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**THE DIFFERENTIAL EFFECT OF VCT SERVICE IN REDUCING
HIV RISK BEHAVIORS AMONG VCT AND NON VCT GROUPS IN
SOME SELECTED SUB CITIES IN ADDIS ABABA**

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List of Abbreviations

AIDS	Acquired Immuno Deficiency Syndrome
ANC	Antenatal Care
BRA	Baseline Risk Assessment
BSS	Behavioral Surveillance Survey
CBOs	Community Based Organizations
CDC	Center for Disease Control and Prevention
FGAE	Family Guidance Association of Ethiopia
FGD	Focused Group Discussion
FHI	Family Health International
HAPCO	HIV/AIDS Prevention and Control Office
HIV	Human Immuno Virus
IDU	Injecting Drug Users
MMM	Medical Missionaries of Mary
MOH	Ministry of Health
OSSA	Organization for Social Service for AIDS
STDs	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
USAIDS	United Nations Program on HIV/AIDS
VCT	Voluntary Counseling and Testing
WHO	World Health International

Abstract

The research study reported in this thesis investigates the effectiveness of Voluntary Counseling and Testing (VCT) service in reducing major HIV risk behaviors current in Ethiopia. The sample involved in the study consists of 280 individuals living in three selected sub cities of Addis Ababa: Yeka, Lideta, and Addis Ketema. Half of them have received VCT service (VCT group) and the other half has not received the service (non VCT group). The behaviors that have been taken in consideration are: 1. number of sex partners; 2. sexual intercourses with casual and high risk partners; 3. condom use; 4. exchanging sex for money and material goods; 5. exposure to STDs; 6. receiving untested blood; 7. sharing potentially contaminated sharp instruments for daily base needs and traditional practices and 8. using of alcohol and drugs for sexual initiation.

The pertinent data have been collected using self report instruments. Moreover qualitative information was obtained from 36 individuals, 16 males and 20 females through focused group discussions and interviews. Percentage, Chi Square, Pearson correlation is used for analyzing data.

The results of this research show that Voluntary Counseling and Testing is effective in reducing the number of casual sex partners, in reducing the frequency of sexual intercourses with casual and high risk partners, in reducing the use of drugs for sexual initiation, in enhancing consistent and correct use of condom and negotiation skill about condom use with partner, and for STDs diagnosis. However, no significant effect of VCT service has been found in reduction of sex with prostitutes, exchange of sex for money and material goods, exposure to STDs, alcohol use for sexual initiation, receiving and/or donating untested blood and sharing potentially contaminated sharp instruments for daily base needs and traditional practices.

CHAPTER ONE

I. INTRODUCTION

1.1. Background of the problem

At the end of 2002, the joint United Nations Program on HIV/AIDS /UNAIDS/ estimated that forty two million people in the world were living with HIV. Of these, approximately 70 percent of all HIV infection in the world was in Sub-Saharan Africa including our country Ethiopia, which is the third African country in delivering the greatest burden of the disease next to Botswana and South Africa (FHI, 2004).

Although the spread of HIV/AIDS in Ethiopia was later than many East African countries, now it is spreading throughout the country with a greater concentration in urban areas. In Ethiopia, like in other countries HIV/AIDS has been recognized as the major obstacle for development since about 80% of the cases of HIV/AIDS are found among the most economically productive age group of the population, between the ages of 20 and 49 (MOH 2002; 2003).

It is known that HIV/AIDS is a uniquely stigmatized and incurable disease. With this understanding, in Ethiopia different governmental, private sector and non-governmental organizations including the Federal Ministry of Health (MOH) has been putting national efforts to prevent and control HIV/AIDS since 1990's. Some of these national efforts include: preventing and managing sexually transmitted infections, promoting voluntary counselling and testing for HIV, supporting people infected by HIV, preventing mother to child transmission of HIV, introducing and providing antiretroviral therapy as part of comprehensive care and helping to mobilize communities, to meet in order to meet the needs of individuals who have become

vulnerable by the consequence of HIV/AIDS. To this end voluntary HIV counselling and testing is a key public health intervention in promoting the health of HIV infected individuals in caring and giving support for persons living with HIV transmission through reducing risk behaviours (Kelin, 2000).

Brunswick (1993) attested that the behaviours that put individuals at risk for HIV/AIDS infection are risk behaviours that enable the transmission of the virus through sharing of body fluids from infected to uninfected individuals. As she noted, the prevention intervention strategies like VCT service should be based on individuals' specific risk behaviours and to assist them to consider their partner's HIV status before involving in sexual relationships, to help them make good decision makers that underlie the choices of the right partner, to value the perception of norms and expectancies that are associated with risk behaviours and other social, environmental and cultural determinants of the risk behaviours.

Since reducing risk behaviour is one of the most significant objectives of VCT, individuals practicing behaviours which place them at risk for HIV infection should be recommended VCT (Flemmig and Johiro, 1997). In this regard (Lance et al, 1998) also indicated that, in the absence of cure or vaccine, the best way to prevent the infection is to reduce or avoid risky behaviours that result in contact with blood, semen or vaginal fluids of an HIV infected and high risk individuals through VCT.

Lance further attested that VCT is one of the most widely used and effective behavioural interventions in reducing risk behaviour in both developed and developing countries. With the assumption that VCT may reduce the frequency of high risk behaviour through personal risk assessment, helping to make and implement risk reduction plan and to maintain reduction of risk behaviour, it is considered as the most important prevention intervention of most state and federal programs (CDC, 1993; Higgins and her Colleagues, 1991).

Similarly, several studies in both developed and developing countries revealed that VCT is an effective intervention in reducing self reported risk behaviour among both HIV positive and HIV negative individuals attending VCT centers (FHI, 2002, USAID, 2005). For instance, study from Nigeria showed that VCT service is effective in reducing the incidence of STD's including HIV/AIDS and in increasing the use of condoms (Smith, 2004).

FHI (2004) indicated that, when an individual begins to consistently engage in risk behaviour, the risk behaviour must be unlearned. Accordingly, to reduce ones risk behaviour, an individual needs to identify the behaviour as harmful, understand the available alternatives, be able to use that knowledge and receive the support necessary to maintain the behaviour change (Flemmig and Johiro, 1997). These researchers also indicated that, in HIV counselling sessions, in collaboration with the client, the counsellor should review those behaviours that place the individual at risk for HIV and discuss the ways that behaviours can be changed to reduce his/her risk behaviours.

The counsellor with the client should also develop realistic risk reduction strategies like VCT set prevention goals and find feasible solutions which are consistent to the individuals'/clients' needs. In the whole process of counselling sessions, counsellors should work with clients and support them in their commitment to practice, maintain and choose safer behaviour. This helps the clients to take responsibility to achieve behavioural change (Green and McCreaner, 1989). Moreover, clients should be encouraged to freely express their feelings to develop appropriate and personalized risk reduction goals and strategies.

A risk reduction plan should be developed with HIV positive individuals to take precautionary measures to prevent the HIV transmission to others and to stay health

(Flemmig and Johiro, 1997). The plan should also be developed with HIV negative individuals especially for sexually active individuals to reduce their risk of contracting HIV for themselves as well as transmission to others.

As regard to the difference in the effectiveness of VCT among different groups research studies in the United States demonstrated its effectiveness in changing risk behaviours, despite the differences in the results with sex and sero status of the individuals. Another study also examined that VCT is effective in reducing number of sexual partners among males who attended VCT service. But no difference was observed in number of sexual partners among females (John et al, 1999).

