interventions involve medical rehabilitation or efforts to lessen the latter consequences of HIV/AIDS. This embraces the medical treatment of those people living with HIV/AIDS.*

Furthermore, HIV/AIDS education, according to UNAIDS (2004), with a behavioral change focus is conducted by applying varieties of methodologies that suit adults which mainly includes methods in Life Skill, Peer Education, Adult learning and Community Conversation.

1. **Life Skill Method**: If the information we receive is not consistent with our attitudes, beliefs and values, we are unlikely to adopt the new behavior. Thus, knowledge should be provided to a person with life skills that enables people to think critically about health risks and take effective action to protect themselves. According to UNAIDS (2003:112) life skills can be grouped into three inter-related categories:

i) Decision - making and problem - solving that provide the ability to analyze the cause of the problem and search for ways to alleviate it by taking appropriate measures.

ii) Communication and interpersonal relationship skills that refer to our opinions and feelings with others; seek advice and help when facing problems.

iii) Self management skills which help us to deal with negative emotions (like anger, sadness, fear, etc.) and stressful situations

2. **Peer Education Method**: Peer education usually involves training and supporting members of a given group to effect change among the members of the group. It is commonly used to effect change in knowledge, and attitudes at the individual level. It is also believed to create change at the societal level by modifying norms and stimulating collective action (ILO, 2004: 221).

Peer education programs provide people with an opportunity to acquire correct information about sex and sexuality and arm with the skills for self-protection. To implement peer education programs, the following core points should be taken into account:

- *Peers should be selected from the target group based on their demographic and socio-economic backgrounds;*
- *Training should be provided with opportunities to learn and practice on how to teach peers, both knowledge and skills, for self protection;*
- *The program should continuously raise the interest and motivation of peer educators (UNAIDS, 2003:113).*

3. **Adult Learning Method**: Knowles' (1984:4) theory of andragogy which is concerned specifically about adult learning. Knowles emphasizes that adults are self - directed and expect to take responsible decisions. Adult learning programs must accommodate these fundamental facts. To effectively utilize adult learning, adults' behavior should vividly be identified.

According to the same author, adult learning (theory of andragogy) takes the following core principles of adult learners' behavior into consideration (Knowles, 1984:4).

- *Learners' need to know -why, what and how;*
- *Self-concept of learners -autonomous; self - direction;*
- *Prior experience of the learners -resource; mental modes;*
- *Readiness to learn - life related; developmental task;*
- *Orientation to learning - problem - centered; contextual; and*
- *Motivation to learning - intrinsic value; personal pay off.*

These adult learning principles are based on the goals and purposes of individual, societal and institutional growth with prime consideration of individuals and situational differences as well as subject matter differences.

The theory of andragogy applies to any form of adult learning and has been used extensively in the design of organizational training programs (Knowles, et al.1998: 24). It is the most important method to attract adults to actively participate towards the desired behavioral change.

Knowles (1984) advises considering the following guiding principles when applying andragogy to the design of adult learning programs.

- *The provision of task oriented instruction -- the learning activities should be in the context of common tasks to be performed;*
- *Instruction should take into account the wide range of different backgrounds of adult learners; learning materials and activities should allow for different level;*

- *Since adults are self- directed, instruction should allow learners to discover things for themselves, providing guidance and help when mistakes are made (Knowles, 1984:23).*

1. **Community Conversation method**: Community conversation is strategy initiated by UNDP to involve community members in discussing and finding solutions to the problems of HIV/AIDS. This methodology is based on theories about people, what they do, and their social life and enables them to talk about HIV/AIDS epidemic starting from their own experiences. These experiences have been practiced by NGOs in some African countries and better results were secured (World Bank, 2003:205).

In Ethiopia, the community conversation method recently is becoming more popular in addressing HIV/AIDS. The method has helped local communities find ways to talk, build relationships, and reflect on the issue of HIV/AIDS in their respective communities. The process leads to social contracts between men and women, among people living with HIV/AIDS, integrative relationships, the urban/rural relationships, between the rich and the poor (World Bank, 2003:212).Thus, community conversation has been found to be an effective tool with viable results in providing HIV/AIDS education to the public.

In spite of the adult education methods' importance in the process of HIV/AIDS mitigation, in the context of Ethiopian situation most of these methods do not seem well exercised in the workplace HIV/AIDS intervention efforts. Thus the researcher believes that HIV/AIDS intervention in workplace activities need to employ these methods mainly for two reasons; for one thing, they are proved effective through experiences (World Bank, 2003: 213); for another, they are adult focused approach.

2.6 Knowledge of HIV/AIDS Status

According to EDHS (2005), the magnitude of the HIV/AIDS epidemic is felt at both individual and societal levels. Knowledge of HIV/AIDS status helps individuals to make specific decisions to reduce risk and increase safer sex practices so that they can remain disease free. For those who are HIV-positive, knowledge of their status allows them to

take action to protect their sexual partners through accessing treatment and planning for the future (EDHS, 2005:195).

However, in Ethiopia as revealed in EDHS (2005) knowledge of HIV status is very low. Only 6% of men and 2% of women have been tested (EDHs, 2005: 195). This seems mainly due to inadequate Information Education Communication (IEC) and Behavioral Change Communication (BCC) interventions by the concerned institutions. Besides, experience tells that many people would like to die without knowing their HIV/AIDS status than people would like to check and know the results.

One way of preventing and controlling HIV/AIDS is Voluntary Counseling and Testing (VCT) of HIV/AIDS. Knowledge about one's status through VCT of HIV/AIDS is very important for all people in all walks of life to reduce the risk of HIV infection. However, Voluntary Counseling and Testing (VCT) is one of the least addressed intervention areas related to HIV/AIDS (EPHA, 2005:10).

According to Family Health International (FHI, 2008:53), although VCT is becoming increasingly demanding in most of developing countries to prevent and control the risk of HIV/AIDS, many people in these countries are still reluctant to be tested. This reluctance is the result of barriers to VCT. People fail to be tested for HIV for many reasons: lack of access to testing services, fear of stigma and discrimination where in many countries HIV infected people may experience social rejection and discrimination, fear of the test will be positive, and lack of access to treatment. In some countries or where HIV/AIDS is seen as a problem of marginalized groups, fear of rejection or stigma is a common reason for declining testing. In many countries women worry that they would suffer shame and discrimination if they were known to be HIV infected (FHI, 2008:59).

These facts mean thousands of opportunities for increased access to treatment, care, support and prevention have been, and are being, missed. Opportunities for further spread and intensification of the complication of HIV/AIDS are laid fertile grounds.

2.7 Condom Use

Condom use is a critical element in comprehensive, effective and sustainable approach to HIV/AIDS prevention and treatment. The male latex condom is the most efficient and available technology to reduce the sexual transmission of HIV/AIDS and other STIs (WHO, 2004:131).

On the other hand, recently female latex condom is also available; however, it is less common by users and least promoted by providers for it is a recent discovery as well as it is not easily accessible in the social market environment.

Knowledge of condom is an important if not the only and sufficient precondition for use. Beliefs about condoms both positive and negative are likely to influence condom use. Knowledge of condoms and the role that they can play in preventing transmission of HIV/AIDS virus is much less common.

According to EDHS (2005), one-quarter of the women and just under half of the men reported condom use in their last higher risk encounter (EDHS, 2005:217).

In addition, according to Mola Tafete (2007:68), on the study conducted to assess the prevalence of risky sexual behavior and associated predisposing factors to STIs /HIV/AIDS infections among in School and out of School Youth, in North Gonder Zone, North West Ethiopia. Out of 1681 involved in the study three-fourth (76.3%) of them was aware of HIV/AIDS and 49.7% were sexually experienced. In the 12 months prior to the survey, 53.3% of the sexually active males had sexual contact with female commercial sex workers, of which 44.6% reported they never used condom and of those who used condom 32% had reported inconsistent use of condom with commercial sex workers. Only 49.3 % sexually active respondents are thinking that they could be at risk.

However, correct and consistent condom use offers the best protection against HIV and other STIs. Since the consistent and correct use of condoms reduce the risk of HIV infection, HIV/AIDS prevention programs often include the promotion and distribution of condom (Abay 2007).

2.8 Alcohol consumption

These days, Ethiopia with sexual violence against women is placed in the forefront. The result of the UNAIDS/WHO (2007:16) in multi- country study which was carried out in 11 countries that involved 24,000 women described the condition. The women who had been subjected to sexual violence by intimate partner ranged between 6 percent in Japan, Serbia and Montenegro, and 59 % in Ethiopia.

A growing research shows that excessive alcohol consumption plays a key role in gender based violence and the occurrence of risk sexual activity that exacerbates the spread of HIV/ AIDS. A study on young people in Kenya reveals that females who like alcohol are nearly 3 times more likely to be sexually active than those who do not. Similarly, males who take alcohol are nearly 3.5 times more likely to be sexually active than those who do not. Alcohol (and other substance) abuses and affects people's risk assessment process (AIDS in Africa, 2006:59).

According to Mark et al (1994:53), drunkenness usually brings irresponsible behavior. The drunkards usually express their displeasure, anger while intoxicated, and then their attitude could be translated into anti- social emotions. Information regarding alcohol showed that heavy drinking was associated, with prior prostitution visitation, and inconsistent condom use with prostitutions (Mark, et al, 1994:53).

2.9 Misperception about HIV/AIDS

The routes of HIV transmission are specifically identified and documented by scientists. They have identified three ways through which HIV infection spreads: sexual intercourse with an infected person; contact with contaminated blood; and transmission from an infected mother to her child before or during birth or through breast feeding (Encarta, 2006). But health officials and concerned social behavioral scientists continually face challenges with the public's unfounded fears concerning the potential for HIV transmission by other means.

Scientific researches proved that HIV differs from other infectious viruses in that it dies quickly if exposed to the environment. On the other hand, no evidence has linked HIV transmission to casual contact with an infected person, such as hand shake, hugging or kissing or even sharing dishes or bathroom facilities (Encarta, 2006:3).

In Ethiopia, particularly adults, lack accurate knowledge about the ways in which the HIV/AIDS virus can and can not be transmitted. The following results from EDHS (2005: 181) clearly illustrate the existing knowledge gap on some of the common misconceptions about AIDS and HIV transmission in Ethiopia.

- *51 percent of women and 69 percent of men know that a healthy looking person can have (and thus transmit) the virus that causes AIDS (EDHS, 2005).*
- *47% of women and 57% of men reject the misconception that AIDS can be transmitted by mosquito bites.*
- *63% of women and 80% of men confirmed that a person cannot become infected by sharing food with a person who has AIDS.*
- *Around four in ten women and six in ten men are aware that using condom during sexual encounters can reduce HIV/AIDS transmission (EDHS 2005: 181).*

A significant number of populations still seem ignorant regarding the way HIV transmits. Therefore, addressing the problem and challenging the transmission to avert the rate of infection, demands joint efforts to involve in the intervention activities and employing well-functioning HIV/AIDS services.

2.10 Risk Perception of HIV Infection

Literatures on health related behavior emphasizes the perception of being at risk of infection as being one of the necessary conditions for behavioral change. The degree of the perceived risk seems to affect individuals' actual control in adopting preventive measures. Individual risk perception is dependent on the perception held by other

members of their personal network. Individuals risk perception as well as individuals knowledge is likely to be subject to social environment influences, as long as social interaction allows information exchange, facilitates common evaluation and definition of meaning and its validity.

Risk perception depends on the individuals' perceived control of their capacity to take preventive measures against the infection. Risk perception is also dependent on the relationship behavior and mode of transmission of virus (Dejene Getahun, 2005:32).

People who feel that they have little or no influence over what happens to them are more likely to engage in risky sexual behavior-women are more likely to feel that they do not have control over their situation (Varga. 2001)

Another study showed that accurate assessment of potential partners risk for HIV/AIDS or other STDs may assist individuals in making decision to avoid sexual contact or to adopt protective behaviors with in the partnership (Stoner, 2003; Ndola, et al, 2006).

In sub-Saharan Africa, socio-cultural norms and practices are major determinants of sexual risk taking behavior (Caldwell, et al, 1999:312). Besides, sexual risk behaviors, including early sexual debut, unprotected sexual intercourse, and multiple sexual partners, occur in a broader context. The intensity of involvement in sexual risk behavior ranges from no sexual relationship to unprotected sexual intercourse with multiple partners and commercial sex workers.

Although risky sexual behavior does not always indicate a high-risk life style, sexual risk behaviors often cluster with other risk behaviors, including substance use, violence involvement, economic dependency, misconception about the infection, and lack of proper information (Renee, et al, 2002:23:407).

The relationship between risk perception of HIV/AIDS and sexual behavior is complex and poorly investigated and understood, particularly in Ethiopia. Studies conducted in different cultures have associated HIV/AIDS risk perception with a wide range of variables: number of sexual partners, knowledge of sexual partner past sexual behavior, fear of AIDS, shame associated with having AIDS, community perception of AIDS risks, knowing some one with AIDS, discussing AIDS at home, closeness of parent-child

relationships and religious affiliation (Macintryre et al, 2004 cited in Temesgen 2007:42), including the social environment, economic status and cultural-norms.

CHAPTER THREE

Research Design and Methodology

3.1 Research Design

In this research study, an integrative approach that makes use of both quantitative and qualitative methods is used as a research design. According to Steckler, et al (1992), the former produces quantifiable, reliable data that are usually generalizable to relatively larger number of respondents whereas the latter is of paramount importance in developing deep understanding of human systems and their subjective aspects of behavior.

3.2 Research Method

A descriptive survey method was applied to determine the level of risk perception of HIV/AIDS among adult population and the influencing socio-economic and demographic factors in Nazareth Tractor Assembling Factory in Adama. Besides, as stated by Sing (1985:69), descriptive survey is the method of investigation which attempts to describe and interpret that exists at present in the form of conditions, practices, processes, trends, effects, attitudes, beliefs, etc. As a result, in describing the existing situation of risk perception of HIV/AIDS among adult population, the descriptive survey method was found to be relevant and appropriate

3.3 The study Area and Target Population

The study is conducted in Adama (Nazareth) city which is located at the Eastern part of the capital city of Ethiopia at a distance of 100 k.ms. The city is found on the main trade and in port and export route of the country. It is also the interjection point of many roads

from South, East and the center of the country. The only rail way line of the country has its route and station through this city.

The target population are male and female (15-64 working age population) adult workers in Nazareth Tractor Assembling Factory. This group of the society is highly threatened by HIV/AIDS pandemic, yet given little or no attention and was not properly addressed.

3.4. Data Sources

Both primary and secondary sources were employed in this study to generate necessary information. The primary source of data were workers in Nazareth Tractor Assembling Factory between the age of 15-64 years, and the secondary source of data were relevant government policy documents as well as pertinent literature on HIV/AIDS especially from international organizations like WHO, UNAIDS, etc. Furthermore, journals, magazines, internet sources were employed as secondary source of data

3.5 Procedures of Data Collection

As the medium of the research work was English, questionnaires, FGD and interview guiding questions were firstly prepared in English and translated into Amharic language in order to be administered to the study subjects easily. This is mainly to overcome problems of understanding and to encourage participation and free flow of ideas. To avoid bias and inconsistency, the translation was made to be ratified by the research advisor for accuracy. To maximize the quality of responses of the respondents and the rate of return, convenient time gap was arranged.

Before administering the instruments to the target populations, the researcher employed 5 assistances (2 males and 3 females with at least qualification of grade 12 and above). They were provided with a -two day training on how to administer the instruments and on ethical matters they should maintain on the process. The principal researcher has

made close follow-up in all the processes briefing the objective of the study clear to the respondents so as to avoid confusion and facilitate ease of administration.

3.6 Data Collection Instruments

Three combined principal data collection tools or instruments were employed in this study, namely: semi-structured interview, focus group discussion and questionnaire. These were employed to procure primary data. Here, questionnaire is recommended to quantify the data. The standardized use of these three principal data collection instruments are believed to generate data that could be used for descriptive and inferential purposes in the study area from the target population. The quantitative methods of the survey were enriched by a qualitative method. The purpose of the qualitative method is to elaborate the identified results and supplement the quantitative survey to further explore some of the major results.

A. Survey Questionnaire: The study used survey questionnaires which were prepared for the data collection process. Issues attached to risk perception of HIV/AIDS pandemic and related affiliations to different predisposing factors were assessed. After obtaining the consents of the respondents, the data were collected by trained enumerators under the follow up of the principal researcher.

B. Semi- Structured Interview: It was carried out involving adult workers in face-to-face situation. Such interviews were conducted primarily with selected "key players" of the factory. The key players are: HIV/AIDS Focal Person (With pseudo name POP_2) and volunteer person living with HIV/AIDS (with pseudo name POP_1). Interviews were conducted in Amharic for clarity and detailed expression of the respondents' reflection, and latter translated into English by the principal researcher. Interviews were tape recorded with the informed consent of the interviewees and were analyzed qualitatively (refer to the pseudo names in the appendix section).

C. Focus Group Discussion (FGD): A total number of three FGD with 18 discussants participated in discussions on HIV/AIDS. Each FGD has six discussants, one heterogeneous (Male and female mixed) and two homogeneous (One female group and

one male group independently) groups on the bases of their gender. The arrangement is deliberately made by the researcher for two main reasons:

First, our society is highly conservative, both from the religious and cultural perspective to discuss on sex related issues openly. Hence, to create more relaxed environment for the discussants so as to express what they think and feel without reservation homogeneous arrangement is preferred.

Second, the heterogeneous arrangement provides information on the attitude of the society towards HIV/AIDS and the extent of their confidence to discuss the issues openly and without reservation. Thus, both arrangements are considered to be the appropriate mechanisms to secure rich and reliable information in both dimensions through a set of facilitated activities and gather information in an interactive process of collective reflection. For ethical reasons the FGD participants were given pseudo names (refer the pseudo names in the appendixes).

In each FGD one moderator, one script writer, and one caretaker were assigned. For ethical reasons on the homogeneous FGD arrangements the female FGD was conducted by employed female data collectors. After obtaining the discussants consents, the responses were tape- recorded. Discussions were conducted using Amharic language as a medium. Finally, it was translated into English and was analyzed qualitatively by the researcher. Most guides were open- ended to give room for more reflection.

3.7 Sampling Technique

A total of 170 adult workers from Nazareth Tractor Assembling Factory were used in this study. Availability sampling technique was used to select respondents, ordinary workers from the study subjects to fill the questionnaires.

In addition, purposive sampling technique was employed to select key informants for the semi- structured interview. Finally, random sampling technique was used to select FGD respondents for focus group discussions.

3.8. Sample size determination

The participants were selected from 260 permanent workers in the factory (177 males and 83 females) and 43 part time workers (33 males and 10 females) which means a total of 303 workers from which about two-third is male and one-third is female, as information is accessed from the Factory.

Based on Chandan (2003) formula, samples of 170 (113 males and 57 females) adult workers were selected for responding to the questionnaire. This is one of the ways of scientific sample size determination of a population, where the population size is less than 10,000 (n<10,000).and it is recommended by most of the social scientists (Chandan, 2003).

Thus, $n = \frac{(z\alpha/2)^2 p*q}{E^2}$ and $n' = \frac{n}{1+ n\left\{\frac{}{N}\right\}}$

Where, P is the proportion of adult workers who are at risk perception of HIV/AIDS, and;

q is the effect size defined by the alternative hypothesis, 5% is accepted.

As no research is so far conducted in the study area, the proportion P is not known. In the absence of p and q, we can assign the product p*q to achieve the maximum possible value of 0.25 i.e. when p=0.5 and q=0.5.

E is margin of error or limit of accuracy to be tolerated in estimating of adult workers which is then α =5% = 0.05

$z\alpha/2$ = the standard normal value corresponding to the desired level of confidence, 95% which corresponds to the value 1.96.

Moreover, in most social science research, the desired level of significance is 95%.From the normal distribution table $z\alpha/2 = 1.96$.

n is the Sample size, and N is the total population (which is 303).

Hence, $n = \frac{(1.96)^2 * (0.5*0.5)}{0.05^2}$ $n = 384$

$$n' = \frac{n}{1 + \frac{(n)}{N}}$$

$$n' = \frac{384}{1 + \frac{(384)}{303}} = \frac{384}{1+1.2673} \approx 170$$

$n \approx 170$

Thus the sample size is 170 (113 male and 57 female).

3.9 Pilot Testing

Data collection instruments (questionnaires) are piloted before they have been administered for actual data collection. This is because piloting helps to clear up any confusion in instruments of data collection and ascertain the validity of the instruments and at the same time allow the researcher to determine the adequacy of instructions to respondents.

The specific objectives of this pilot test were to:-

i) Determine the sequence of the questionnaire from simple to complex leading the respondents involve patiently to fill and complete without being bored of them;

ii) Improve and finalize the items so as to maintain coherence in their relative relationship and thereby meet the desired outcome;

iii)Test the suitability of the items to help participants freely respond and avoid words and phrases that may create hindrance for the respondents as the case of HIV/AIDS is sensitive in terms of social and psychological issues.

To test the instrument in light of the above points, a randomly sampled 30 (15 males and 15 females) participants from the target population were taken and involved in the pilot testing.

As a result, there were questions identified and escaped due to their sensitive nature and probably for fear of leveling oneself to the expected outcome. The respondents escaped the question that says "Do you use drug?" which directly request their involvement to drug abuse, while their escapism is cross checked on similar question that says "Do you drink alcohol?" where their response possibly reveals their behavior. Consuming alcohol is one of the many ways that leads to abuses.

Therefore, based on the lessons learnt from the pilot test, it was found better to cancel some words and probing questions that might not enable the researcher to secure right answers to meet the purpose, and maintain some similar questions on behalf of the cancelled ones.

In addition, the questionnaires were undergone through by social scientists in the field to meet the standard and address the issue under investigation and their suggestions were incorporated. On the bases of the feedback of the pilot test, the questionnaires were further developed.

3.10 Data Processing and Analysis

Data Processing is an important part of the whole survey operation. It includes consistency checking, data clearing, and coding and data entry. Data obtained from the questionnaire was entered, in to the computer cleared and edited for analysis using SPSS package (version 15.00) and were analyzed quantitatively.

The information generated from the survey questionnaires was analyzed using descriptive and inferential statistics. Furthermore, the descriptive statistics includes cross tabulation and percentage distribution, and the inferential statistical tests employed Pearson Chi-square test. A significant level $\infty = 0.05$ was used for the study.

Percentages were calculated to show the distribution of the respondents regarding socio-economic and demographic characteristics and HIV/AIDS related behaviors.

Information generated through semi-structured interviews and focus group discussions were analyzed qualitatively and triangulated with the quantitative data where necessary and appropriate.

Then, the bi-variate analysis with chi-square test was employed for selected variables to measure the level of significance of the independent variable against the dependent variable.

CHAPTER FOUR

Data Presentation, Analysis and Interpretation

Taking into account the major objectives of the study and specific objectives too, this chapter assesses selected demographic and socio-economic characteristics of the participants and risk related factors.

4.1 Demographic and Socio-economic Characteristics of the Quantitative Survey Respondents

The distribution of the respondents' demographic and socio-economic characteristics includes sex, age, religion, ethnic group, marital status, level of education and monthly income. Among the determined 170 samples, 113(66.5%) males and 57 (33.5%) females were involved in the quantitative survey; luckily almost all questionnaires were completed and returned to the researcher.

As indicated in Table 3, fortunately all participants were found to be between the age of 21- 50 which is meant in their active sex age or in their productive and reproductive age. This opportunity, gives the researcher to secure reliable information for the sought outcome from the proper target group.

Regarding the participants' religion, 65.3% were orthodox Christians, 20.6% were protestant Christians, 12.9% were Muslims and about 1.8 % were Catholics. As indicated in the Table 3, having the respondents with dominantly prevailing religion in the country would make the research work to importantly identify the impacts they may pose on the situation of HIV/AIDS.

Similarly, among the quantitative survey participants, about 37% belongs to the Oromo ethnic group, while 32.94% were Amhara, 11.2% Gurage, 2.35% Tigre, and the remaining 16.5 % belongs to various ethnic groups. The opportunity of accessing the dominantly residing ethnic groups in the area would provide the researcher to have necessary insight towards the community and their social reflections

Table 3- A: Distribution of participants by selected background characteristics

Variables		male		Female		Total	
Age		No	%	No	%	No	%
	21-30	47	56.6	36	43.4	83	48.82
	31-40	33	71.7	13	28.3	46	30
	41-50	33	80.5	8	19.5	41	18.2
Religion	Orthodox	75	67.6	36	32.4	111	65.3
	Muslim	15	68.2	7	31.8	22	12.9
	Protestant	21	60	14	40	35	20.6
	Catholic	2	100			2	1.8
Ethnic group	Amhara	36	64.3	20	35.7	56	32.94
	Oromo	45	71.4	118	28.6	63	37
	Tigre	3	75	1	25	4	2.35
	Gurage	9	47	10	52	19	11.2
	Others	20	71.4	8	28.6	28	16.5

According to the survey findings, 65.9% were found to be currently married and 21.8% were never married and at the same time 7.65 %, and 4.7% were divorced and widowed respectively. The reflection provides ample opportunity from all walks of sexual life which help the researcher to evaluate their responses from different angles.

Furthermore, the findings of the study revealed that among the participants no one was found to be illiterate. Accordingly, the qualifications among male and female participants, the majorities, and 28.8% were completed grades 9-10, while 22.4% and 17.65%were completed grades 5-8 and 1-4 respectively. At the same time, about 20% were found to be with qualifications above grade twelve, while 11.2% of the respondents were found to be in a level of grade 11-12. Thus, the results imply that the possibility of the respondents having better opportunity of utilizing various literature which may add knowledge to their understanding of HIV infection.

Table 3-B: Distribution of participants by selected background characteristics

Variables		male		Female		Total	
		No	%	No	%	No	%
Marital status	Never married	26	70.3	18	29.7	37	21.8
	Married	75	67	37	33	112	65.9
	Divorced	7	53.8	6	46.2	13	7.65
	Widowed	5	62.5	3	37.5	8	4.7
Educational level	Illiterate						
	Grades 1-4	18	60	12	40	30	17.65
	Grades 5-8	22	57.9	16	42.1	38	22.4
	Grades 9-10	34	69.4	15	30.6	49	28.8
	Grades 11-12	13	68.4	6	31.6	19	11.2
	Above grade 12	26.	76.5	8	23.5	34	20
Monthly income	≤500 Eth. birr	24	57.1	18	42.9	42	24.7
	501-1000 Eth.birr	43	60.6	28	39.4	71	41.8
	1001-2000 Eth.birr	36	81.8	8	18.2	44	25.9
	≥ 2001 Eth.birr	9	75	3	25	12	7.06

Similarly, the findings of the study further revealed the status of the participants' earning. Accordingly, both the permanent and par time employees were earning monthly income at different levels of wage rates. As a result, out of 169 respondents about 24.7% of the respondents earn less than 500 Ethiopian Birr and considerable number of the respondents 41.8% earn between 501-1000 Ethiopian Birr, while about 25.9% of the respondents earn between 1001-2000 Ethiopian Birr. Yet, the number of respondents who earn more than 2001 Ethiopian Birr is very few (only about 7.06%).The employees' monthly income is to a large extent insignificant, compared to the prevailing market situation in the country. Hence, the majority of the respondents are victims of economic crisis which may lead them to various unwanted behaviors including unsafe sexual

practices to satisfy their material needs. Unfortunately, one respondent failed to reflect his earning position.

4.2 Knowledge of HIV Infection

HIV/AIDS strikes the most economically productive members of the society, with highest infection rates found between the ages of 15 to 49 (MOH, 2006). There are many factors that affect the sexual behavior of people mainly, due to lack of knowledge about sexual reproductive health information and appropriate guidance.

Knowledge of HIV/AIDS presupposes mainly identification of whether the disease is a virus or not, the ways of transmission, the mode of prevention, and whether the disease can be cured. In this regard, the vast majority of adult workers lack proper knowledge about HIV infection (Fig.2).

Yet, having proper knowledge about sexually transmitted diseases including HIV /AIDS is believed to have paramount importance to protect oneself and one's community from being victims of risky infections and thereby protecting themselves from falling into multitudes of socio-economic problems.

These days, it is a common understanding that HIV/ AIDS is a workplace issue not only because it affects labor and productivity, but also because the workplace has a vital role to play in the wider struggle to limit the spread and harmful effects of the epidemic. HIV/AIDS threatens the lives of many workers and those who depend on their families, communities and enterprises. An interview conducted with the HIV/AIDS focal person and the person in charge of the factory clinic (POP_2, Oct.2008) witnessed this reality when he said:

> *So far, the factory lost some veteran workers who have significant influence on the production and profitability of the factory due to HIV/AIDS. As a result, the factory suffered from complains of the clients due to inefficiency of the inexperienced workers (POP $_2$, Oct. 2008).*

As reflected by the FGD discussants, HIV/AIDS has several socio-economic impacts on a country. ILO (2004:12) has also shared the same opinion and stated the following which strengths the respondents' reflection:

- *AIDS deaths lead directly to a reduction in the number of workers available and particularly workers in their most productive years. As experienced workers are replaced by younger, less experienced persons, productivity is reduced;*
- *A shortage of skilled workers leads to higher production costs and loss of international competitiveness;*
- *Pressure increases on the social security system, including life insurance and pension funds, which are important source of capital for both the government and the private sectors (ILO, 2000:12)*

These effects are globally common in the world of work. At this very point, knowledge of HIV/AIDS is critically important to combat the challenges. This is mainly because in HIV/AIDS risk reduction model, knowledge of HIV/AIDS is extremely important to recognize risky behavior and taking timely appropriate action.