In addition, study conducted on economically disadvantaged black youths in the United States showed that VCT was effective in reducing the incidence of HIV/AIDS among those who test HIV negative. But no difference was observed for those who tested HIV positive. The finding of this study contradicts with the USAIDS finding i.e., VCT is an effective service in reducing risk behaviour especially among HIV positive individuals (John et al, 1999).

Clattes et al (2002) conducted a study on the efficacy of seven sessions of HIV counselling program with individuals at high risk for HIV risk behaviour. The result of this study showed that participants who were randomized to receive HIV counselling reported 49% fewer unprotected sexual intercourse, and 43% more in using condoms consistently as compared to control groups and groups who did not receive the intervention. In this study it was also found that participants who received the intervention demonstrated an increase in condom use with both main and casual partners by about 20% and increase in consistent condom use from 15% to 32%.

Furthermore, the result of a meta analysis of 27 published studies on 19,597 participants indicate that, after receiving VCT, HIV positive participants and HIV sero-discordant couples reduced unprotected intercourse and increased condom use compared to HIV negative and untested participants (Lance et al, 1998). The study also reveals that HIV negative participants did not modify their behaviours more than untested participants. Study by Higgins et al (1991) also indicated the effectiveness of VCT in reducing risk behaviour among sero-discordant couples. In general, these studies concluded that, VCT renders an effective means of secondary prevention for HIV positive individuals and sero-discordant couples. But it does not give effective primary prevention strategy for HIV negative individuals.

As the majority of the research findings conducted in the Western countries revealed, VCT is effective in reducing risk behaviour. Different literatures regarding the effect of VCT in reducing high risk behaviour also concluded that learning about one's HIV status or test result was strongly related to decreased risk behaviour (Higgins & her colleagues, 1991 cited in Ickovics et al, 1998). But this does not totally mean that any "single dose" VCT service always reduces risk behaviour. Because there are also studies that are inconsistent with the above studies. For instance, study on vulnerable young people in United States showed that "a single dose" VCT service did not promote significant reduction of risk behaviour (FHI, 2002). In addition, the most recent longitudinal study investigated no sexual behaviour change as a result of VCT among participants in community based multi-site study those who were treated for STDs and college students (McCusteer et al, 1996 and Winger et al 1991 & 1992 cited in Ickovics et al, 1998).

In Ethiopia voluntary HIV counselling and testing service has began in the late 1990's with collaboration of MOH with NGO's like OSSA /Organization for Social Service for AIDS, Medical Missionaries of Mary (MMM) etc (MOH, 2002). In the year

2002 the number of institutions involved in HIV counselling and/or testing or both were 80. However, neither the quality of counselling and testing service and the efficacy of the service nor the challenges or obstacles associated with the serviced are assessed (MOH, 2002). Therefore the main purpose of this research is to assess and evaluate the differential effect of voluntary HIV counselling and testing in reducing or changing the risk behaviour in some selected VCT centers in Addis Ababa.

1.2. Statement of the Problem

It is commonly known that voluntary HIV counselling and testing (VCT) is an effective public health intervention in promoting the health of HIV infected individuals and plays a significant role in reducing risk behaviours and HIV transmission. However, as to the knowledge of the researcher, there is no research conducted on the effect of the service in reducing risk behaviour and the challenges related to the service in the country. In the absence of vaccine or cure for HIV/AIDS, voluntary counselling and testing remained the key strategy in reducing the spread of the HIV epidemic through behavioural change in terms of reducing the number of sex partners and increasing consistent and proper condom use (Mills et al, 1998).

Therefore, this study gives emphasis on the differential effect of VCT in reducing HIV risks behaviour between VCT and non-VCT groups in some selected sub cities in Addis Ababa. The present study mainly aimed at answering the following nine basic questions:

1. Is there a significant difference between individuals who received VCT service (VCT group) and who did not receive the service (non VCT group) with respect to the number of lifetime and recent sexual partner?
2. Is there any significant difference between VCT and non-VCT groups with respect to having had sexual intercourse with casual and high risk partners?

3. Is there a significant difference between VCT and non-VCT groups with respect to condom use?
4. Is there a significant difference between VCT and non-VCT with respect to negotiation skill about condom use with partner?
5. Is there a significant difference between VCT and non-VCT groups with respect to exposure to STDs?
6. Is there a significant difference between VCT and non-VCT groups with respect to exchanging sex for money and material goods?
7. Is there a significant difference between VCT and non-VCT groups with respect receiving untested blood?
8. Is there a significant difference between VCT and non-VCT groups with respect to sharing potentially contaminated sharp instruments for daily base needs and traditional practices?
9. Is there a significant difference between VCT and non-VCT groups with respect to use of alcohol and drugs for sexual initiation?

1.3. Objective of the Study

1.3.1. Major objective

The major objective of the study is to explore the impact of voluntary HIV counselling and testing (VCT) intervention in reducing risk behaviours.

1.3.2. Specific objectives

The specific objectives of the study are:

- To investigate the significant difference between individuals who received VCT service (VCT group) and who did not receive the service (non VCT group) with respect to number of sexual partner.
- To inspect the significant difference between VCT and non-VCT groups with respect to having had sexual intercourse with casual and/or high risk partners.
- To examine the significant difference between VCT and non-VCT groups with respect to condom use.
- To find if there is any significant difference between VCT and non VCT groups with respect to negotiation skill about condom use with partner
- To examine the significant difference between VCT and non-VCT groups with respect to exposure to STDs.
- To discover the significant difference between VCT and non-VCT groups with respect to exchanging sex for money and material goods.
- To detect a significant difference between VCT and non-VCT groups in relation with receiving untested blood.

- To determine a significant difference between VCT and non-VCT groups in relation with sharing potentially contaminated sharp instruments for daily base needs and traditional practices.
- To find out a significant difference between VCT and non-VCT groups in relation with using alcohol and drugs.
- To give recommendation for a better effectiveness of the VCT in reducing risk behaviour based on the results of the study.

1.4. Significance of the Study

The majority of individuals in any group and educational level tend to seek out individuals with whom to share and discuss their problems. The major cause of this problem is individual's own risk behaviour resulting from an intention to perform a particular behaviour. This intention to perform risk behaviour comes from a combination of **attitude** (an individuals belief with evaluative manner) and **subjective norm** /an individuals perception of the social pressure to behave in particular way/. HIV/AIDS is a uniquely stigmatized and incurable disease which results from individuals own risk behaviour i.e. having unprotected vaginal, anal and/or oral sex with infected person or a person who do not know one's sero status. Voluntary HIV counselling and testing is a key intervention strategy in reducing HIV related risk behaviour of individuals as it is stated in the above literatures.

Although, in Ethiopia it has significant role in reducing HIV related risk behaviour, it is only recently (in 1990's) that VCT service have been considered important as an entry point for prevention and interventions for HIV/AIDS. There are also no research studies, at least seen by the researcher, conducted on the efficacy and effect of VCT in risk reduction and changing sexual behaviour. The available research studies evaluating VCT have been concentrated on attempting to prove that VCT reduces

incidences of HIV infection and contribute to prevention. However it is very important to demonstrate that VCT "works" before planning and funding VCT service (MOH, 2002).

The best means of demonstrating that VCT "work" is through evaluating the effect of VCT in reducing HIV related risk behaviour. This could only be strengthened by conducting a research on the area. Therefore, the main objective of this research is to assess the effectiveness of VCT service in Addis Ababa.

Generally, this research study is hoped to be helpful in:

- Increasing knowledge about the effectiveness of VCT in reducing risk behaviours,
- Enhancing the motivation of governmental and non governmental organizations and private sectors in planning and funding of VCT service after demonstrating its effect on risk behaviours,
- Giving hints for further research study in the field and,
- Giving recommendation for better effectiveness of VCT in reducing risk behaviours.

The result of the study is also expected to be useful for government organizations, non-governmental organizations, private sectors and other institutions involved in VCT like, VCT program planners, VCT managers, VCT counsellors and VCT clients.

1.5. Delimitation and Limitation of the Study

The study is delimited to the three sub cities in Addis Ababa due to time, budget and other constraints. The study would generate more valid result if it includes all sub cities in Addis Ababa.

The sensitive Subject matter of the data is a potential limitation of the study. Because HIV risky behaviours especially the sexual behaviours is a very personal and considered as much ridicule behaviours. The other limitation of the study is that since the sample was relatively small and random selection in to the VCT and non VCT group was not performed, the result of the study may be only applicable mostly for Addis Ababa population. In addition, the present behaviours of the participants may also change over time.

1.6. Definition of Terms

AIDS: Acquired immunodeficiency syndrome which can affect the immune and central nervous systems and can result in neurological problems, infections, or cancers. It is caused by human immunodeficiency virus /HIV.

Confidentiality: A process in which the disclosure of personal information in a relationship of trust and with the expectation that it will not be disclosed to others in ways that are inconsistent with the original disclosure. Confidentiality must be maintained for persons who are recommended and/or who receive HIV counselling, testing, and referral.

HIV: Human immunodeficiency virus, which causes AIDS. Several types of HIV exist, with HIV-1 being the most common in the United States.

HIV counselling: is a confidential dialogue between a client and a counsellor aimed at enabling the client to cope with stress and make personal decisions related to HIV/AIDS(MOH,2002).

Risk behaviour: Is behaviour which exposes individuals to a high risk of HIV Transmission.

Unprotected sex: Is sexual practices that have high probability of HIV transmission from one sexual partner to another

Voluntary HIV testing: HIV testing that is offered free of coercion i.e., the clients have the opportunity to accept or refuse HIV testing.

Voluntary HIV Counselling and Testing Is the process by which a client undergoes counselling enabling him/her to make an informed choice about being tested for HIV/AIDS. It is aimed at helping clients to cope with stress and to make personal decisions related to HIV/AIDS.

Serostatus: Somebody's condition with regard to being seropositive or seronegative(Encarta,2006)

Seropositive: After a blood test, showing immunological evidence of HIV infection, either current or previous(Encarta,2006)

Seronegative: after a blood test, showing no immunological evidence of HIV infection, either current or previous(Encarta,2006)

VCT Group: is a group of participants who received VCT service at least six months before data collection.

NON VCT: Group is a group of participants who did not received VCT service at least six months before data collection

CHAPTER TWO

II. REVIEW OF RELATED LITERATURE

2.1. General Concept of HIV/AIDS

The acronym HIV stands for the Human Immunodeficiency Virus the infection with which causes AIDS that stands for Acquired Immune Deficiency Syndrome (Green and McCreaner, 1989). The virus is transmitted from one person to the other through sexual intercourse, contaminated blood and blood products, and from an infected mother to infant during pregnancy, during delivery, and postnatally through breast feeding. On the other hand, no laboratory evidence suggests that HIV is transmitted by casual contacts (shaking hands, hugging etc), food, water, and mosquitoes (Stroebe and Stroebe; 1996 as cited in Asnake, 2001).

According to Berer (1993), although the first cases of people with HIV were identified in 1980s from the sample of tissues and fluids, the incidence of the disease goes back to 1959. The same author further indicated that an approved commercial blood testing for detection of HIV-1 antibodies has been available in the United States since 1985. A confirmed positive antibody test is an evidence for infection with HIV. If an infected individual is tested during the period between infection with HIV and the development of antibodies (window period), the result will be negative for HIV antibody. But this does not mean that the virus is not present in the individual. To be confident of the test result, the individual should be tested for the second time after three months or more. Therefore, once a person is infected with HIV, he/she can transmit the virus to other individuals regardless of the test result for HIV antibody.

Early identification of HIV infection in individuals has many advantages. Some of these are:

- *Access to therapies and preventive measures that can delay disease progression and prevent opportunistic infections.*
- *Access to education and counselling*
- *Linking the HIV infected individuals to supportive networks that can assist in maintaining good health, delaying onset of symptoms, and preventing transmission to others (MOH, 2002. PP: 7).*

Currently, two serotypes of HIV are recognized. These are HIV-1 and HIV-2. HIV-1 is the world wide predominant virus. On the contrary, despite its spread in West Africa during the 1980s, HIV – 2 is rarely reported from East Africa, Europe, Asia, and Latin America. In spite of their difference in spread, the two viruses are similar in their modes of transmission and clinical manifestations. But HIV-2 may not be as easily transmissible as HIV-1. Moreover, the progression from infection to disease is also longer for HIV-2 (Green and McCreaner, 1989).

Generally, according to MOH, 2002; and ICASA/International Conference on AIDS and STIs in Africa, (2005), since the 1980s, HIV/AIDS has become a prevalent disease and the current global problem. It is the main cause for the death of the highly productive and reproductive members of the society.

2.2. Prevalence of HIV/AIDS

2.2.1. Global Aspect of HIV/AIDS

The first cases of Acquired Immune Deficiency Syndrome (AIDS) were detected in homosexual men in the United States in 1981. But its etiologic agent Human Immuno- deficiency Virus (HIV) was identified two years later, in 1983 (Flemmig and Johiro, 1997). As regard to the extensive spread of HIV, it appears to began in the late 1970s and 19 80's in America, Australia, and Western Europe. Since then, HIV/AIDS is widely spreading throughout the world (Green and McCreaner, 1989)

The World Health Organization Global Program on AIDS reported that sub-Saharan Africa constitute 70% of the total world HIV/AIDS infected population followed by U.S.A.,(9%), Americas (9%) excluding the U.S.A., Asia (less than 6%), Europe (4%), and Oceania(less than 1%) (Ayiga , Ntozi , Ahimbisibwe, Okurut, and Odwee,1999)

Evidences suggest that the prevalence of HIV infection may be stabilizing in developed countries like Australia, North America, and Western Europe. On the contrary, the prevalence is high in East and Central Africa (Green and McCreaner, 1989; Flemmig and Johiro, 1997).

2.2.2. HIV/AIDS in Africa

Africa, especially the sub-Saharan Africa, has been severely hit by HIV Pandemic (Muula, 2000). According to the same author, currently Africa is believed to be the continent with the highest prevalence and transmission of HIV/AIDS in the world. Similarly, WHO (2002) indicated that sub-Saharan Africa is the most affected part of Africa as well as the world. It is the place where about two third of the world population living with HIV/AIDS is living. Jimoh (2000) cited in Akinade (2001) further stated that from the sub-Saharan African countries, Ethiopia has been rated as the first in HIV/AIDS prevalence followed by Nigeria.