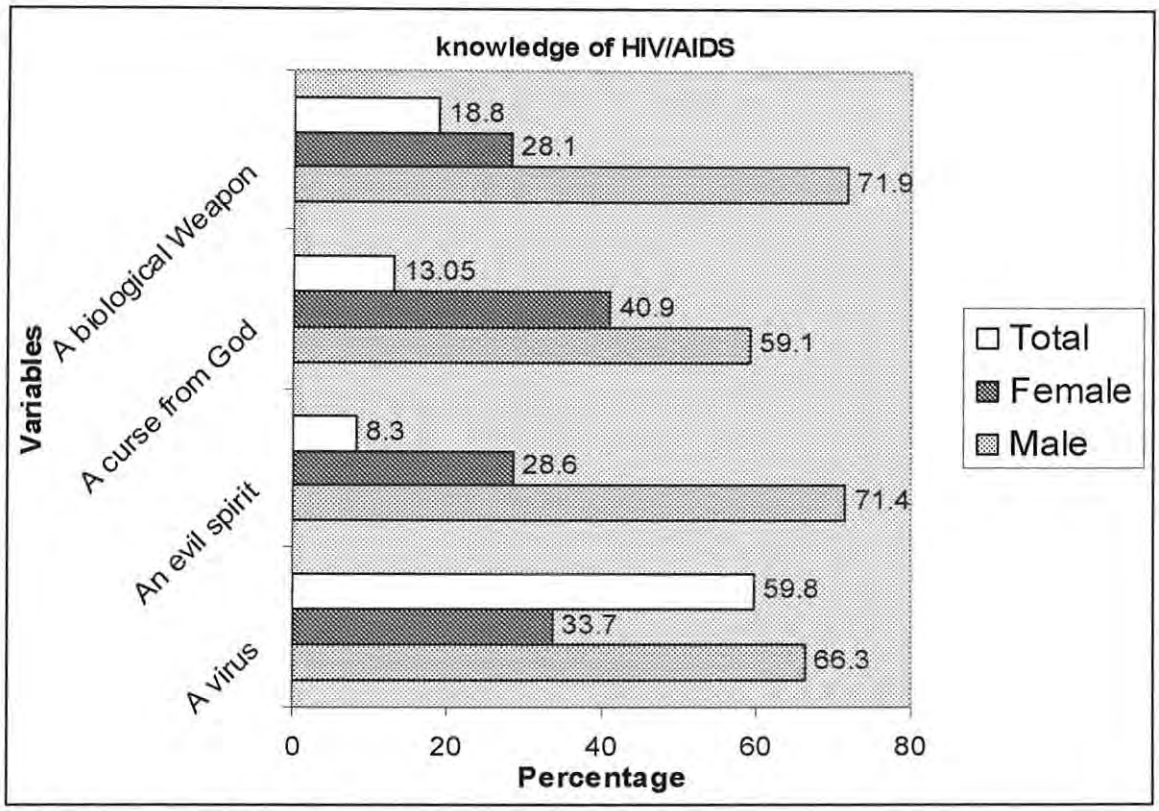

Fig.2: Respondents' knowledge about HIV virus

Accordingly, the quantitative survey conducted to assess about HIV knowledge of adult population in Nazareth Tractor Assembling Factory, revealed that 101(59.8%) perceived HIV/AIDS as a virus while 32(18.8%) believed as a biological weapon developed by the whites to clear out the black race from the surface of the earth, and 22(13.05%), 14(8.3%) believed as an evil spirit and a curse from God to punish His people who deviate from His orders respectively. The perception of the quantitative response that HIV is a virus is shared by the FGD discussants. As one of the FGD respondents (MAX_3, Oct. 2008) reflected:

> *HIV is a virus that infects human beings by attacking the white blood cells and exposes to various opportunistic diseases and eventually leads to death. It mainly transmits by unsafe and unprotected sexual intercourse. It is a disease that has no cure except treatment to sustain life and improve health condition of infected people (MAX_3, Oct. 2008).*

Though a significant number of adult workers perceived HIV/AIDS as a virus that exposes to various opportunistic diseases leading to death, about 68(40.15%) of respondents

misperceived the virus. In spite of HIV's being a virus, considerable number of adult workers perceived it adversely as if the virus is a biological weapon, an evil spirit and a curse from God to penalize His creatures for not obeying His orders.

In fact, such misperceptions are not based on baseless ground. On the one hand, it is a common knowledge that there is a lot of unethical business-oriented misleading information propagated among the society that hampers the proper perception of the nature of HIV virus. On the other hand, the prevailing backward traditional values, beliefs and norms among the society imposes greater barrier to the proper perception of the nature of HIV virus. Hence the result indicates the opportunity of the respondents' exposure to potential risk of HIV infection. This misperception is also shared and reflected among the FGD discussants. They believed and expressed that they heard people say and even read some articles that say HIV is man made. This perception gap clearly indicates the existence of wide opportunities to the spread of the virus paving the path to significant risk perception of HIV infection among the population both in the factory and outside in the community

Similarly, the quantitative survey attempted to assess the perception of the adult workers whether they have proper knowledge about the ways of HIV virus transmission or not.

Table 4: Respondents' knowledge about the ways of HIV transmission

Variables	Responses					
	Male		Female		Total	
	No	%	No	%	No	%
Sexual intercourse with HIV infected person	103	64.8	56	35.2	159	93.53
Share inject able needles or sharp edged tools with HIV infected person	105	65.2	56	34.8	161	94.7
Infected blood transfusion	100	67.1	54	32.9	164	96.5
From mother- to -child	60	56.6	46	43.4	106	62.4
Sharing toilet, food and clothes with HIV infected person	5	33.3	10	66.7	15	8.82
Shaking, hugging or kissing infected person	9	26.5	25	73.5	34	20
Mosquito or insect bites	5	33.5	10	66.5	15	8.82

NB. As multiple answers were possible the percentage may not add up to 100.

The perception of respondents regarding the ways of transmission of HIV virus is reflected diversely as shown on Table 4. Among respondents about 159 (93.53 %), 161(94.7%), 164(96.5%) and 106 (62.4 %) agreed that HIV infection is possibly transmits by sexual intercourse with HIV infected person, share injectable needles or sharp edged tools with HIV infected person, infected blood transfusion and from infected mother-to-child through breast feeding and/ or during delivery respectively. Hence, the result indicates that significant number of the respondents is at potentially positive track of perceiving the ways of HIV transmission and if they are up to their perception in their actual life, they are really on the safest side of avoiding the risk of HIV infection.

Paradoxically, out of the total of respondents about 15(8.82%), 34(20%) and 15 (8.82%) reflected that HIV virus transmits by shaking, hugging or kissing infected person; mosquito or insect bites, and sharing toilet, food and clothes with HIV infected persons respectively which are all based on scientifically unfounded ways of the transmission of HIV infection. These groups of people are probably in the potentially harmful track of the perception of HIV infection which may initiate provoking environment against PLWHA

Similarly, on the assessment survey made to identify whether the adult workers have the knowledge about the prevention method of HIV infection. Hence, the study subjects were asked what kind of care should be taken so as not to be victims of HIV infection. As a result, the respondents have been observed with different levels of perceptions

Table 5 : Respondents' knowledge abut the mode of prevention

Variables	Responses					
	Male		Female		Total	
	No	%	No	%	No	%
Abstinence	10	8.9	5	8.8	15	8.8
Faithfulness	105	93	57	100	162	95.3
Consistent condom use	13	11.5	2	3.5	15	8.8
Avoid sex with casual person	100	88.5	54	94.7	154	90.6
Avoid sex with commercial sex workers	109	96.5	--	---	109	96.5
Avoid sharing inject able needles or sharp edged tools with infected person	103	91.2	56	98.2	159	93.5
Avoid using untested blood	110	97.4	55	96.5	165	97
Avoid sharing toilet, food and clothes with HIV infected person	11	9.7	4	7.0	15	8. 82
Avoid shaking, hugging or kissing infected person	28	24.8	36	63.2	64	37.6
Avoid mosquito or insect bites	21	18.6	13	22.8	34	20

NB. As multiple answers were possible the percentage may not add up to 100%.

Regarding the HIV prevention methods (see table 5) adverse realities are reflected in the responses. Accordingly, among male and female respondents, 165 (97%), 162 (95.3 %), 159 (93.5%),154 (90.6%), 15 (8.8%) and 15 (8.8%) responded avoid using untested blood, faithfulness, avoid sharing injectable needles or sharp edged tools with infected person, avoid sex with casual person, consistent condom use and abstinence respectively, while out of 113 male respondents about 109 (96.5%) confirmed that avoiding sex with commercial sex workers as best alternatives to prevent HIV infection.

The reflections observed have positive and encouraging trends to the efforts of preventing the spread of HIV infection in the world of work. Such positive trends are achieved by various factors as effectively communicated by one of the FGD discussants' (FEB_1, Oct.2008) when said;

Thanks to radio programs on HIV/AIDS, especially on line talk on FM radio, I have more than enough knowledge about what HIV/AIDS is, the ways of transmission, the prevention method and even how to get treatment in case one is infected (FB_1, Oct.2008).

But the problem is in the way everyone acts in real life towards the conditions. You hear everyone saying perfectly about HIV/AIDS in public, but you also find the same person acting entirely different privately and find him falling into problems. Besides, no awareness creation activities are taking place in the factory. As ascertained by the focal person and the person in charge of the clinic in the Factory during the interview conducted,

There is no convenient environment available for awareness creation on HIV/AIDS in the factory. Awareness creation effort in the factory is almost negligible. Leave alone the management, the Labor Union gives no attention to HIV/AIDS awareness creation activities (POP2, Oct, 2008).

From this perspective, it would be difficult to say that there is sufficiently exhaustive Knowledge all about HIV/AIDS among the workers in the factory.

Even though, they regret to say that everyone has fully armed with all means' of prevention methods in their explanations , HIV/AIDS radio programs, religious institutions, local and international NGOs, and health institutions undeniably are playing significant role to create awareness among the adult workers. The discussants also reflected high understanding of risky sexual behavior. As a result, almost all agreed on and stressed to remain loyal and faithful being one-to-one as irreplaceable option to prevent HIV infection.

Despite all the efforts made as reflected on Table 5, it is important to recognize some respondents bias on the prevention of HIV infection mainly attributed to lack of proper knowledge and some socio-cultural influences. As a result, among male and female respondents 9(5.3 %) perceived avoid shaking, hugging or kissing infected person as the method of HIV prevention and as the same time 0.6% and 4.12 % perceived avoiding mosquito or insect bites and avoid sharing toilet, food and clothes with HIV infected persons respectively as a means to prevent HIV infection. The response despite the

misperception it reflects holds a provoking tone towards PLWHA which may initiate them to seek revenge against uninfected persons.

In addition, to comprehend the level of the respondents' knowledge of HIV/AIDS behavior, they were asked whether HIV/AIDS infection can be cured.

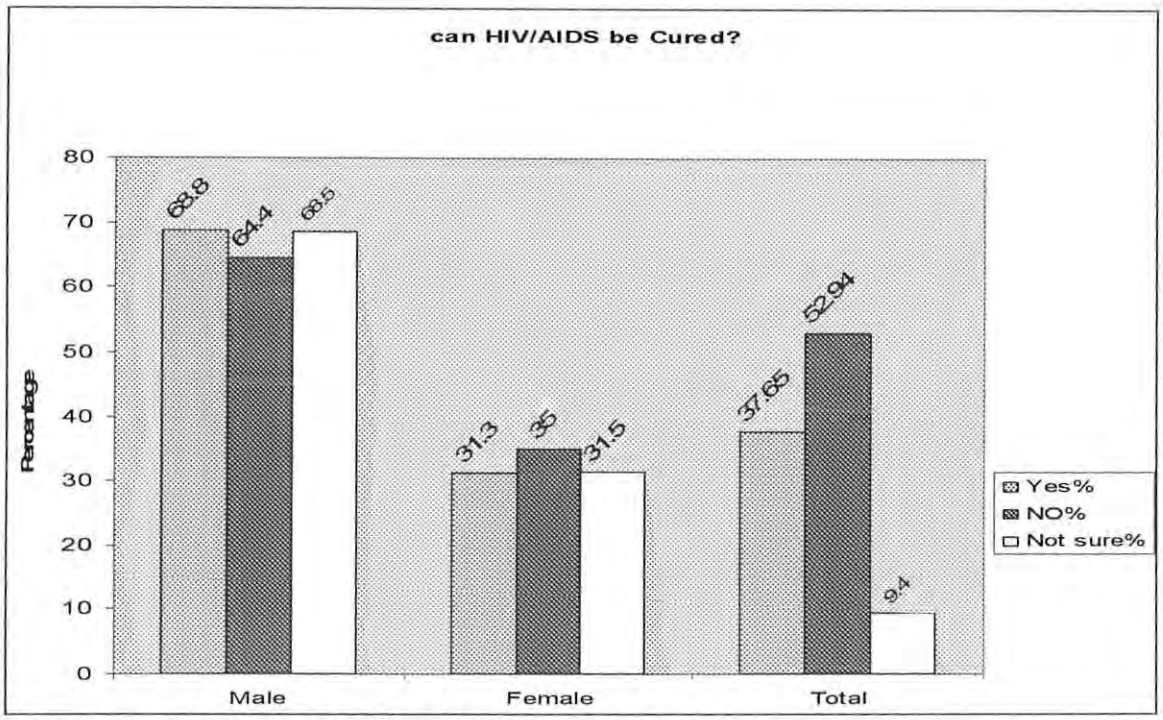

Fig.3: Respondents' knowledge about the behavior of the virus

Accordingly, the quantitative survey revealed that 52.94% responded HIV/AIDS has no cure, and 37.65% claim that it can be cured; while in significant proportion (9.4%) were not sure of the issue under investigation.

The same question was asked to FGD discussants, the majority share the opinion that HIV /AIDS can medically be treated to improve the health conditions of the infected person, but cannot be cured. However, some discussants argue that they witnessed people being infected earlier and were cured by various healing factors among which they mentioned as Holy Water, prayers to the Holy Spirit and to some undefined cultural treatments. Though it would be erroneous to belittle the contributions of traditional and cultural treatment on various health related problems, it would be difficult, especially on issue of HIV/AIDS, to trust the unproven traditional medications healing powers.

In both cases, in the case of the respondents who hold confusing opinion that HIV/AIDS can be cured; and at the same time those respondents who failed to identify whether HIV/AIDS can be cured or not, are at the forefront of potential risk perception of HIV infection. This is because the opinions they hold possibly hinder them from the globally accepted and scientifically proved nature of the virus as well as transmission and the prevention methods.

4.2 Knowledge of respondents' regarding HIV/AIDS Status

One way of preventing and controlling HIV/AIDS is Voluntary Counseling and Testing (VCT) for HIV/AIDS. VCT provides the opportunity for people to know their HIV status with quality counseling support to help them cope up with a positive or a negative test results. Knowledge about one's status through VCT for HIV/AIDS is very important for whoever found in all walks of life to reduce the risk of HIV infection.

Knowing one is HIV negative, can serve as strong motivating factor to remain negative, and initiates to strictly adopt scientifically proved preventive mechanisms and also value once life to the utmost possible level.

On the other hand, knowing one is positive packed and supported by counseling and proper education, may become more motivated to adopt a rather healthier lifestyle that improves one's health status and slow the progression from HIV infection to symptomatic HIV disease and full blown AIDS. In addition, knowing one is HIV positive also provides an opportunity to protect sexual partners and to plan for the future from an informed position.

However, Voluntary Counseling and Testing (VCT) is one of the least addressed interventions areas related to HIV/AIDS (EPHA, 2005:219). This fact is further proved by the information released by UNAIDS in 2007, though the number of people using HIV testing and counseling services has quadrupled in the past five years; however, world wide only 12% of people who want to be tested are currently able to do so. 'In 2003, it was estimated that only 0.2% of adults in low-and middle –income countries received voluntary HIV counseling and testing services (UNAIDS, 2007).

Accordingly, in the quantitative survey conducted, the study populations were asked whether they have undergone VCT to know their status. Out of the total male and female respondents, only 37(21.8%) confirmed that they have undergone VCT, while 133 (78.2%) were not undergone VCT.

Table 6: Respondents' knowledge of their HIV status

Variables	Responses					
	Male		Female		Total	
	No	%	No	%	No	%
yes	26	70.3	11	29.7	37	21.8
No	87	65.4	46	34.6	133	78.2

From the responses of the respondents, almost more than three-fourth or the majorities do not know whether they are free from HIV infection or not for they have not undergone through VCT. The FGD discussants were also asked similar questions, though they believe that knowing one's status was very important, their response was also the same. The response communicates the prevalence of potential danger among the respondents.

At the same time, those who undergone VCT were asked their reasons why they have undergone. Accordingly, out of the total of 37 respondents who responded that they have undergone VCT, 14(37.84%), 8 (21.62%), 6 (16.2%), 6(16.2%) and 3(8.1%) gave their reasons due to getting married, knowing for sure, being sick, adjusting for future life and being pressured by spouses respectively.

In addition, as ascertained from the FGD discussants (MAD_2), most of those who undergone VCT were inspired and/or encouraged either by their own or the mass media program that installed in their mind to give response to value their life and change their behavior which is worth encouraging and promoting initiation.

Table 7: Respondents' reasons to undergo VCT

Variables	Responses					
	Male		Female		Total	
	No	%	No	%	No	%
To know for sure	8	30.76			8	21.62
To get married	10	38.46	4	36.36	14	37.84
To adjust for future life	3	11.54	3	27.27	6	16.2
Pressured by friends	--		---		--	
Pressured by Spouse	2	7.7	1	9.09	3	8.1
Pressured by employer	--		--		--	
I was sick	3	11.54	3	27.27	6	16.2

NB. As multiple answers were possible the percentage may not add up to 100%.

These positive trends were also encouragingly supported and appealed as important experience to be developed by a person who lives with the virus during an in-depth interview conducted with the patient (POP_1, Oct.2008). The patient in his considerate advice said;

> *I would advise everyone to get tested and know one's own status rather than living with both psychological and mental strain. It is a great relief. Some people may have the virus but due to either ignorance or fear, they don't get tested. As a result, they affect the other innocent. This is really dangerous. To be tested and know one's own status is very much helpful not only to oneself but also to one's family and the community (POP_1, Oct. 2008).*

Similarly, the study populations were asked what practical behavioral changes they have brought after they have undergone VCT.

Table 8: Respondents with behavioral change

Variables	Responses					
	Male		Female		Total	
	No	%	No	%	No	%
Abstinence	---		2	100	2	5.4
Faithfulness	24	68.6	11	31.4	35	94.6
Consistent condom use						
Avoid using untested blood	23	67.6	11	32.4	34	91.9
Avoid sharing sharp edged tools& inject able needles	23	67.6	11	32.4	34	91.9
Avoid sex with commercial sex workers	26	100	--		26	100
Avoid sex with casual persons	23	67.6	11	32.4	34	91.9
Avoid drinking alcohol and drug use	4	36.4	7	63.6	11	29.7

NB. As multiple answers were possible the percentage may not add up to 100%.

As can be observed in Table 8, out of 37 male and female respondents who have undergone VCT, 91.9%, 94.6%, 91.9%,91.9% assured that they have brought behavioral change through avoiding using untested blood, faithfulness, avoiding sex with causal persons, avoiding sharing sharp edged tools and injectable needles respectively. At the same time, 29.7% and 5.4% confirmed avoiding drinking alcohol and drug use and abstinence respectively.

Interestingly, out of the total 26 male respondents, all confirmed that they have avoided sex with commercial sex workers. These are really encouraging responses to avoid the risk of HIV infection. These trends are also shared by some of the FGD discussants.

On the other hand, those who responded that they haven't undergone VCT were asked their reasons and they shared the following experiences.

Table 9: Respondents reasons not to undergone VCT

Variables	Responses					
	Male		Female		Total	
	No	%	No	%	No	%
Lack of knowledge about VCT	1	100			1	0.75
Trust my partner	13	30.2	30	69.8	43	32.33
Faithful to my partner	64	64	36	36	100	75.2
Fear the result	15	65.2	8	34.8	23	19. 7
Fear the reaction of the community	23	71.9	9	28.1	32	24
Lack of HIV test facilities	2	100			2	1.5

NB. As multiple answers were possible the percentage may not add up to 100%.

According to their response, out of 133 male and female respondents, 100 (75.2 %) ascertained that they are faithful to their partners, 32 (24%) claim they fear the reaction of the community, 23 (17.3%) fear the result, 43 (32.33%) trust their partners. While lack of knowledge about VCT and lack of HIV test facilities were mentioned as least reasons respectively. The responses reflected on Table 9, matches with the opinion Survey conducted in United States of America.

One of the reasons for adult workers' hesitation to undergo VCT is fear of the positive results and the potential consequences. Similarly, a survey conducted to high risk individuals in United States of America, for instance, revealed that as compared to other factors, fear of positive result found to be a decisive barrier by the respondents (Galvan et.al.2004; cited in Andargachew, 2006:35).

The issue of VCT was among the serious concerns initiated greatest argument among the FGD discussants and was reflected argumentatively. On the one hand, there are those groups of discussants who failed to undergo VCT due to various personal reasons and remained untested. Many people don't have the confidence to get tested for HIV and know their status. Even if some people had tested, they would do privately and would not

tell the truth. The truth is further ascertained by the FGD discussants as reflected by one of the participants (MAX_1, Oct. 2008):

> *To be frank, I have not gone through VCT. I do not have the courage to test my blood for HIV and know my status. When I think of testing, I usually visualize all my past misdeeds. I lose confidence, my deeds threaten me. I too heard some colleagues saying they would rather die than get tested for HIV. They fear the result and the reaction of the society and I too share the same (MAX_1, Oct, 2008).*

On the one hand, there are those who undergone VCT by virtue of certain compelling environment and appeared to advice the importance of VCT as reflected by one of the participants (MAD_2, Oct, 2008):

> *I have gone through VCT for about three times in interval. When I was making the first test, I was really very much in trouble. I was worried and argued with my mind for days whether to make the test or not. I visualized all my past deeds and every incidence I have gone through. Lastly, I decided to make the test, for one thing I was convinced, for another I badly need the result. Fortunately, I was found free from the infection. Since then I began to mind every step in my life. During the second and the third I had no problem with getting tested for I have already built the confidence. So, I would advice everyone to undergo VCT and know his status and get a relief and lead a healthy and comfortable life (MAD_2, Oct, 2008).*

In light of the need for individuals to have earlier access to treatment, care, support and prevention, VCT has paramount importance for both individuals and the community. It is as well necessary to achieve universal, access to prevention, treatment, care and support and to mount effective responses against HIV and thereby reduce the risk of HIV infection. In this respect, the responses of those participants of the study who have undergone VCT have paramount importance to the potential mitigation effect of HIV infection.

However, regarding the knowledge of one's HIV status, especially to be HIV-positive, the in-depth interview conducted with the same person living with HIV/AIDS (POP_1, Oct. 2008) has revealed the social and psychological impacts as follows:

> *To be HIV positive is really shameful, shocking and frightening. When you hear that you are a victim, you feel that you are to die instantly. Even though people*

do not know about you, you feel that the whole world know, talk, gossip about you and finger at you. You feel as if you are strange and everything is staring at you. You feel as if you are cursed. You feel as if the whole thing stood against you and every hope is collapsed. You lose your physical, psychological and emotional strength. Your social life would totally be affected. Besides, what people talk about the virus and the victims is rather frightening and pinching. The impact is potentially harmful (POP_1.Oct. 2008).

The reflections imply that the existence of odd perceptions towards HIV/AIDS virus and the attitude towards the victims is greatly harmful and most probably emanated from lack of proper knowledge and awareness.

Similarly, stigma and discrimination are the other underpinning factors prohibiting individual workers from undergoing VCT and know their status. As reflected in the in-depth interview, the attitude of the community towards PLWHA is considerably distorted and discouraging and caste a shadow on utilizing VCT services.

By the same token, studies conducted across Africa also disclosed that people's reluctance to undergo VCT was to a great extent associated and determined by fear of stigma and discrimination. For example, a sample study conducted in South Africa's mine workers, more than one-third of who had undergone VCT, fear testing positive and potential consequences such as stigma and discrimination, were identified as the main barriers to VCT, (Day et al. 2000 :203)

This situation is also reflected with the in-depth interview conducted with the person living with HIV/AIDS (POP_1, Oct. 2008).

As I fear the discrimination and stigmatization that might come, most of the time, I'm in conflict with myself. I always dream my illness and visualize people's gossip and pinching remarks. Sometimes, I feel that people are staring and fingering at me. Sometimes I feel as if I'm walking to the grave in the shadow of death, shouldering the ghost. Some times, I wish I were dead instantly more than knowing my HIV status. It is really a challenge to live with the virus (POP_1. Oct. 2008)

The expressions imply that discrimination and stigma hampers the workers not to experience VCT and at the same time, reflects the existence of wide gap with regard to the virus among the society.

Besides, individuals affected by the virus must be identified and their needs must be addressed. Because of the stigma attached to AIDS some HIV infected individuals have sought to conceal and/or deny their illness. It is a common knowledge that denial, blame, guilt and shame are common responses of individuals to HIV. In some cases, individuals as well as their families suffer from severe psychological disturbances; in other, infected individuals engage in self- destructive behaviors to escape the stigma and prolonged painful physical and psychological illness and strain.

These all reflections mainly emanated from failure to implement proper educational interventions, especially adult education, and /or non-existence of educational efforts among the workers in the factory.

Despite all the realities reflected, VCT provides an entry point to various HIV/AIDS services including prevention and control of HIV infection and opportunistic illnesses as well as psychological support. Furthermore, VCT benefits those people who test positive or negative by alleviating anxiety, increasing awareness of individuals' vulnerability to HIV and promoting behavioral change, and facilitating early referral for care and support.

4.3 Condom Use Behaviors

Among sexually active individuals at risk for HIV infection, it is a common knowledge that consistent and correct condom use remains the best protection option against HIV. As a result, the use of condom is globally acknowledged as an alternative option to prevent HIV infection. Condom has won global acceptance and scientifically proved and valid. However, various condom related factors affect the proper utilization of condom. Among which unethical business-oriented misinformation and some culturally biased reflections are some of them. They hindered and play the leading role in reducing the use and validity of condom and distort its image and its considerable functions.

In light to this, the study subjects were asked whether they have ever used condom.

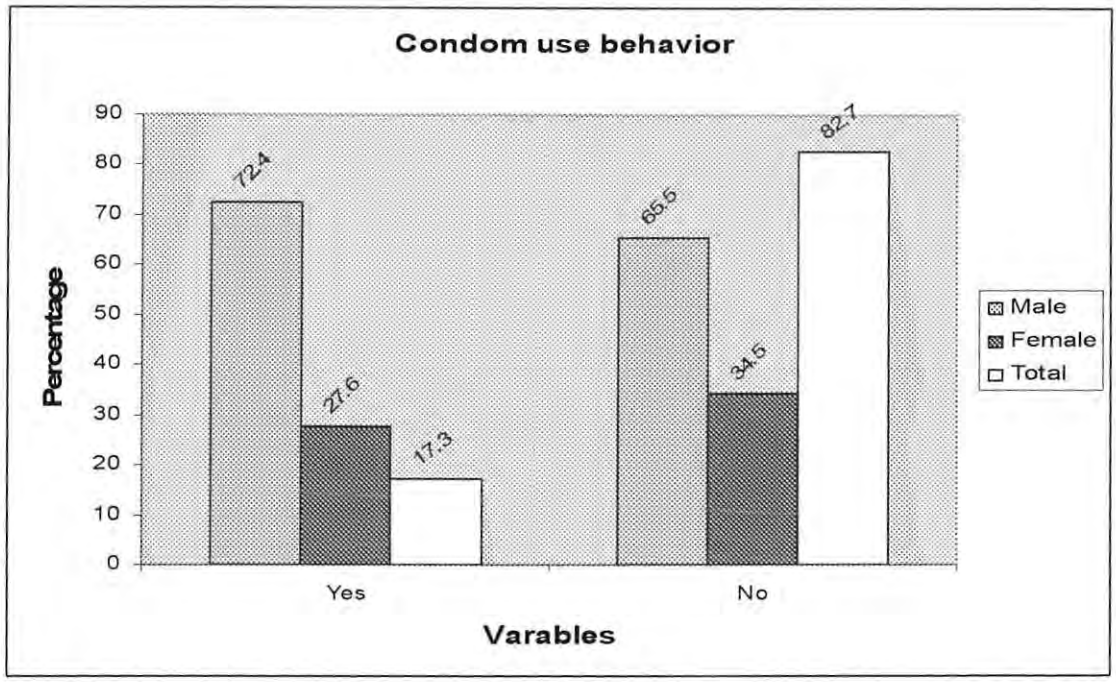

Fig.4 Respondents' condom use behavior cross tabulated by sex

Out of the total 170 male and female respondents only 29 (17.3%) confirmed that they have used condom, and 139 (82.7%) were not used condom, while two respondents did not reflect their idea. Both responses were also reflected by FGD discussants. The information obtained from the focus group discussions paradoxically supports both experiences. On the one hand, there are those groups who stand totally against the use of condom yet with unproven justifications (MAX_4, Oct, 2008).

> *According to my understanding, it is not totally useful to use condom as a protection option. To some extent it may protect HIV/AIDS, STDs and unwanted pregnancy provided that there is no production error, and there is proper utilization of the condom. However, in the absence of these conditions, it is possible to be exposed to various problems. If the problem is STDs one can get cure through available modern medication. If it is pregnancy, one can either give birth or abort in time. But if it is HIV, what solution can one gets apart from ending up. Therefore, rather than using condom as a protection option for HIV*

infection, it would be better to avoid totally if one is thinking HIV/AIDS (MAX_4, Oct. 2008).

The other respondent *(EFF_1, Oct. 2008),* on the other hand, claims the spread of HIV/AIDS to the introduction of condom in the country when he said;

> *The spread of HIV/AIDS is further intensified after condom is introduced in our country. This is because hoping that condom would protect from HIV infection, many people involve in sexual intercourse especially in an intoxicated environment with various drugs and alcohol consumptions. Besides, though unproven, I heard people say and even read some articles that say HIV is man made. If HIV is really man made and imported, how can we rely and trust and what concrete evidence do we have about condom which is also man made and imported from the same source. I don't trust condom totally. Who knows exactly whether condom itself is not a means to spread the virus? (FEF_1, Oct. 2008).*

On the other hand, there are other groups of respondents who validate the use of condom as the best alternative option to prevent HIV infections (MAE_2.Oct.2008)

> *As far as HIV infection exists and wide spread in the society, it would be unwise to avoid condom totally. Let alone more than 90 percent prevention capacity, of HIV/AIDS why not one percent, it is not an easy thing. Sex is biological in nature, and it is the need of every human being. We, as human beings, are not always in a comfortable, protective and safe environment. Hence in risky situations using condom is an avoidable and inevitably important and useful. In fact, to be faithful and loyal to one-to-one is above and beyond everything, but in a difficult situations to use condom is to a large extent a protection option (MAE_2.Oct.2008)*

In fact, both sides are based on different backgrounds. Though there are grains of truth in the justification of those who oppose the use of condom, there is also biased information in their assumption of the nature of condom, most probably, due to tenaciously clinging to traditional beliefs, values and norms influenced by lack of proper Knowledge.