According to Akinade (2001), several factors have been identified as being the contributing factors to the world wide spread of HIV/AIDS; the major ones are risk behaviours and substance abuse. Muula (2000) attested that the major mode of HIV transmission in the case of Africa is through heterosexual intercourse. Where as, in Africa homosexuality and injecting drug use (IDU) as a means of HIV transmission is uncommon. Consistent with this idea, Akinade (2001) indicated that, prostitution or sex work, mobility in population; traditional practices such as circumcision and use of alcohol and drugs for sexual initiation, sharing sharp instruments in common are

some of the ways by which HIV spreads among members of some African societies, in addition to heterosexual intercourse.

HIV/AIDS is rapidly expanding in many African countries with a profound impact on both health and socio-economic development of the regions (MOH, 2004). Muula (2000) also stated that health and social gains are diminishing in many countries. This is so because, many limited resources are being allocated for HIV/AIDS prevention and care of the AIDS patients. He further noted that, since the infection is high in the productive age groups, the national economics of many countries are being threatened.

To tackle the epidemic, effort has been made at the local, regional, and international level for the benefit of indigenous Africa (Muula, 2000). According to MOH (2004), despite the effort to control the epidemic, it is continuing in many parts of African countries and is still claiming millions of lives. But this does not mean that all the efforts made to tackle the epidemic have failed. Rather, there are many evidences for the practical effects of intervention programs on HIV/AIDS epidemic. For instance, Flemmig and Johiro, (1997) VCT, which is one of the intervention programs, is playing a great role in reducing HIV risk behaviour and in initiating behavioural change that reduces risk of being infected or prevent transmission of the virus to others if infected.

2.2.3. HIV/AIDS in Ethiopia

The incidence of HIV epidemic began in Ethiopia about 22 years ago. The discovery of the first evidence of HIV infection in the country was made in 1984 (Tsega et al, 1988 and MOH, 2004). Two years later, the first two cases of AIDS were reported to the Ministry of Health. Although the vast majority of AIDS cases are not reported and many more have died without being noticed and aided, the 2005 joint report of

UNAIDS and WHO shows that there were about 3 million HIV positives in Ethiopia (UNAIDS, 2005). With regard to the way of transmission, in the Ethiopian context, the major HIV risk behaviour is heterosexual risk behaviour, which currently accounts for more than 87% of all HIV infections. Prenatal (mother to child) transmission is the second predominant way of HIV transmission next to heterosexual risk behaviour (MOH, 2004 and WWW.usaid.gov/pophealth/aids/; July 2002). To decrease the rate of progression of HIV/AIDS epidemic in Ethiopia, national and international response was initiated (Getnet et al, 2002; and MOH, 2004).

In response to the epidemic, the Ethiopian government in collaboration with local and international Non Governmental Organizations and the civil society established many task forces, programs, departments, plans, and offices working on HIV/AIDS prevention and control since 1985. Of these, HIV/AIDS prevention and control office (HAPCO) is the recently (in 2002) established office under the Prime Minister's Office (MOH, 2004). According to the Ministry of Health, as a national response to HIV/AIDS, HAPCO developed the national strategic framework on the major priority interventions needed to be implemented in the country. One of the interventions, which is given priority in the strategic framework of HAPCO is Voluntary HIV Counselling and testing (VCT).

Even though encouraging signs of change were documented following the implementation of prevention strategies, the change is progressing at slower rate and is not sufficient enough to be compelling (MOH, 2004). Because in relation to the level of the epidemic, the magnitude of the impact, the increasing level of after effect, the increasing number of population, and the poverty level of the country, the positive trend is not satisfactory. But this does not mean that there is no behavioural change in the population. For instance, the MOH's fifth report on the antenatal care

(ANC) surveillance data from 1989 -2003 indicates that there are some behavioural changes in the population. These changes include increased awareness about the disease, increase in awareness and attitude towards the use of condom and increase in the utilization of VCT service by different social groups. But still there is an assumed gap between awareness and attitude change concerning the disease, condom use, and the practical reduction of risk behaviour in response to the intervention given.

2.3. Voluntary HIV Counselling and Testing (VCT)

2.3.1. Concepts and Definition of VCT

VCT may be defined as a confidential process in which individuals or couples voluntarily under go counselling that helps him/her or them to make personal decision in relation to HIV/AIDS (Ickovics et al, 1998).

Similarly, according to MOH (2002), VCT is the process in which an individual undergoes counselling that enables him/her to cope with stress related to HIV/AIDS. Another definition by Family Health International (FHI) states that VCT is a confidential relationship between the client and the counsellor that is aimed at helping the client to cope with the stress and make personal decision about HIV/AIDS (FHI, 2002).

VCT focuses on assessment of HIV risk behaviours, provision of information and correction of misconceptions about HIV/AIDS, development of a personalized risk reduction plan, provision of test results and explanation of the meaning of the result and provision of referrals (if needed) (MOH, 2002).

2.3. 2. Historical Background of VCT

Voluntary HIV counselling and Testing (VCT) has been recommended by Center for Disease Control and prevention (CDC) since 1985. It was the time when serologic tests became available to detect antibodies to HIV. CDC published the public health service guidelines for counselling and antibody testing to prevent HIV infection and AIDS in late 1987 (CDC, 1993). According to CDC's report, millions of serologic tests were performed to detect antibodies for HIV at publicly funded VCT sites using the guidelines.

In the case of Ethiopia, VCT service began in the late 1980s and currently the service is expanding throughout the country (MOH, 2002). According to MOH, the service is given by trained nurses and social workers selected from Addis Ababa and regional hospitals. Previously, most of the VCT centers' settings were confined to governmental health institutions. But now a days, many non governmental organizations and private sectors are providing the service in collaboration with Ethiopian Ministry of Health.

Mhei and FHI (2005) stated that there were about 94 centers involved in providing VCT service in Ethiopia. Of these institutions, the majority were found in Addis Ababa. The situation of VCT in Ethiopia was assessed for the first time in 2000 and of the 80 such institutions in the country at the time, only 38 were involved. According to the same author, the result of the assessment shows that in most of the institutions, confidentiality of the HIV test result is maintained through minimizing the access to the records of the clients. However, due to the shortage of physical facilities and trained man power, absence of system to monitor and evaluate the quality of the service and lack of research studies on the quality, effect or efficiency of the service, the majority of the institutions do not follow the standard guideline of VCT.

2.3.3. Relevance of VCT Service

The opportunistic infections resulting from AIDS are becoming leading causes of premature death in the world wide and the problem is more serious in developing countries like Ethiopia (Lance, Michael, Blair and Nicole, 1998). But the recent (2004) report of USAID indicates that despite the increase in the effect of opportunistic infections, a number of countries are demonstrating positive results in reducing HIV infection rate. Such countries pioneered in HIV prevention success are Senegal, Thailand, and Uganda. The USAIDS, therefore, recommended that the global community should learn from the prevention success of these countries and adopt their strategies.

According to CDC (1995) and USAIDS (2004), one of the most important lessons learned from these countries is giving effective response to decrease risk behaviours, which slows down the risk of infection. One of the best methods the countries used was providing expanded access to voluntary HIV counselling and Testing (VCT).

According to USAID (2004), VCT offers the opportunity to strengthen prevention efforts by encouraging more individuals to learn their HIV status. Lance et al (1998) also indicated that WHO and CDC identified VCT as one of the major strategies in HIV/AIDS prevention. Moreover, they considered it as the most successful approach in promoting and assisting behaviour change or reduction of risk behaviour.

As regard to the significance of VCT in HIV/AIDS prevention, Flemmig and Johiro (1997) also attested that VCT is an essential part of HIV/AIDS prevention. The authors further explained that VCT plays a great role in increasing self perception of risk behaviour and in initiating behaviour change that reduces the risk of being infected and/or transmitting the virus to others. Similarly, Ickovics et al, (1998)

attested that VCT is essential for identifying HIV positive persons early. This early identification in turn enables the individuals to get appropriate counselling, early medical care and referral to appropriate health, preventive and social services.

FHI's, 2002 report also confirms that in addition to offering counselling, testing blood, prevention and clinical management of HIV related illnesses, enabling and encouraging people with HIV/AIDS to access appropriate care and effective HIV prevention strategy, VCT is an effective intervention strategy in reducing risk behaviour. Consistent with this idea, MOH (2002) indicated that VCT is the most relevant service in reducing the spread of HIV/AIDS through risk reduction and provision of care and support for HIV infected individuals.

In general, the afore-mentioned justifications regarding the relevance of VCT can be summarized into three major points.

1. Giving individuals the opportunity to learn their HIV status and obtain referrals for further psychosocial and medical care.
2. Providing counselling so that individuals reduce their risk behaviours and thereby minimize the chance of being infected , and avoid transmitting the virus to others
3. Helping individuals in making personalized risk assessment, development of personalized risk reduction plan and encouraging them to implement the risk reduction plan.

2.4. Concept and Definition of Risk Behaviour

The behaviours of human beings have a great influence on their physical and emotional health. Some of the behaviours that can affect health are: personal hygiene, smoking, eating, sexual practices, physical activity and substance abuse

(FHI, 2004 and Yusuf, 1998). These behaviours that can cause premature death can be known as risk behaviour. Since these behaviours are difficult to change, a great effort should be exerted to reduce their effect. Unless these behaviours are changed or reduced, they can cause illness and premature death. One of the risk behaviours currently becoming a major public health threat is HIV risk behaviour.

HIV risk behaviour is a behaviour that places an individual at risk for HIV infection or for contracting HIV/AIDS (USAID, 2005; Flemmig and Johiro, 1997).

Previously, in relation to HIV/AIDS epidemic there was a categorization of individuals as high/low risk groups or vulnerable/non vulnerable groups (Engender Health, 2005). According to this categorization, high risk or vulnerable groups are groups who are historically large in number to contract HIV infection. These groups include: sex workers, Military, factory workers, Injection Drug users (IDU), homosexual etc. Thus, some individuals believe that they are not at risk if they are not members of the above groups. However, now a days the idea of risk behaviour is not based on who one is rather it is based on what one does. In other words it means that, HIV/AIDS does not discriminate. Consequently, vulnerable or high risk groups are groups (individuals) who engage in HIV risk behaviour that exposes them to HIV infection.

2.4.1. Major HIV Risk Behaviours

Many researchers, Flemmig & Johiro (1997); Shabbir and Larson, (1991) and Gebre, (1990) cited in Hibist, (2001); Engender Health, (2005); Gonzales et al (1999); Pieris & Coldwell, (1999); Blake et al (2001), investigated many HIV risk behaviours. Among these, the major HIV risk behaviours that are stressed in the present study and are common in Ethiopia include:

- Having multiple life time and recent sexual partners

- Having partner/s who have multiple sexual partners
- Unprotected sexual intercourse or sex without condom
- Inconsistent and incorrect use of condom
- Receptive anal intercourse without condom
- Exchanging sex for money, drugs, shelter etc.
- Sexual intercourse at early age
- Having sex with prostitutes or with high risk partner/s.
- Having history of an STD Diagnosis
- Receiving untested blood
- Sharing potentially contaminated sharp instruments like needles, blades etc. for daily need bases
- Using potentially contaminated tattoo needles or skin piercing instruments for traditional practices and
- Using drugs or alcohol immediately before sex that impairs sexual decision making and that leads to unwanted or unprotected intercourse.

Of the above HIV risk behaviours the major determinant of HIV risk behaviour in Ethiopia is risky sexual behaviour primarily heterosexual behaviour. These risky sexual behaviours constitute: multiple sexual partner, sex without condom, inconsistent and incorrect use of condom, having partner/s that have multiple sex partner/s, having sex with prostitutes or high risk partners, using drugs or alcohol immediately before sex that impairs sexual decision making and having history of an STD diagnosis (Genet et al, 2002).

2.5. The Role of VCT in Reducing Risk Behaviours

Now days, HIV/AIDS is becoming the public health threat. According to CDC's report, in the past five years, there has been a rapid increase in the heterosexual transmission of HIV with about 40,000 new infections continuing to occur each year

(CDC, 2000 cited in Clattes et al, 2002). To overcome this pandemic disease many governmental, nongovernmental, private agencies and individuals are involving themselves in a war against it. The major components of the war are: Prevention and care (USAID, 2005).

The CDC report also attested that, the only definite means of reducing or preventing individuals' risk behaviour is behavioural intervention. The most commonly and widely used behavioural intervention in developing countries is VCT (Voluntary HIV Counselling and Testing). Therefore, in this war against HIV/AIDS, VCT has a main role i.e. serving as a unique bridge between HIV prevention and care. This is through giving support and care for both HIV positive and HIV negative individuals to make personalized plans to reduce their risk behaviours (USAID, 2005). The effect VCT in reducing the major risk behaviours identified in this study will be discussed in the following subsections.

2.5.1. The Role of VCT in Reducing Sexual Risk Behavior

Sexual intercourse in general is the most common means of HIV transmission. In Africa in general and in sub Saharan Africa, including Ethiopia, in particular the transmission of HIV is mostly through heterosexual intercourse (MOH, 1998 cited in Asnake, 2001; Lane & Palacio 2003, Ayiga et al, 1999). For instance, at the end of 2001, in United States 51% of all the HIV infections among adolescents and adults was transmitted through sexual intercourse (Lane & Palacio, 2003).

Since sexual behavior plays the greatest role in the HIV epidemic, most of the HIV prevention programs including VCT have focused on identifying and reducing risky sexual practices (Lane & Palacio, 2003). The heterosexual activities attributed to the rapid spread of HIV involve sex without condom, inconsistent and improper use of condom, multiple and high risk sexual partner, use of alcohols and drugs for sexual initiation which hinder safer sex, exposure to STDs, and having sex with prostitutes, risky and HIV positive partners (Lane and Palacio, 2003; Ayiga et al, 1999, Lane et al 1998, Hojer, 1999). These sexual practices are riskier than other sexual practices in that they exacerbate the risk of transmitting HIV from one sexual partner to another.

But it is very rare that individuals openly discuss about these risky sexual behaviors. This is because most of individuals are too embarrassed to open a discussion on the issue and others do not perceive themselves to be at risk. Therefore, VCT is one of the most important public health services in opening discussion about risky sexual behaviors, in performing HIV risk assessment and in providing HIV prevention counseling. In addition, VCT provide information about risky sexual practices and provide counseling to help individuals or groups to make the most appropriate choice

for risk reduction. Thus, there is no question for the relevance of VCT in facilitating initiation and maintenance of on going reduction of risk behaviors (IBD).

Flemmig and Johiro(1997), classified risky sexual behaviors into three levels. These are: no risky sexual behavior, low risky sexual behavior, and high risky sexual behavior.

No risk sexual practices are practices that do not involve contact between bodily fluids and mucous membranes or skin that have risk for HIV transmission. These practices involve: abstinence, social kissing, self-masturbation, hugging, massage, body rubbing, shared fantasies and erotic taking.