Similarly, the target populations were asked the reasons for using Condom. Accordingly, out of those male and female respondents who used condom 27 (93.1%) claimed they used condom to prevent sexually transmitted diseases, while 24 (82.76%) of them, to prevent HIV/AIDS, and 9 (31.03%) of the respondents also confirmed that they used condom to prevent pregnancy.

Table 10: Respondents' reason for condom use

Variables	Responses					
	Male		Female		Total	
	No	%	No	%	No	%
To prevent STDs	21	77.8	6	22.2	27	93.1
To prevent HIV/AIDS	18	75	6	25	24	82.76
To prevent Pregnancy	2	22.2	7	77.8	9	31.01
Using condom satisfies me	----		--		--	

NB. As multiple answers were possible the percentage may not add up to 100%

On the other hand, those subjects of the study who reflected that they did not use condom were asked the reasons. As a result, out of the total 139 respondents, about 136 (97.84%) confirmed their reasons concerning lack of trusting condom, 31(22.3%) to the prohibition of their religion, while 2.2% and 1.4% justified their reasons to shaming to ask their partners and partners' objections respectively.

However, the reasons given for not using condom do not sound convincing rather tend to seem pretexts which mainly influenced by lack of proper education and the prevailing backward traditional reflections. From the responses communicated, most of the respondents seem under custody of traditional beliefs, values and norms in this modern world.

Table 11: Respondents' reasons not to use condom

Variables	Responses					
	Male		Female		Total	
	No	%	No	%	No	%
Unavailability of condom	----		---		--	
Expensiveness of condom	----		---		--	
Don't know where to get it	----		----		--	
Ashamed to ask my partner	2	66.7	1	33.3	3	2.2
Partner's objection	2	100			2	1.4
Lack of trusting condom	88	64.7	48	35.3	136	97.84
Don't know how to use condom	---		----		--	
Decreases satisfaction	---		---		--	
My religion prohibits	17	54.8	14	45.2	31	22.3

NB. As multiple answers were possible the percentage may not add up to 100%.

4.5. Alcohol consumption behaviors

It is crystal clear that alcohol consumption necessarily distorts one's sense of judgment and invites to various misdeeds and malpractices. Alcohol consumption hinders rational thinking. Besides, it is a common knowledge that in some Ethiopian cultures males are encouraged to consume alcohol and usually adventured as an expression of manhood. Yet, as alcohol affects one's sense of imagination, it drives to ill-emotional expressions. In most cases, under the influence of alcohol, people fail to practice safer sex. Failure to practice safe sex, in turn, predisposes to various sex-related problems, among which the risk perception of HIV infection is one of the serious ones.

In this regard, the study subjects were asked their behavior of alcohol consumptions. As a result, 98.2% of male and female respondents reflected their experiences, out of which 49.7% confirmed that they have never consumed alcohol at all, while 46.1% and 4.2% confirmed that they consume rarely and most often respectively.

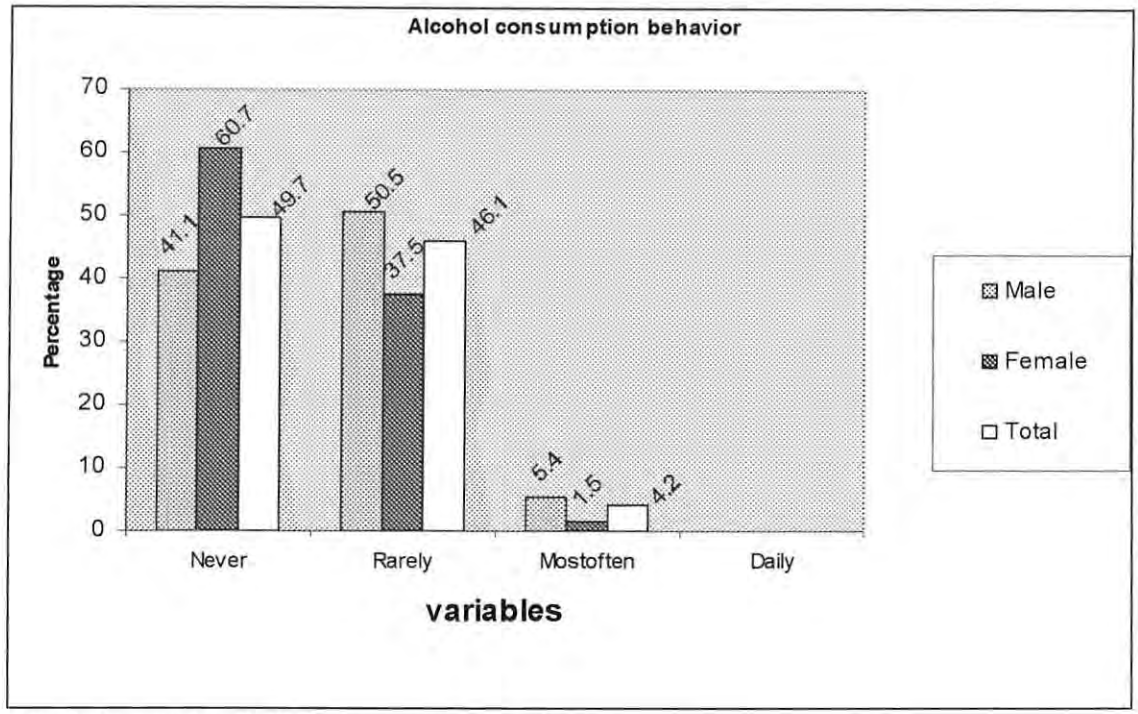

Fig.5: Respondents' alcohol consumption behavior

As can be observed from the quantitative survey, a little more than half (46.1% rarely & 4.2% most often), (50.2%) consume alcohol at different rates. These alcohol consumers seem at the potential risk perception of HIV infection that may emanate from its influences. This idea is also strongly supported by one of the FGD discussants (MAX_2, Oct.2008).

> *Alcohol and drug consumption necessarily distorts our sense of judgment and exposes us to various malpractices. Under the influence and mood of intoxication, our judgment would totally be abnormal. We lose our personality and fail to care for our deeds. Such situations easily drive us to unwanted activities and also lead us to involve into unsafe and unprotected sexual intercourse which is one of the predisposing factors to HIV infection (MAX_2, Oct.2008).*

The reflections of the respondents evidently imply the proper perception of the impacts of alcohol and its predisposing effects. At the same time, the FGD discussants witnessed the consequences and reflected the effects observed in their factory environment in their discussions (FED_1, Oct.2008).

Though it is difficult to tell how many they are, there are many workers in this factory who are exposed to various addictions- alcohol, Chat, cigarette, and even Shishah. There were some workers who fell under the influence of various addictions and were expelled from their regular work due to their failure to discharge their responsibilities. Some of them disintegrated their families and even some were exposed to HIV/AIDS and lost their life (FED$_1$, Oct.2008).

The response of the FGD indicates that alcohol consumption not only exposes to HIV infection but also to a great extent exposes to various social and economic problems. The expression further indicates the practical experiences of the respondents on the effect of alcohol consumption.

To ascertain the influence of alcohol as one of predisposing factors that drive to sex, the respondents were asked whether they practice sex after alcohol consumption or not.

Accordingly, as reflected in Table12, out of 84 (50.3%) male and female alcohol consumers in different rates, the majority, 81 (96.43%) confirmed that they would definitely practice sex; while a small proportion about 3 (3.57%) denied that they would not practice sex after alcohol consumption.

Table 12 Respondents' sex behavior after alcohol consumption

Variables	Respondents					
	Male		Female		Total	
	No	%	No	%	No	%
Yes	59	72. 8	22	27. 2	81	96. 43
No	3	100			3	3. 57

These responses indicate that sex after alcohol consumption is a common practice and definitely accelerates the chance of risk perception of HIV infection among the consumer populations.

On the other hand, to assure and evaluate the position of alcohol consumers on the prevention of HIV/AIDS and STDs, they were asked whether they practice safer and

protected sex by using condom with sex after alcohol. Out of the total 84 alcohol consumers, about 5 (5.95%) confirmed that they used and while only about 5(5.95%) said that they did not use condom after alcohol consumption. The remaining 74 (88.05%) refused to reflect their opinion probably due to the sensitivity of the issue.

As can be observed from the quantitative survey responses, alcohol consumption most probably paves the way to unsafe sex practices and facilitates the extent of potential risk perception of HIV-infection

Table 13 Respondents' condom use behavior with sex after alcohol consumption

Variables	Responses					
	Male		Female		Total	
	No	%	No	%	No	%
Yes	5	100			5	5.95
No	5	100			5	5.95
Don't remember						

Similarly, the study subjects were asked whether they have experienced sex with commercial sex workers both at sober or intoxicated environment.

Accordingly, out of the total 113 respondents 95 (84.05%) reflected their opinion and as a result only 10 (8.85 %) had confirmed their experience of involvement while 85 (75.2%) reflected their non-involvement in the experiences. Though the result seems insignificant, the existence of the experience itself implies the possibility of having the chance of risk perception of HIV infection among the adult populations.

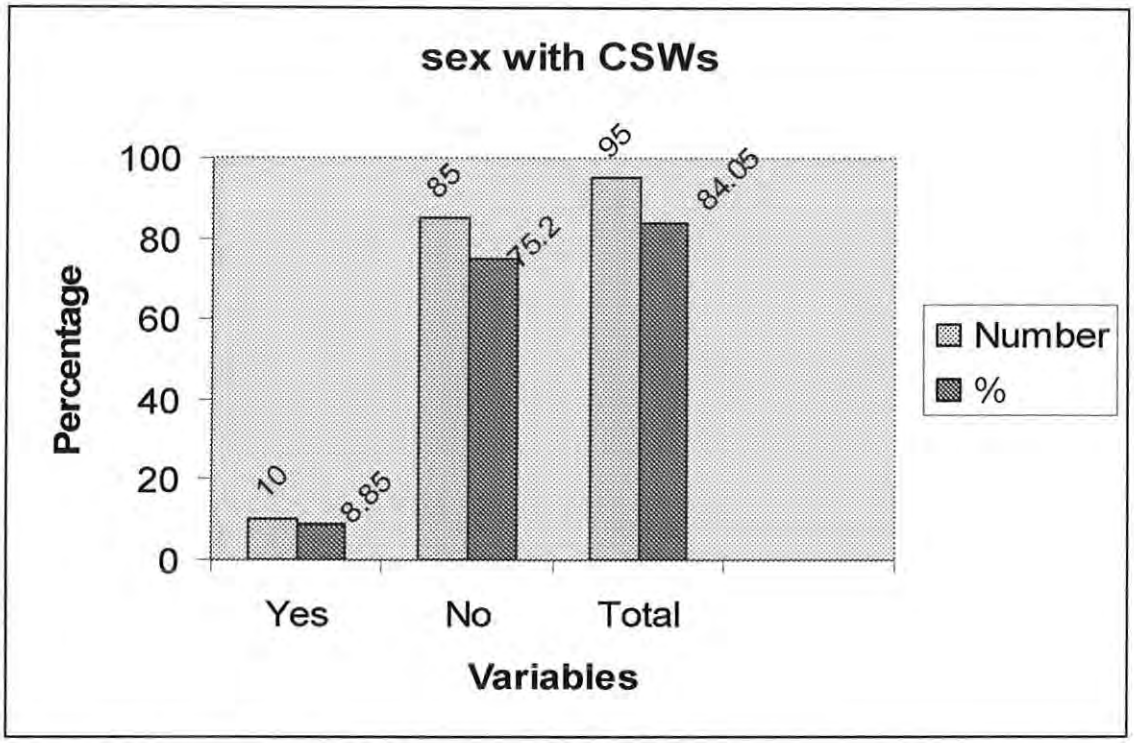

Fig. 6 Male respondents who experience sex with CSWs

4.6 Multiple Sexual Partners

In the context of HIV/AIDS prevention and control, limiting the number of sexual partner to one and only one and having protected sex is what globally won and celebrated idea and crucial to combat the epidemic.

One of the many predisposing factors to HIV infection is expected to be multiple sexual partners. Despite the sensitivity of the issue, particularly in our cultural context, the study subjects were asked about the number of sexual partner they ever had.

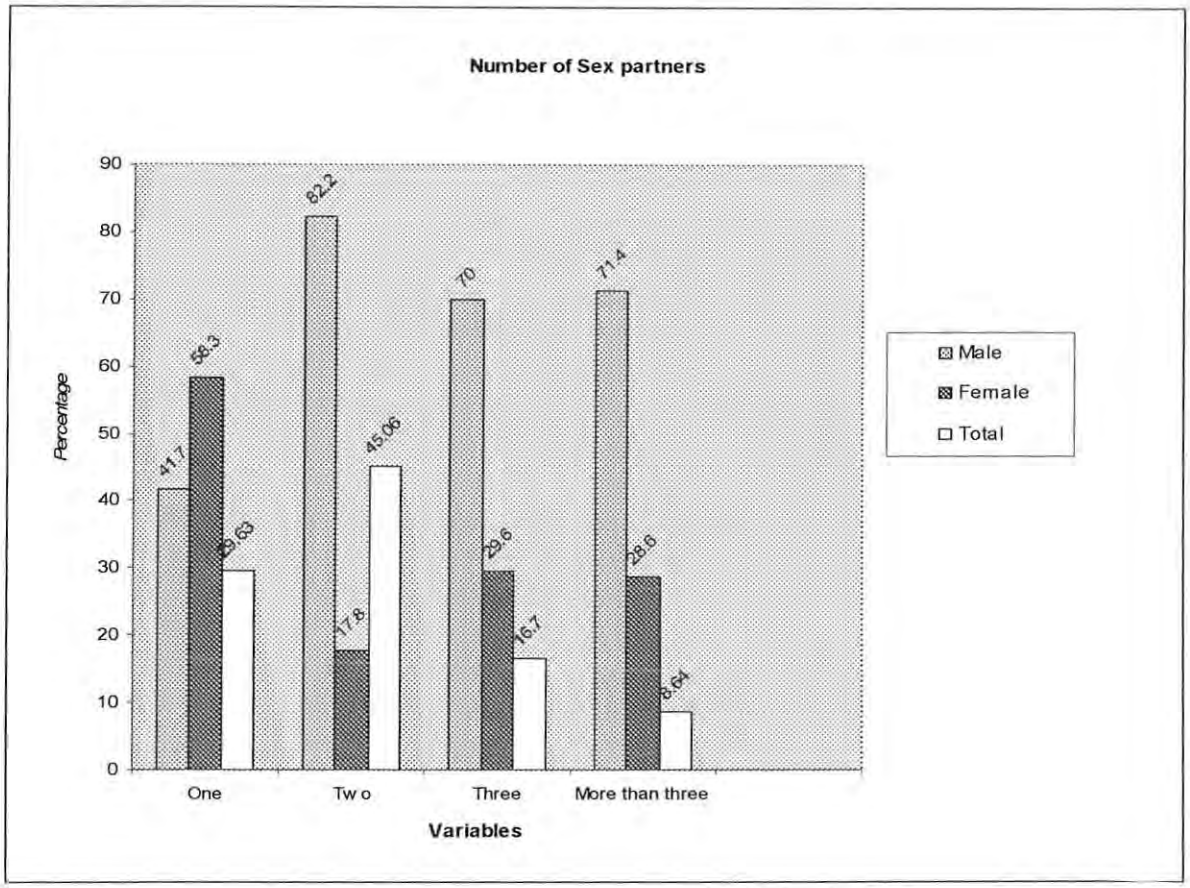

Fig. 7: Respondents' with multiple sexual partners

Although, the respondents answers is to some extent subject to bias due to the issues' sensitivity, they reported that 8.64% , 16.7% , 45.06% ,and 29.63% they have had involved themselves in sex more than three times, only three times, only two times and only one time respectively. On the whole, more than 70% have had involved in multiple sexual partners which to a great extent predisposes to potential risk perception to HIV infection.