An individual is said to be at lower risk, when he or she uses a barrier like condom between potentially infective blood or body fluids and mucous membranes to reduce a risk of HIV transmission.

Higher risk sexual behaviors are behaviors that involve contact between blood, semen, vaginal secretions or urine with mucous membrane such as vagina, linings of the rectum, mouth, urethra etc, which have a high risk of HIV transmission (378 - 380).

2.5.1.1. The Role of VCT in Increasing Condom Use

The most effective way of preventing HIV infection, though it is not practical in most cases, is abstinence or avoidance of any sexual contact (CDC, 1990b, cited in Crawford and Desieratio, 2002 and Houth et al, 1993). It is also well recognized that safe sexual behavior is the best available method for sexually active individuals to protect themselves against HIV infection (Hojer, 1999). This safe sexual behavior is attained through reducing unprotected sexual intercourse. Ayiga et al, (1999) reported that reducing unprotected intercourse is the most effective means of controlling the spread of HIV which can be mainly be reduced through the use of condom. This implies that those who indulge in unprotected sexual intercourse are at greater risk for catching HIV than those who practice safer sex.

Even though, several studies on HIV transmission found a statistically significant negative association between condom use and risk of HIV infection, it is difficult to determine the true extent to which condoms reduce risk of acquiring HIV/AIDS only depending on these investigators who were using various scales for describing

condom use. However, it is generally accepted by medical and public health communities that latex and polyurethane condoms can significantly reduce the risk of sexual transmission of HIV. But this is only when it is used correctly and consistently or frequently. Therefore, consistent and correct use of condoms which reduces unprotected sexual intercourse is recommended as an important HIV prevention measure (Smith, 2004).

A Meta analysis of retrospective studies of HIV transmission among heterosexual couples showed that consistent or correct use of condoms reduced HIV transmission from infected partner to uninfected partner by 69% as compared to inconsistent (infrequent) users (Houth, et al, 1993). On the other hand, a retrospective study conducted by the same author on 256 serodiscordant couples for more than 20 months demonstrated that no seroconversion was occurred among 124 couples who consistently and correctly used condoms. In this study, even though the reason was not detected sero conversion also did not occur among 12 couples who inconsistently used condoms. On the contrary, among the rest of 109 couples who did not use condoms in every episode of intercourse, sero-conversion was observed.

As compared to incorrect use of condoms, failure to use condoms consistently is the most common obstacle to condom's effectiveness (McDonald et al, 1990 cited in Desiderata and Crawford, 2002, Flemmig and Jehiro (1997). This is because condoms slip off or tear during intercourse infrequently or rarely. Crawford and Desiderata, (2002) reported that in one study, the possibility of condoms' slipping off or breakage is less than 1% of episodes. This substantial breakage or slipping of condoms may be due to improper use of lubricants. For instance use of petroleum or oil lubricant causes damage of condoms and it is an independent risk factor for HIV infection for prostitutes. But prostitutes and individuals with multiple partners were

significantly more consistent in their use of condoms than those having single sexual partners (Crawford and Desiderata, 2002).

VCT is one of the services where individuals can get an insight that they should use condom consistently and correctly, which enables them to take measures to reduce or eliminate unprotected sexual intercourse (Lane and Palacio, 2003). VCT also helps clients to develop technical skills in using condom.

John, Roll, Lynda, Stephen and Peggy (1999) argued that one of the major goals of VCT service is promoting condom use among clients to prevent HIV infection. Accordingly, measurement of condom use among clients of VCT is very essential for evaluating the effectiveness of VCT service.

The result of review of 27 research studies on the effect of HIV counseling and testing by Lance, et al, (1998) showed that both HIV positive groups and serodiscordant couples showed significant increase in condom use than untested participants. However, HIV negative participants increased their frequency of condom use to lesser extent compared to untested participants. According to this study, participants who know that they are HIV positive reduced their risk of being re-infected and their risk of infecting others. However HIV negative individuals did not modify their HIV risk behavior any more than individuals who did not receive VCT. Thus, based on the study, they concluded that VCT is an effective secondary prevention strategy for HIV positive and serodiscordant couples. But not effective primary prevention strategy for HIV negative participants and participants who did not receive VCT.

Similar study conducted by Meursing (1999) on 96 HIV positive individuals showed that provided with HIV counseling and free condoms, most people with HIV did not succeed in maintaining consistent condom use. The result of this study suggests that

HIV testing and counseling programs will only achieve prevention of secondary HIV spread when they are supported by strong measures for promoting acceptance and openness with regard to HIV. Moreover, the study also reveals that people with HIV encountered the same barriers to safer sex as the community in general.

John et al (1999) in their study on condom use and HIV risk behaviors among adult VCT participants in US found that 62% of adults were using condoms at their last intercourse with in their ongoing relationships, while only 19% reported using condoms with their steady partners at the last intercourse. This study also demonstrated that compared to individuals who were at high risk, those who were at low risk were not using condoms.

Similarly study by Laukamm-Josten (2000), which was conducted on preventing HIV infection through peer education and condom promotion as a result of interventions like VCT, revealed that the participants use condom most frequently with casual, unknown sex partner and least frequent with regular or primary sex partner.

Effective condom use requires not only technical skills in using condoms correctly and use of condoms consistently but also requires social skills to negotiate condom use and perceptions that condoms can be a part of pleasurable sexual relationship (Flemmig and Johiro, 1997).

In one study, asking or trying to convince one's partner to use condom was the strongest predictor of condom use. Further more, Flemming stated that facilitating communication between the individual and his /her partner has also been associated with reduced risk sexual behaviors. It is also investigated that individuals who received VCT service are more likely to try to insist condom use and communicate with his/her partner about the risky sexual behaviors than those who did not receive the service (IBD).

For instance, adolescents who did not receive VCT may fear that insisting on condom use would reveal HIV status of the partner and result in loss of the relationship (Flemmig & Johiro, 1997). The participants also reported that condom use is associated with discomfort and reduction of sexual pleasure.

In general, correct and consistent use of condom with sexual practices can reduce the risk of HIV infection and VCT is one of the interventions that play the greatest role in promoting and initiating consistent and correct use of condom.

2.5.1.2. The Role of VCT in Reducing Multiple and High Risk Sexual Partner

2.5.1.2.1. Multiple Sexual Partners

Having multiple sexual partners is one of the sexually risk behaviours associated with the spread of HIV infection among adolescents and young adults (Johnson, 1993). Since HIV infection is transmitted sexually and is common among sexually active people, the likelihood of the exposure varies with the number of sexual partners encountered (Keely and Lawrence, 1988 cited in Johnson, 1993). Given this fact, greater number of individuals should have involved in monogamous relationship so as to minimize the risk of HIV/AIDS. However, many research studies show that self-protective behaviour has not been demonstrated in large proportion of adolescents and young adults. For instance Turner et al (1998) cited in Johnson (1993) found that more than 60% of the Oxford university students have more than one sexual partner with in the last three months. Another study conducted on college students indicated that 56% of the participants had sexual relations with more than one partner (McDonald et al, 1990 cited in Crawford and Desiderato, 2002).

With regard to the difference in the number of sexual partners between men and women, the results of the above two studies show a greater percentage of men than

women with multiple partners and a larger percentage of women than men with only one partner. Consistent with this finding, Getnet et al (2002) also stated that a greater proportion of male than female participants in their study had more than one sex partner in the last 12 months i.e., 49.7% of male and 22.4% females.

According to the study by Turner and others (1998), adolescents or young adults who were sexually involved with multiple partners did not perceive themselves to be at increased risk of HIV infection compared to individuals involved with a single partner. From this reality it can be assumed that adolescents with multiple sex partners have a lower level of knowledge about AIDS and use of condoms as a means of preventing HIV infection.

Further more, an HIV/AIDS BSS (Behavioural Surveillance Survey) report conducted by Getnet et al (2002) shows that among the sexually active young people, 51.9% reported that they had non-commercial sex partners while 19.5% of them had commercial sex partner in the last 12 months. Research results from early epidemiological studies of HIV infection among homosexual men also revealed that sexual practices with many different partners have high risk of HIV infection (Lane and Palacio, 2003).

A study on first year Canadian college students found that the prevalence of HIV/AIDS and other STDs increased with the number of sexual partners (McDonald et al, 1990 cited in Crawford and Desiderato, 2002). This study further investigated that participants with a history of 10 or more sexual partners reported having had at least one STD, which facilitates the transmission of HIV. Other studies by Baldwin and Baldwin (1988); Crawford et al (1992); and MaCDonald et al (1992) cited in Crawford and Desiderato (2002) attested that multiple sex partner accompanied by

inconsistent use of condom places individuals at risk for contracting STDs and increases the chance of infection with HIV.

Generally, from the above research findings it can be deduced that adolescents and young adults who have sexual relation with multiple sex partners are higher in risk for contracting HIV/AIDS than those who have only one sex partner. This is so because sexual contact with multiple partners, especially casual partners increases the probability of coming in contact with an HIV positive partner and being infected with the virus.

Concerning the effect of VCT in reducing number of sexual partners, different studies showed no significant difference between individuals who received VCT and who did not receive the service. For instance, the result of the review of 27 studies on the effect of VCT in reducing sexual risk behavior indicated that, there is no significant difference between individuals who received VCT and those who did not receive VCT in reducing the number of sexual partners (Lance, Weinherdt, Michael, Blair, Johnson and Nicole 1998). This result contradicts with hypothesis of the studies. This may reflect, said the reviewers, the fact that number of sexual partners is the outcome that is not sensitive to change during shorter intervals. Because in the review, studies that had longer follow-up periods had longer effect on the reduction of number of sexual partners.

2.5.1.2.2. High Risk Sexual Partner

As stated above the more sexual partners an individual has, the greater the probability of having contact with an HIV infected person. But this does not mean that having only one sexual partner is completely safe. That is, if one of the partners is already infected with HIV, the partners had multiple partners in the past, had prostitutes as partners, and if partners do not know their HIV status individuals are at

higher risk for contracting HIV (Flemmig and Johiro, 1997; Lane and Plaecio, 2003). Thus, the authors suggested that a reasonable strategy is to choose a partner who is at low risk of being HIV infected, a partner who knows his/her HIV sero status and then practice safer sex with that partner, which is mostly achieved through attending VCT service.

2.5.1.3. The Role of VCT in Reducing Exposure to Sexually Transmitted Diseases/Infections

Johnson (1993) investigated that STDs/ STIs are significantly correlated with HIV/AIDS and HIV/AIDS was significantly associated with risky sexual behavior such as unprotected sexual intercourse (sex without condom) and having multiple sex partners.

Furthermore, Lance et al (1998) attested that the reduction of the frequency of unprotected intercourse is granted through assessing whether their behavior is accompanied with significant STDs and increasing their use of condom.

Study on African American women also indicated that women who have been treated for STDs judged their susceptibility to be exposed to HIV/AIDS more than women who report lower exposure to STDs did (Catania, Regeles and Coates, 1990 cited in Johnson, 1993). Flemmig and Johiro (1997) investigated that STDs not only reflect the types of risk taking behavior that are associated with HIV transmission but are also associated with genital ulcers that increase susceptibility to HIV infection.

Kamb, Fishbein and Douglas (1998) conducted study on 5,758 HIV negative heterosexual individuals and found that interactive HIV/AIDS counseling interventions presented with didactic prevention messages was effective in decreasing new STDs during the 12 months of the study.

2.5.1.4. The Role of VCT in Reducing Alcohol and Drug use

Alcohol and drug use for sexual initiation is one of the factors that place individuals at risk of contracting HIV. Even though little is known about the relationship between drug/alcohol use and risky sexual behavior and the association is indirect, many studies confirmed that there is a significant relationship between these two variables. Flemmig and Johiro (1997) said that the use of alcohol or other drugs may indirectly contribute to exposure to HIV by impairing judgment related with sex. That is, it increases the likelihood of having multiple sex partners, and intercourse without condom. Study on both heterosexual and homosexual men attending an STD clinic also revealed that alcohol/drug use has been associated with decreased condom use (CDC, 1993, Houth et al, 1993 cited in Crawford and Desiderato, 2002). In line with the above findings, Vwakwe (1998) cited in Akinade (2001) found that all male and female drug or alcohol users have a very high probability to indulge in heterosexual intercourse with HIV positive and/or high risk individuals .

In addition, the BSS Ethiopia report indicated that 44% of participants who used alcohol and Chat regularly reported having had risky sex in the last 12 months (Genet et al, 2002). It this survey, regular alcohol drinking coupled with drug use was reported as a risk factor for unprotected sex.

Contradicting with the above studies, study on the reported relationship between drug use and high risk sexual behavior, surprisingly found that there is lack of significant association between drug use and sexual risk behavior (Fullilove et al, 1990; Hardy, Smith and Hirsch, 1986; and Primm, 1990 all cited in Johnson, 1993). The result of the study shows that the reported association between drug use and risky sexual behavior is restricted to populations with a higher probability of exposure to HIV/AIDS.

This may be because of their frequent use of drug/alcohol immediately before sex that impairs sexual decision-making, which leads to unwanted or unprotected sexual intercourse and their trading of sex for money or drugs (Clatts et al, 2002).

CHAPTER THREE

III. METHODS AND PROCEDURES

This section of the study deals with research participants, sampling technique, research instruments/tools, procedures of data collection and procedures of data analysis.

3.1. Research participants

The target population of the study are individuals who received VCT service (HIV positive and HIV negative groups) and individuals who did not receive VCT service (non VCT group), VCT counsellors, Leaders of Community Based Organizations (CBO), peer educators, youth associations, women's associations, and religious individuals at the three randomly selected sub cities in Addis Ababa i.e., Lideta, Yeka, and Addis Ketema.

The total sample of participants in the quantitative part is 280 individuals, 150(53.6%) males and 130 (46.4%) females. The majority of ethnic groups in the three sub cities of Addis Ababa (Yeka, Lideta, and Addis Ketema) are represented and so are the various religious groups. The age of the subjects ranges from 15 to 47, but most of the participants are from 26 to 30 years of age. The sample also consists of individuals from such diverse works of life such as governmental and non governmental employees, traders, small business owners, sex workers, house wives, and home based care givers for HIV patients, school students and unemployed.

For the interview and focus group discussion the sample consist individuals who received VCT or VCT group (HIV negative and HIV positive individuals), non VCT groups (individuals who didn't received VCT), VCT counsellors form the respective

VCT centers, home based care givers, religious persons, community leaders, youth association leaders, peer education leaders and women association leaders. The sample also consists of individuals from diverse occupations, educational levels, marital status etc.