In spite of diverse socio-cultural thoughts and practices of multiple sexual partners, the possibility of having multiple sexual partners is highly criticized by the FGD discussants. It is considered as an outdated and discouraging tradition which necessarily needs to be eradicated. As commented by one of the FGD discussants (FEE_1, Oct. 2008):

> *It is true that having multiple sexual partners is dangerous and exposes not only to HIV infection but also to various social and economic problems. It is one of*

the predisposing factors to HIV infection and it is also one of unfavorable traditions and trends that we have to fight against to get rid of it (FEE_1, Oct. 2008).

On the other hand, the extent of awareness and comprehensive knowledge of HIV/AIDS is mainly associated with age, education, religion, economy and gender among other factors that exposes people to involve in the environment of multiple sexual partners. The FGD discussants exhaustively reflected the entire situation of multiple sexual partners in relation to the raised issues.

Regarding the influence of age risk perception of HIV infection, the FGD discussants have communicated the following as reflected by one of the participants (MAE_2, Oct.2008).

At youth age, most of the time, we are influenced by our emotional feelings. We tend to do things driven by our emotional feelings. From this perspective, most of us do not pay too much attention to our deeds and we do not visualize repercussions. Our emotional feelings overwhelm us and distort our thinking. Though difficult to generalize, our immature age fuels on our hasty decision and emotional feelings. So, we would easily be driven into multiple sexual practices (MAE_2, Oct.2008).

Similarly, education, though not universal, it is a common knowledge that it has a significant impact on our emotional feelings and rational thinking. It is universally acceptable that as one is better educated, one would have better rationalization. As a result, the educators have better opportunity to comprehend and acquire knowledge particularly on the information of HIV/AIDS and adverse effects of HIV infection. But this does not mean that all educated are out of the risk of HIV infection. The FGD discussants strongly supported the idea, as one of the participants (MAX_5, Oct.2008) said:

There are many well educated people including in our factory that were most probably involved in multiple sexual practices and unfortunately infected by HIV/AIDS and lost their precious life (MAX_5, Oct.2008).

Regarding religion, there are many adverse reflections of realities. One of the FGD participants (MAF_2, Oct.2008) said:

> *No religion, I believe, encourages unsafe and unprotected sex. In almost all religions, it is considered as a sin. But the main issue is whether everyone is strictly adhering to the rules, regulations and principles of one's particular religion. If one is not up to the rules, regulations and principles of his religion, it is possible to end up in the wave of risk of HIV infection (MAF_2, Oct.2008).*

As reflected in the response of the FGD, in some religions and cultures there is a possibility for a man to marry more than one wife. However, these opportunities require the beneficiaries to be consistent to the rules, regulations, and principles of the particular religion or culture. If a man is to have more than one wife due to either his religion or culture, he has to be committed to its ethics and principles; and the women have to also be faithful to their only husband. Otherwise, it is an open secret that having multiple sexual partners under the cover of either religion or culture is a potential danger to end up in higher risk perception of HIV infection.

As a matter of fact, economic problem can be one of the many predisposing factors that drive especially women to run into multiple sex businesses. There are many Female factory workers who involve in multiple sex business to earn their life directly selling their respected body. The majority are women who failed to sustain their life unless they sell their body. Because they can not afford their daily needs and at the same time, it is an easy access in their hands through which they can easily earn money to sustain their life and combat the challenge of poverty. This is because they earn low income. As a result they involve in multiple sex business as a side work to supplement their meager income. These women employ sex as an opportunity to satisfy their material needs.

Unfortunately, it is regretful to see such women being exposed to various problems including HIV infection and spoil their precious life. It is again regretful to lose such productive workers. It is as well shameful to the entire society to see such women involving in degrading, humiliating and risky businesses to affect their life.

The FGD discussants further Commented on the situation of gender by reflecting adversely through their thoughtful expressions ($MAF_{6,}$ Oct.2008):

> *Though it would be erroneous to generalize, for the most part women are more vulnerable to various sex abuses. This is, though the government is working against, for one thing, our culture encourages and adventures sex abuse. As a result, many women are victims of rape, abduction and coerced sex. For another, women are economically dependent on their male partners for survival. Hence, the situation reinforces their vulnerability to sex abuses which in turn exposes them to multiple sexual partners ($MAF_{6,}$ Oct.2008).*

As reflected in the expression of the FGD respondents, having multiple sexual partners is the prime predisposing factor of risk perception of HIV infection associated with multiple socio-economic, demographic and cultural variables.

4.7. Misperception of HIV Virus

One of the many predisposing factors to risk perception of HIV infection is the misperception held among the society towards HIV virus. Despite misperceptions of the nature of the virus, the ways of transmission, mode of prevention, various misperceived biases are rampantly prevailing in the community. One of these misperceptions is the opinion of many people that a healthy looking person can not be HIV infected. Hence, to identify whether the study subjects are the victims of this unfounded misperception and to evaluate the gap exists, they were asked if a healthy looking person can be HIV positive or not.

Table 14 Respondents' perception of Physical appearance

Variables	Responses					
	Male		Female		Total	
	No	%	No	%	No	%
Yes	18	81.8	4	18.2	22	13.4
No	12	75	4	25	16	9.8
Not sure	81	64.3	45	35.7	126	76.83

Accordingly, out of the total respondents involved 164(96.5%) of them reflected their perception. As a result, a small proportion, 13.4% agreed that a healthy looking person can be HIV positive. But the majority, 76.83% are doubtful and they responded they are not sure. Though the proportion of the respondents is not as such to be exaggerated, about 9.8% are completely out of the track and responded that a healthy looking person can not be HIV positive.

Despite the concerted national and specific efforts to mitigate the prevalence of HIV infection through various mass Media, the existence of such respondents clearly imply the existence of a gap and potential risk perception of HIV virus and also calls for more concerted efforts to intervene in the implementation of knowledge and awareness creation activities.

4.8. Exposure to media

Exposure to HIV/AIDS information and messages widens the horizon of understanding the nature, transmission, prevention and control of the infection. It also empowers individuals and groups with the possible caretaking mechanisms and thereby, develops rational thinking and one's perspective and attitude towards PLWHA. In this regard mass Media (Radio, TV, print materials) are important source of information and play significant role in addressing HIV/AIDS issues to the vast majority audiences far and wide.

Besides, mass Media are powerful instruments in introducing new information, ideas and findings of new developments to the vast majority of audiences. They also influence the opinions and attitudes of the public towards the desired result if they are properly employed. Mass media plays major role to increase awareness and knowledge of various aspects of life and instrumental in bringing attitudinal change both at individual and societal level.

Table 15: Respondents' exposure to media

	Male		**Female**		**Total**	
	No	**%**	**No**	**%**	**No**	**%**
Most often	**58**	**57.4**	**43**	**42.6**	**101**	**59..76**
Occasionally	**41**	**74.5**	**14**	**25.5**	**55**	**32. 54**
Rarely	**13**	**100**			**13**	**7.7**
No exposure	**----**					
Total	**112**	**99.12**	**57**	**100**	**169**	**99.4**

In this regard, the study subjects were asked the extent of their exposure to Media with programs on HIV/AIDS to identify whether they have shared the opportunity of accessing the messages and information aired to the public. As a result, 99.4% reflected that they have access to the media in varying degrees. The FGD discussants also shared similar opinion and they have communicated the benefit they have obtained from the Mass Media-Radio, News papers, Magazines, TV, etc.

4.9. Level of risk perception

Risk perception is highly associated with various socio-economic and demographic predisposing factors. Knowledge of the respondents about the nature of the virus, ways of transmission and mode of prevention; knowledge of one's HIV status, through VCT; behavior of condom utilization; behavior of alcohol and drug consumptions as well as various sex related socio-cultural values predisposes to different degree of risk

perception. Above all risk perception of HIV infection is highly influenced by the sexual experiences of individual respondents.

In light of this, through the quantitative survey, the study subjects were asked to evaluate and level their risk perception towards HIV infection. As a result, a total of 159 (93.5%) reflected their perception out of which 85 (53.5%) respondents leveled themselves as high or moderate risk perceivers, and about 74 (6.5%) of the respondents leveled themselves as low or no risk perceivers, while about 11(6.5%) of the respondents failed to reflect their perception.

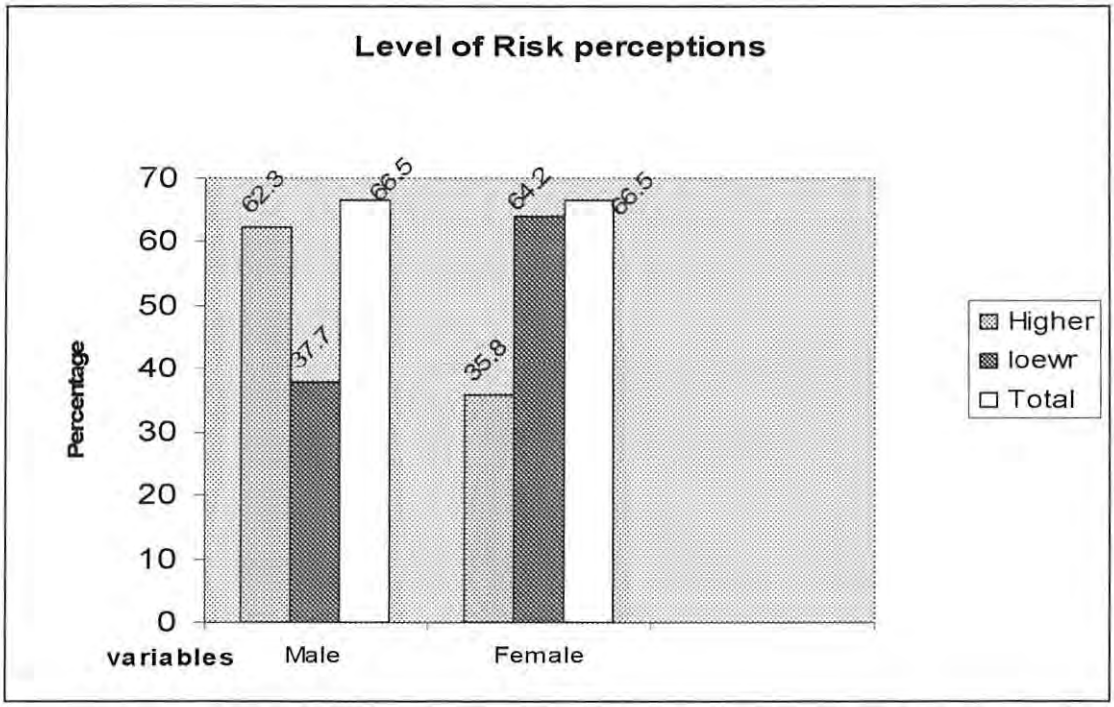

Fig. 8: Respondents' Level of Risk Perception

As can be observed from the responses, significant number of the male respondents is both at high and moderate (higher) risk perception. In spite of the biological, socio-cultural and economic vulnerability, the proportion of the female respondents to high and moderate risk perception is low compared to the male counter parts. However, probably the male portion of the respondents might have possessed better knowledge of the nature of the virus, means of transmission and prevention so that they might have better understanding than the female counter parts.

Furthermore, to identify the study subjects' responses, they were asked to justify the reasons why they come to say that they are at either high or moderate level of risk perception of HIV infection. Admittedly, some impressive responses were secured from the quantitative survey.

Table 16: Respondents' to high or moderate (higher) level of risk perception

Variables	Responses					
	Male		Female		Total	
	No	%	No	%	No	%
I have had sex with more than one sex partner	62	76.5	19	23.5	81	96.4
I have had sex without condom	57	76.0	18	24	75	89.3
I have had sex with commercial sex workers	6	100	--		6	7.14
I have shared sharp edged materials	1	100			1	0.6
I have used untested blood						
I have shared inject able needles						
I don't trust my partner	4	80	1	20	5	5.95
I haven't undergone VCT	61	79.2	16	20.8	77	91.67

NB. As multiple answers were possible the percentage may not add upto100%.

Accordingly, of those respondents who level themselves as high or moderate (higher) risk perceivers, significant number 77 (91.7%) reflected their reason as they have not undergone VCT, while 81 (96.42%) confirmed that they have had sex with more than one sex partner, 75 (89.3%) have had sex without condom, 47 (56.95%) have shared sharp edged materials, and about 5 (5.95%) don't trust their partners respectively. Similarly, 6 (7.14%) of male respondents agreed that they have had sex with commercial sex workers.

In all cases, in the case of not having VCT, in the case of sex without condom or in the case of sex with commercial sex workers, the potential of having the chance of higher risk perception of HIV infection is at arms length.

On the other hand, the target populations who responded that they are at low or no risk levels were asked for justifications to come up with clear, accurate and sound information about the situation at hand.

Table 17: Respondents' low or no (lower) level of risk perception

Variables	Responses					
	Male		Female		Total	
	No	%	No	%	No	%
Abstained from sex	-		1	100	1	0.6
Faithful to my partner	22	40.7	32	59.3	54	70.13
Trust my partner	25	64.1	14	35.9	39	50.64
Always use condom	1	100			1	0.6
Never had sex with commercial sex workers	21	100	-		21	12.4
Never used untested blood transfusion	24	88.9	3	11.1	27	35
Never shared sharp edged materials	17	85	3	15	20	25.97
I have undergone VCT	3	100			3	1.8

NB. As multiple answers were possible the percentage may not add up to100%.

Accordingly, 70.13% respondents justified their reason as they are faithful to their partners. Out of the respondents, 50.6% confirmed that they trust their partner, and about 35% of the respondents reflected that they had never used untested blood transfusion respectively. At the same time, 25.97% of the respondents indicated that they have never shared sharp edged materials; while 3.9% male respondents reflected that they have undergone VCT for HIV/AIDS respectively. Apart from this, about 21 (27.3%) male respondents confirmed that they never had sex with commercial sex workers. The quantitative respondents' views were strongly supported by the FGD discussants in that all agree on the main preventive methods of HIV infections, provided that everyone is up to his words.

4.10 Factors Affecting Risk perception of HIV Infection

The factors that are suspected to have relationship to risk perception of HIV infections among adult population of Nazareth Tractor Assembling Factory were explored in this sub-Chapter. To analyze the factors influencing and/or determining risk perception of HIV infection, bi-variant analysis was employed.

The bi-variate analysis, X^2 (Chi-square) tests was employed to show whether the variables have association or whether the variables are statistically significant or not. The quantitative and qualitative survey have shown evidently that the overall risk perception of HIV infection of the respondents are shaped by risk related factors such as demographic and socio-economic factors.

4.10.1 Bi-variate Analysis

Risk perception of HIV infection among adult population is found to be varied under the influence of various factors. Under this section the assumed relationship between the dependent (risk perception of HIV infection) variable and selected independent (demographic and socio-economic) variables and some selected variables were examined by the Pearson chi-square test. A high value of Pearson chi-square ($p \leq 0.05$) and small value ($P \leq 0.01$) show the presence of casual association between the dependent and its specified predictors. The bi-variate relationship between the dependent variable and independent variables are presented in table 18-A and B.

4.10.2 Demographic and Socio-economic Characteristics and Risk Perception of HIV Infection

The dependent variable, risk perception of HIV infection, was considered here; the variables included in the analysis were sex, age, ethnicity, religion marital status and monthly income.

Table 18-A: Demographic and socio-economic characteristics of respondents and perceived level of risk of HIV infection

Sex of Respondents		**Higher Risk**	**Lower Risk**	**X^2**	**P-Value**
	Male	**66(62.3%)**	**40(37.7%)**		
	Female	**19(35.8%)**	**34(64.2%)**	**9.906**	**.002**
Age Group	**21 - 30**	**39(48.8%)**	**41(51.3%)**		
	31 - 40	**22(52.4%)**	**20(47.6%)**	**2.667**	**.264**
	41 - 50	**24(64.9%)**	**13(35.1%)**		
Religious Affiliation	**Orthodox**	**60(58.3%)**	**43(41.7%)**		
	Muslim	**10(47.6%)**	**11(52.4%)**	**2.870**	**.244**
	Protestant	**15(42.9%)**	**20(57.1%)**		
Ethnic group	**Amhara**	**34(63.0%)**	**20(37.0%)**		
	Oromo	**28(50.0%)**	**28(50.0%)**		
	Guraghe	**9(50.0%)**	**9(50.0%)**	**3.174**	**.362**
	Others	**14(45.2%)**	**17(54.8%)**		

X^2 = Chi-square **P-Value= Significant level at P** < 0.05

Sex: one of the predictor variables and has association with the dependent variable is sex at (X^2 = 9.906; P <0.05). The proportion of male who perceive higher risk of HIV infection is higher than that of female (i.e. 62.3%and 35.8% respectively).From this result obtained it is possible to conclude that males have higher risk perception than females in spite of the assumption that female are biologically, culturally and economically vulnerable.

Age: Age is one of the predictor variables expected to show association with dependent variable. However, the result of this study has shown no association with the perceived

chance of HIV infection as revealed in the Chi-square (X^2 = 2.667; ^{P} >0.05). The possible explanation for the revealed result might be the fact that awareness creation efforts of various mass media have potential effect on the knowledge of the respondents involved in the study.

Religious affiliation: An attempt was made to see whether or not there is any association between religious affiliation of participants and their level of risk perception. Unfortunately, the Chi-square test revealed that (X^2 = 2.870; P >0.05) there was no association between respondents religious affiliation and risk perception of HIV infection. The reason could possibly be the setting of the study area. It might have positively affected the attitude of the respondents.

Ethnicity: Ethnic background is one of the predicted independent variable treated to show the existence of statistical association with dependent variable (risk perception of HIV infection). Unfortunately, the Chi-square test revealed that(X^2 = 3.174; ^{P} >0.05) there was no association between respondents ethnic background and risk perception of HIV infection. The moderate environment of the study area and the interaction of the respondents might have imposed positive influence.

Marital status: This is another independent predictor variable believed to have influence on ones risk perception of HIV infection. However, the results of the Pearson Chi-square test (X^2 = 1.827; ^{P} >0.05) indicated that there is no significant association between the dependent variable and marital status of the respondents. The possible reason for the reflected response most probably could be the majority of the respondents were married and might have confined to the value of marriage.

Educational status: Education was expected to be an important protective factor leading to lower level of risk perception to HIV infection. However in this study, it was found to have no association with the perceived chance of HIV infection as revealed in the Pearson Chi-square (X^2 = 4.033; ^{P} >0.05). The possible explanation for this might be the fact that more than 82% of the respondents have an education level of grade 5 and more. As a result, they might have better attention to HIV/AIDS related information and might enable them to give response to value ones life.

Table 18-B: Demographic and socio-economic characteristics of respondents and perceived level of risk of HIV infection

		Higher Risk	Lower Risk	X^2	P-Value
Marital Status	**Never married**	**17(54.8%)**	**14(45.2%)**		
	Married	**59(54.6%)**	**49(45.4%)**		
	Divorced	**7(53.8%)**	**6(46.2%)**	**1.827**	**.609**
	Widowed	**2(28.6%)**	**5(71.4%)**		
Educational Status	**Illiterate**				
	Grades 1 - 4	**18(66.7%)**	**9(33.3%)**		
	Grades 5 - 8	**20(54.1%)**	**17(45.9%)**		
	Grades 9 - 10	**21(44.7%)**	**26(55.3%)**	**4.033**	**.401**
	Grades 11 - 12	**10(62.5%)**	**6(37.5%)**		
	12+	**16(50.0%)**	**16(50.0%)**		
Average Monthly Income	**<=500**	**22(55.0%)**	**18(45.0%)**		
	501 - 1000	**33(50.8%)**	**32(49.2%)**		
	1001 - 2000	**22(52.4%)**	**20(47.6%)**	**1.883**	**.597**
	>= 2001	**8(72.7%)**	**3(27.3%)**		

X^2 = Chi-square **P-Value= Significant level at $P < 0.05$**

Average monthly income: This variable was also expected to show the presence of statistical association with perceived risk of HIV infection. However, the Pearson Chi-square value (X^2 = 1.883; ^{P} >0.05) revealed that there is no association between the independent variable and the perceived risk of HIV infection. The reflection of the respondents might have triggered from their access to monthly income in the factory.

4.10.3 Selected Predictive variables and risk perception of HIV infection

In this section, respondents' knowledge of HIV infection, knowledge of HIV status, condom use, alcohol consumption, multiple sexual partners, and contact with

commercial sex workers, misperception of HIV /AIDS and exposure to media were treated as independent variables to examine their relationship with the dependent variable (risk perception of HIV infection). The casual association between the dependent and independent variables is presented in Table 19-A and B.

Table 19-A: Level of Risk perception to HIV infection of the adult workers by selected variables

	Variables	High or moderate	Low or No	X^2	P-Value
Knowledge of HIV/AIDS	A Virus	51(54.8%)	42(45.2%)	.454	.929
	An evil spirit	6(50.0%)	6(50.0%)		
	A curse from god	12(54.5%)	10(45.5%)		
	A biological weapon	15(48.4%)	16(51.6%)		
Undergone VCT	Yes	12(34.3%)	23(65.7%)	6.631	0.010
	No	73(58.9%)	51(41.1%)		
Ever used condom	yes	16(59.3%)	11(40.7%)	.344	.557
	No	69(53.1%)	61(46.9%)		
Alcohol Consumption	Never	30(38.0%)	49(62.0%)	20.132	.000
	Rarely	48(68.6%)	22(31.4%)		
	Most often	7(100.0%)	0(.0%)		
Sex with commercial sex workers	Yes	6(75%)	2(25%)	.370	.543
	NO	54(64.3%)	30(35.7%)		
	Total	60(65.2%)	32(34.8%)		

X^2 = Chi-square P-Value= Significant level at $P < 0.05$

Knowledge of HIV/AIDS: knowledge of HIV/AIDS is one of the independent predictor variables believed to have statistical association with the perceived chance of HIV infection. Unfortunately, the Pearson Chi-square value ($X^2 = .454$; $^P > 0.05$) revealed that the expected variable was found to have no statistical association with the perceived

chance of HIV infection. The possible explanation for the absence of statistical association might be attributed to the level of education of the respondents.

Knowledge of HIV/AIDS status: This is one of the predictor variables that are expected to have stronger association with the respondents' level of risk perception. Fortunately, the predictor variable is found to have good association with the dependent variable as expected. As can be seen from Table 19, the Chi-square test result (X^2 = .454; ^{P}<0.05) shows that respondents who have never undergone VCT for HIV to know their status perceive higher risk of HIV infection (58.9%) than those who have undergone VCT for HIV (34.3%).

Ever used Condom: It is one of the variables believed to have stronger statistical association with the level of risk perception of HIV infection. It is also believed to have potential influence on the level of risk perception of HIV infection. However, in this study, the Pearson Chi-square test (X^2 = .344; ^{P} >0.05) indicated that there is no significant association between the dependent and independent variables. The possible reason for the reflected response could be the level of the awareness of the respondents.

Alcohol Consumption: Alcohol consumption is one of the predictor variables to have good statistical association with the perceived risk of HIV infection. As expected, alcohol consumption was found to have statistical association with risk perception of HIV infection. As revealed in the Pearson Chi-square test (X^2 = 20.132; ^{P}< 0.05), 100% of who consume most often, 68.6% of who consume rarely and 38% of non consumers were found to have been higher risk perceivers of HIV infection respectively.

Sex with CSW: The respondents' involvement in the behavior of sex with CSWs is expected to have shown statistically significant association with dependent variable (perceived chance of risk perception). Unfortunately, the Pearson Chi-square test (X^2 = .370; ^{P}>0.05) indicated that there is no significant association between the variables. The possible response for the perceived result might be that the respondents are well aware of the negative consequences of sex with commercial sex workers.

Table 19 –B: Level of Risk perception to HIV infection of the adult workers by selected variables

	Variables	High or moderate	Low or No	X^2	P-Value
Multiple sexual partners	One	7(15.6%)	38(84.4%)	39.704	.000
	Two	48(66.7%)	24(33.3%)		
	Three	19(79.2%)	5(20.8%)		
	More than three	9(75.0%)	3(25.0%)		
A healthy looking person can be HIV positive	yes	10(47.6%)	11(52.4%)	2.605	.272
	No	11(73.3%)	4(26.7%)		
	Not sure	63(53.4%)	55(46.6%)		
Exposure to mass Medias	Most often	20(47.6%)	22(52.4%)	5.774	.056
	Occasionally	39(66.1%)	20(33.9%)		
	Rarely	26(45.6%)	31(54.4%)		

X^2 = Chi-square P-Value= Significant level at $P < 0.05$

Number of sex partners: Among the many predictor variables, number of sex partners is one of the independent variables expected to have statistically significant association with the perceived chance of HIV infection. Fortunately, as expected number of sex partners as revealed in the result of Pearson Chi-square test (X^2 = 39.704; ^{P} <0.05) indicated the presence of stronger association between the variables.

Perception of Healthy looking Person: This is one of the expected variables to have statistically significant association with the perceived chance HIV infection. However, contrary to the expectation, the result of the Chi-square test (X^2 = 2.605; ^{P} >0.05) indicated the absence of statistical significance between the variables. The possible response for the perceived result might be the respondents' level of consciousness towards HIV infection.

Exposure to mass Media: It is a common knowledge that mass Media play major roles in increasing awareness and knowledge of various aspects of life and are very vital in bringing about behavioral change both at individual and societal level. Unfortunately, the result of the Pearson Chi-square test ($\mathbf{X^2}$ = 5.774; ^{P} >0.05) indicated the absence of association between the variables. The possible reason for the perceived result might be the respondents' access to perceive the information aired to the public regarding HIV virus.

CHAPTER- FIVE

Summary, Conclusions and Recommendations

5.1 Summary

The main objective of this study was to investigate the level of risk perception of HIV infection among adult populations in Nazareth Tractor Assembling Factory - Adama as well as to asses the level of risk perception of the adult population towards HIV/AIDS and to examine whether social, economic, and demographic factors have associations with adult populations risk perception of HIV/AIDS.

Accordingly, the major findings the study were summarized as follows:

Major Findings of the Study

1. The study revealed that among adult male and female respondents involved in the study, about three-fifth (59.8%) have knowledge of HIV/AIDS, and responded that HIV is a virus;

2. About 40.15% of the respondents misperceived the virus and claimed as an evil spirit, a curse from God or a biological weapon developed by whites to clear out the black race from the surface of the earth;

3. The study also disclosed that considerable proportions of adult workers (37.65%) of the respondents perceived that HIV can be cured;

4. Out of the total respondents, the majority (78.2%) reflected that they have not undergone VCT to know their status;

5. Stigma, discrimination, lack of proper knowledge and lack of conducive VCT facilities were reflected for not getting VCT among the factory workers;

6. Only 21.8% reflected that they have undergone VCT and know their HIV status;

7. The majority (82.7%) denied using condom. The rejection and denial of undergoing VCT and condom use is associated to various socio-economic and cultural influences and factors;

8. Adult workers being confined under detention of deep-rooted backward traditional beliefs, values and norms, many of them are aginst change and fear of adapting the new trends in life. As a result, some respondents not only strictly were denying receiving the validity of condom but also persistently clinging to misperceptions towards condom;

9. Alcohol consumption is also found to be one of prevailing experiences among adult workers where about 50.3%, regardless of their gender differences, have been found consumers;

10. Of those alcohol consumers, 96.43% of the quantitative survey respondents reflected that they have experienced sex after alcohol consumption;

11. Of the total 113 male respondents in the quantitative survey, only 95 (84.05%) reflected their opinion and out of which only 10 (8.85%) confirmed that they have experienced sex with CSWs;

12. Though having multiple sexual partners is considered and believed by most of the FGD discussants as one of the predisposing factors to HIV infection, the majority (more than 70%) of the quantitative survey respondents paradoxically reflected that they have been involved in practicing multiple sexual partners partly due to ignorance and partly due to religious and cultural reasons;

13. Of those who involved and reflected their perception nearly 76.83% are found to say that they are not sure whether a healthy looking person is HIV infected or not;

14. About 99.4 % of the respondents revealed that they have access to media on HIV programs at varying degrees and shared the opportunity of acquiring messages and information aired to the public;

15. Despite respondents various sexual behavior, of the total respondents 93.5% reflected their perception and out of which 53.5% perceived themselves as higher risk perceiver while 46.5% perceived themselves as lower risk perceivers;

16. The bi-variate analysis with chi-square test has also disclosed the prevalence of strong association between the independent variables (sex, knowledge of VCT, alcohol consumption and multiple sexual partners) and the dependent variable (risk perception of HIV Infection).

5.2 Conclusions

In the absence of biomedical remedies, one of the main remedies left to society to fight against HIV/AIDS is education or behavioral intervention. Education should be part and parcel of every intervention against the disease. It is the only vaccine that we rely on (World Bank, 2004). Education in the adult workers environment presupposes the application of the methodology of andragogy. This is because adults require the consideration of specific adult focused learning environment, which gives due attention to their experiences and their long standing values.

Hence, adult education which is significantly appropriate to the social, psychological, cultural and emotional status of adulthood is the prime intervention alternatives to be chosen to mitigate the risk perception of HIV infection among adult workers.

As evidently reflected from the study, the level of knowledge of adults about the nature of HIV infection, the ways of transmission, the skill and knowledge of the prevention mechanisms backed by practical experiences determine the extent of risk perception towards HIV infection and exposure to the potential impacts of the epidemic. Despite such evidences, the utilization of mitigation measures such as condom use, VCT and exposure to mass Media on programs related with HIV/AIDS, adult education intervention and to similar preventive mechanisms in countries, like Ethiopia, where the impact of HIV/AIDS is highly threatening among the productive and reproductive age population is very limited.

Rather significant numbers of adult workers are found engaged into various predisposing factors such as alcohol consumption, multiple sexual partners, and to various misperceptions that expose them to high risk perception of HIV infection.

Having correct assessment of personal risk perception of HIV infection is extremely important for the target population to take appropriate measures to protect themselves against HIV/AIDS. It is equally important to the concerned institutions to design specific work place intervention programs.

Though knowledge and awareness about HIV/AIDS seem moderate, considerable proportion of adult workers have been found in the wave of misperception about the possible ways of transmission and prevention mechanisms.

On the whole, the experience in the factory has shown various gaps regarding HIV/AIDS mitigation which play a pivotal role in the chance of risk perception of HIV/AIDS infection among adult populations. Among which the following are some of worth mentioning:

- Non-existence of educational efforts, especially adult education intervention, which is critically important in facilitating awareness creation and empowering adults with proper knowledge;
- Non-existence of specific functional workplace HIV policy which enables institutions to mainstream HIV/AIDS mitigation intervention programs in the factory's strategic plan;
- The existence of underpinning barriers such as stigma and discrimination emanated from lack of proper knowledge and resulted in misperception about HIV virus;
- Reluctances to undergo VCT due to the fear of the potential harmful impacts of HIV positive results;
- Refusals to use condom due to misperceptions and unfounded fear and also clinging to backward traditional beliefs, values and norms;

- Non-existence of care and support services in the factory for HIV infected workers and their families.

All these add up to the chance of potentially higher risk perception of HIV infection, which evidently requires an urgent intervention program design in Nazareth Tractor Assembling Factory productive and reproductive adult workers from the potential danger envisaged.

5.3 Recommendations

Based on major findings, summary and conclusions forwarded, the following recommendations were made:

1. Adult workers in Nazareth Tractor Assembling Factory do not possess promising knowledge, which enables them to protect themselves from the potential risk perception of HIV infection. Therefore, it is critically important that the management of the Factory has to work towards educating them with in-depth and profound knowledge and understanding of HIV infection and coping mechanisms;

2. The HIV/AIDS intervention in the world of work should necessarily consider adult education to impart an integrated and holistic knowledge. In short, the strategies in the Factory should presuppose adult education to enable adult workers to tackle the pressing HIV problems prevailing in their environment;

3. HIV/AIDS problems can not be solved by few groups engaged in the mitigation efforts, unless people from all walks of life have deep understanding and involved in various decision making processes. Hence, the factory should ensure that every one is armed with the required HIV knowledge and reach workers through formal, informal and non-formal intervention strategic approach;

4. Most adult workers in the Factory are unfamiliar with HIV/AIDS policy. In fact policies cast best beliefs, values and practices with the view of changing health perspectives positively. These efficient inputs should thus be

communicated effectively to the factory workers by both the Labor Union and the Factory Management using all available media opportunities optimally;

5. The factory has to work towards the realization of Work place specific functional HIV policy. So that HIV/AIDS intervention can legally and practically be mainstreamed in the factory strategic plan;

6. Stigma and discrimination associated with HIV are barriers to providing adequate care, support and treatment and alleviating the impact of HIV/AIDS. They are triggered by lack of understanding of the infection, myths about how HIV is transmitted, prejudice, lack of treatment and unfound fears. Therefore, the Factory management and the Labor Union along with the entire factory workers have to work against stigmatization and discrimination.

7. The Factory should encourage VCT for HIV and should design practical supportive mechanisms for those who find themselves victims. Because stigma and discrimination can deter workers from getting tested from receiving adequate care and treatment and contribute to further infection of other workers.

8. The Factory should provide specific on-going education and training to reinforce appropriate infection control procedures aimed at protecting the workers against exposure to HIV infection so as to create conducive factory environment.

9. The Factory Management should provide adequate information on condom use within the context of HIV prevention and ensure adequate supply of condom in the factory.

10. The Factory should initiate and develop different incentives and reward practices for PLWHA to further promote HIV mitigation efforts in the factory environment.

11. The management of the Factory and the Labor Union has to act jointly and responsibly and involve fully in the process of the prevention and control of HIV/AIDS activities.

12. Sound and viable Information, Education and Communication and/ or Behavioral Change Communications intervention should be initiated, developed and further strengthened by the Factory Management, to reduce barriers enhancing risk perception of HIV infection among adult populations such as stigma and discriminations.

13. The Labor Union has to engage fully into advocacy intervention in order to get support and win commitment from the factory management as well as from the national responsible bodies.

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APPENDINCES

ADDIS ABABA UNIVERSITY

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Appendix –I

Socio-demographic Characteristics of the FGD discussants, October, 2008, Adama.

FGD _ One Female

Variables: Pseudo Names	Age	Sex	Ethnicity	Religion	Education	Marital status	VCT for HIV
FEA_1	22	F	Amhara	Orthodox	Diploma	never married	No
FEB_1	25	F	Amhara	Protestant	Diploma	never married	Yes
FEC_1	30	F	Oromo	Protestant	Grade-8	Married	No
FED_1	27	F	Oromo	Orthodox	Grade-11	Married	Yes
FEE_1	26	F	Amhara	Protestant	Diploma	Divorced	No
FEF_1	34	F	Gurage	Muslim	Grade-12	Married	No

FGD- Two: Male

Variables	Age	Sex	EthnicGroup	Religion	Education	Marital status	VCT for HIV
MAA_2	31	M	OROMO	Orthodox	1st Degree	never married	No
MAB_2	25	M	Gurage	Orthodox	Diploma	never married	No
MAC_2	30	M	Silti	Muslim	Grade 8	Married	No
MAD_2	24	M	Amhara	Orthodox	Diploma	never married	Yes
MAE_2	38	M	Oromo	Protestant	Grade-12	Married	No
MAF_2	37	M	Wolayita	Protestant	Grade- 10	Married	No

FGD-Three: MIXED (Male & Female)

Variables	Age	Sex	Ethnicity	Religion	Education	Marital status	VCT for HIV
MAX_1	28	F	Oromo	Orthodox	Diploma	never married	NO
MAX_2	25	F	Amhara	Orthodox	Grade-12	Married	YES
MAX_3	33	F	Amhara	Orthodox	Grade-12	never married	NO
MAX_4	41	M	Kambata	Protestant	Diploma	Married	YES
MAX_5	32	M	Amhara	Protestant	Diploma	Married	NO
MAX_6	46	M	Oromo	Orthodox	Grade-8	Married	NO

Appendix-II

Date of FGD 14, Oct., 2008

Place of FGD Adama

1. FGD

Discussion Guides for Focus Group Discussants.

1. How do you explain HIV/AIDS? Or what do you think is HIV/AIDS?
2. What does HIV/AIDS related education seem in this factory, such as awareness creation efforts, activities and the like?
3. How do you explain the knowledge of the adult workers towards HIV/AIDS? Knowledge about ways of transmission, prevention, treatment and cure?
4. What do you think about the workers attitude and participation in getting VCT and know one's status?
5. Do you think risk perception emanate from one's educational, economic, religious, sex and age status? How? And Why?
6. Do you think poverty invites to sexual business? How?
7. What do you think about the effects of alcohol, chat and cigarettes on risk perception of HIV/AIDS?
8. What is your opinion about Condom use? Does it protect from HIV/AIDS and STDs?
9. What do you think about having multiple sexual partners? Does it have impact on the risk perception of HIV infection?
10. Finally, what do you suggest to overcome HIV/AIDS at present in general?

Appendix-III

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1. Structured Interview
   This in-depth interview is designed to collect data from persons who are living with HIV/AIDS concerning their living conditions in the study area.

Date of interview—Oct.13,2008

Place of interview--Adama

Informant's code—POP1

Basic Information

Age-32

Sex-Male

Educational background—Grade 12

Religion--Muslim

1. How do you come to know your HIV/AIDS status?
2. What condition (incidence) do you suspect for your exposure to HIV virus?
3. What is the impact of HIV on your life?
4. Do you get HIV/AIDS related services from the factory? What are they? Are they adequate?
5. After you have been victim, how is your relationship with your spouse, friends, relatives and colleagues?
6. What are your exceptional problems that you have been confronting?
7. What are your coping mechanisms to the problems you are confronting?
8. What is your opinion about one's knowledge of his/her HIV status?
9. Regarding HIV/AIDS, what is your future aspiration?

2. Semi-structured Interview

This in-depth interview is designed to collect data from key informant who is HIV/AIDS focal person in the study area.

Date of interview—Oct.13,2008

Place of interview--Adama

Informant's code—POP2

Basic Information

Age-38

Sex-male

Educational background--Diploma

Religion—Protestant Christian

1. How do you express the situation of HIV/AIDS in this particular Factory?
2. How do you describe the adult workers risk perception of HIV/AIDS?
3. Do you have close relationship (intimacy) with PLWHA?
4. How do you describe the feelings of PLWHA towards themselves?
5. What have you observed about workers perception towards HIV positive persons?
6. What services are available for HIV positive workers in the Factory? If so, are they adequate?
7. Do you have time and convenient environment to create awareness about HIV/AIDS among the Factory workers?
8. What activities the Labor Union perform to prevent and control the spread of HIV/AIDS in the Factory? If so, are they adequate?
9. What are the major problems do you observe due to HIV/AIDS incidences in the Factory?
10. What do you suggest about HIV/AIDS situations in the Factory in general?

Appendix-IV

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Survey Questionnaires to be filled by Adult Population of Nazareth Tractor Assembling Factory

Questionnaire No. _____

Informed confidentiality and consent

Dear respondents

Good morning/afternoon

This questionnaire is prepared by a graduate student of Addis Ababa University. The student studies risk perception of adult population in the world of work. The main objective of this study is to investigate the risk perception of HIV/AIDS among adult population of Nazareth Tractor Assembling Factory. So that the results of the study will be used for better understanding of those factors of risk perception and for designing appropriate planning of effective interventions.

The information you give will be held confidential (your name will not be written on this form, and will never be used in connection with any of the information you tell me). Therefore, your genuine participation by responding patiently to the questionnaire is highly appreciated.

You have the right to skip questions which are not comfortable to you, and you can stop at any time you like.

Are you willing to participate in completing the questionnaire? Yes or No.

If yes, please circle the answer/s that you feel appropriate to the corresponding questionnaire.

Thank you for your willingness to participate in completing this questionnaire: Continue.

Part I --Socio- economic & Demographic Characteristics of the Respondents

1. Sex of the respondents a. Male b. Female

2 .How old are you? a. ≤20 b. 21-30 c. 31-40 d. 41-50 e. ≥ 51

3. What is your Religion? a. Orthodox b. Muslim c. Protestant

d. Catholic e. Other, specify----------

4. What is your Ethnic Group? a. Amhara b. Oromo c. Tigre d. Gurage

e. Other, Specify-----

5. What is your Marital Status? a. Never married b. Married c. Divorced d. Widowed

6. What is your Educational Status? a. Illiterate b. Grades 1-4

c. Grades 5-8 d. Grades 9-10 e. Grades 11 - 12 f. > 12

7. What is your Average Monthly Income?

a. < 500 Eth. Birr b. 501-1000 Eth. Birr c. 1001-2000 Eth. Birr d. > 2001Eth. Birr

Part II--Respondents knowledge about HIV/AIDS

8. What do you think is HIV/AIDS?

a. a virus b. an evil Spirit c. a curse from God d. a biological weapon created by the Whites to clear out the black race e. Other, specify--------

9. How does HIV Transmit? (Multiple answers possible)

a. Sexual intercourse with HIV infected person

b. Sharing inject able needles or share sharp edged materials with HIV infected person

c. Infected blood transfusion d. From infected mother-to-child

e Sharing toilet, food and clothes with HIV infected person

f. Shaking, hugging or kissing infected person

g. Mosquito or insect bites h. Other, specify

10. How can a person prevent HIV infections?

(Multiple answers possible

a. Abstinence b. Faithfulness c. consistent Condom use

d. Avoid sex with casual person e. Avoid sex with commercial sex workers

f. Avoid sharing injectable needles or sharp edged tools with infected person

g. Avoid using untested blood

h. Avoid sharing toilet, food and clothes with infected person

i Avoid Shaking, hugging or kissing infected person

j. Avoid mosquito or insect bites k. Other, specify------

11. Can HIV/AIDS be cured?

a. Yes b. No c. Not Sure

Part III –Voluntary Counseling and Testing (VCT)

12. Did you under go VCT to know your HIV status? a. Yes b. No

13. If your answer to question No 12 is yes, what were your reasons for getting VCT? (Multiple answers possible)

a. To know for sure b. To get married

c. To adjust for future life d. Pressured by friends

e. Pressured by spouse f. Pressured by employer g. I was sick

h. Other, specify----------

14. If your answer to question No 12 is yes, what changes have you brought on your behavior after HIV test? (Multiple answers possible)

a. Abstinence b. Faithfulness c. Consistent condom use d. Avoid using untested blood

e. Avoid sharing sharp edged tools and injectable needles f. Avoid sex with commercial sex workers

g. Avoid sex with casual person's h. Avoid drinking alcohol & drug use

i. Others, specify----------

15. If your answer to question No 12 is no, what were the reasons for not getting VCT? (Multiple answers possible) a. Lack of knowledge about VCT b. Trust my partner c .faithful to my partner

d. Fear the result e. Fear the reaction of the community

f. Lack of HIV test facilities g. Other, specify

Part IV--Condom Use

16. Have you ever used condom? a. Yes b. No

17. What are your reasons for using condom? (Multiple answers possible

a. To prevent STDs b. To prevent HIV/AIDS

c. To prevent pregnancy d. using condom satisfies me

18. If you have not used condom at all or have not used consistently, what were your reasons? (Multiple answers possible).

a. Unavailability of condom b. Expensiveness of condom

c. Don't know where to get it d. Ashamed to ask my partner

e. Partner's objection f. Lack of trusting condom

g. Do not know how to use condom h. Decrease satisfaction

i. My religion prohibits j .Other, specify----------

Part - V. Alcohol and Drug Consumption

19. Do you drink alcohol?

a. Never b. Rarely c. Most often d. Daily

20. Have you ever had sex after having alcohol?

a. Yes b. No c. Some times

21. Have you ever had sexual intercourse with commercial sex workers? (For males)

a. Yes b. No

22. Have you ever used condom when making sex with commercial sex workers? (For males). a. Yes b. No c. Some times

Part - VI. Multiple Sexual Partners.

23. How many sexual partners have you ever had?

a. One b. Two c. Three d. More than three

Part VII. Misperception towards HIV/AIDS.

24. Can a healthy looking person be HIV positive?

a. Yes b. No c. Not sure

Part VIII. Exposure to Media

25. What is the extent of your exposure to Mass Medias which have programs on HIV/AIDS (Radio, TV, and Newspaper)?

a. most often b. occasionally c. rarely d. no exposure

Part IX. Risk Perception of HIV infection

26. How do you evaluate your risk of being contacted to HIV infection?

a. High or Moderate risk (higher risk) b. Low or No risk (lower risk)

27. If your answer to question No 26 is high or moderate, why do you believe that you are at risk? (Multiple answers possible)

a. I have had sex with more than one sex partner b. I have had sex without condom

c. I have had sex with commercial sex workers. d. I have shared sharp edged materials

e. I have used untested blood f. I have shared inject able needles

g. I don't trust my partner h. I haven't undergone VCT k. Other, specify-----

28. If your answer for questions No 26 is low or no why do you believe you are not at risk? (Multiple answers possible)

a. Abstained from sex b. Faithful to my partner c. Trust my partner

d. Always use condom e. Never had sex with commercial sex workers

f. Never used untested blood transfusion g. Never shared sharp edged materials

h. Other, specify------

Thank You!!

DECLARATION

The under signed, declared that this thesis is my own work and has not been presented for any other degree and that all sources of material used for thesis have been fully acknowledged.

Name Tsegaye Abebe

Signature _____

Date Feb. 4, 2009

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

Name Worku Kassaye

Signature _____

Date of submission Feb 4, 2009