3.2. Sampling Technique (Procedure)

The study is both qualitative and quantitative in nature. According to Patton, 1990 cited in Gro (1996) sampling procedures in quantitative research are different from qualitative research, even though heterogeneity is important for both cases. To gather quantitative as well as qualitative data for the study, purposive or judgmental sampling method in which the researcher uses her own judgments or opinion to choose or pick only the respondents who were assumed to best meet the purpose of the study or who can give the required information and are willing to share it, is used. This is because only individuals who best meet the purpose of the study and who are accessible for the data collection should be selected. Because it was too difficult to access those participants with such visible characteristics.

Two major characteristics are required to participate in the study. First participants in both the VCT and non VCT group should be sexually active to participate in the study. That is all sexually inactive individual were excluded from the sample after the first brief interviews because they could not fulfil the criteria set in the purpose of the study. Second, participants in the VCT groups are only those who received the service six months and above before the data collection. Individuals who received VCT (VCT group) recently (less than six month) were also excluded from the sample because in this short time they may not reduce their risk behaviour and even if there is reduction of risk it is difficult to say it is because of VCT.

Sampling procedure for qualitative method is based on the strategic choice and systematic sequential plan of the researcher, where the researcher only goes to those individuals whom in her opinion are likely to have the required information and be willing to share it (purposive) judgmental sampling (Gro 1996). A total sample of participants in the qualitative methods consists of 36 individuals i.e. 16 males and 20 females were participated in the semi-structured in depth interview and focus group discussions. The age range of participants in the in-depth interview is from 18 to 49 and that of the focus group discussion is from 21 to 53. The dominant ethnic and religious group are tried to be represented, and so are the marital status and educational level.

3.3. Research Instrument/Tools

One of the instruments used to gather data in this study was questionnaire that was prepared in English and translated to Amharic so that the respondents understand the subject matter easily. The researcher, with the help of two professional translators who have BA in language, majoring English and minoring Amharic, and who are doing their MA in counselling and measurement and evaluation, did the translation. In addition to questionnaire interview and Focused Group Discussion (FGD) was used to get detailed information that can not be addressed through questionnaire.

Most of the items for risk behaviours were adopted from, Slonim-Nevo (2001), Ward, Darke & Hall (1990), Baseline Risk Assessment/BRA, (1999) and CAPS Instruments (1991). Some relevant items from Ashebir (1995) and Hibist (2001) were also adopted. The rest of the instruments were developed based on related literatures.

The same questionnaire was administered for all VCT groups (HIV positives, HIV negatives) and non VCT groups. The questionnaire consists of items related to the

demographic characteristics; self reported sexual behaviours like condom use with regular and casual partners, number of sexual partners, exposure to sexually transmitted disease and use of alcohol and/or drugs for sexual initiation and harmful traditional practices. Variables like age, sex, educational level, marital status of the participants, and the family status of participants, religion, occupation and monthly income of the participants were also included.

3.3.1. Validity and Reliability of the Self Reported Behaviours

Demonstrating the validity and reliability of the self reported behaviours especially that of the sexual behaviour is very essential. Because bias might be very high due to the strongly held cultural norms and taboos that inhibit individuals to talk and discuss openly/publicly about sexual matters, which is more serious in the case of our country Ethiopia.

Content validity and split half reliability on the bases of pilot study were used to investigate the validity and reliability of the instrument used for the study. To assess the content validity of the items, the instruments were given to 12 evaluators/ judges, who were asked to determine the appropriateness of each item. The 10 judges were VCT counsellors from FGAE's VCT center, Zewditu Hospital's VCT Center and African Initiative VCT center and the two were qualified and experienced instructors in AAU, educational psychology department. The judges evaluated the items on a five point scales where by "5" is allotted to the most appropriate, "4" for appropriate, "3" for least appropriate, "2" for items that need improvement and "1" to items that needs to be discarded. The judges were also give their suggestions on the issues excessively dealt in the questionnaire, important issues that were not included in the questionnaire but needed to be included in the questionnaire and whether the questions are too sensitive. On the bases of the

judgment suggestions, and comments, important improvements were made on the instrument.

Concerning the reliability of the instrument, pilot study was made on 30 respondents randomly selected from the three study areas i.e. 10 from each center. The reliability was calculated using split half method of calculating reliability. The split half reliability of the pilot study items was 0.543. This shows the consistency of the items is good to be used for the study. Based on the result of the pilot study necessary improvement was also made. For instance, two difficult, one vague, and four too sensitive items and two items which have no or little relevance to the purpose of the study were discarded and made ready for the survey. Therefore, the appropriate instrument which fit to the intended purpose of the study was administered.

3.4. Data – Collection Procedures

The three main approaches used for data collection are questionnaire, interview and focused group discussion. The data collection for the quantitative (questionnaire) was done by the researcher and assistant data collectors. But the focused group discussions and interviews were done by the researcher collaboration with coordinators and counsellors of VCT centers, youth association and psychosocial support of AIDS patients. The three main approaches of data collection procedures used in this study are described below.

3.4.1. Questionnaire

Before administering the questionnaire, the purpose of the study was discussed with the program coordinators and concerned officials of the three centers: Pro-Poor Psychosocial Support of AIDS Patients (Lideta Sub-city), Mhei for Youth Anti-AIDS Association (Addis Ketema Subcity) and Family Guidance Association of Ethiopia (FGAE): Frensay Branch Youth Association (Yeka Sub-city). After their willingness was obtained the questionnaire was administered accordingly. At the two centers, Mhei and FGAE youth association half of the data was administered in halls in cooperation with the coordinators and counsellors of the centers, after brief orientation was given by the researcher on the purpose of the study and on how to fill the questionnaire. The rest of the data administration was done by the counsellors (FGA youth Association) and assistant data collectors (Mhei for Youth Anti-AIDS Association) of the two centers. Because it was difficult to get the participants easily. Brief orientation on how to administer the data was given for these counsellors and assistant coordinators.

The administration of data at the third center (Pro-Poor) which is found at Lideta sub-city was done in cooperation with eight assistant data collectors. The eight assistant data collectors were given a half day orientation on the purpose of the study, content, and nature of the items and methods of data collection. All of the assistant data collectors are those who have high accessibility to the participants and whom the participants especially the HIV positives trust. Because they are home based care givers and coordinators of the HIV/AIDS Education campaign at Kebele level.

At all centers the eligible participants were asked to provide verbal consent before they were given an orientation and instruments. After their consent is obtained, the researcher, the counsellors, the assistant program coordinators and data collectors

gave participants an orientation on the purpose of the study, content of the items and way of filling the questionnaire and clarified the instructions of the items. The participants were also told that the researcher is fascinated to get honest answers and that confidentiality is granted.

To assure the confidentiality of the study or the collected data, after each participant fill the questionnaire, they put it in a private box that they were given and identification number (code) was assigned to each questionnaire. The data collectors were given an orientation in the confidentiality procedures. The participants were also strongly granted that any information or response they give will be kept secret.

3.4.2. Interview

Semi-structured in-depth interview with few pre-coded and open ended questions were conducted. The interviewees were: VCT group i.e., VCT positive and VCT negative and non VCT groups, VCT counsellors at some selected VCT centers, home based care givers and project coordinators of the three respective centers. All of the individual interviews were done by the researcher privately in the respective three centers and selected VCT centers. All the participants gave informed consent to be interviewed and the interviews were tape recorded.

3.4.3. Focused Group Discussion (FGD)

In addition to questionnaire and individual interviews the qualitative information was collected through FGD. Three FGDs with an average of 6 to 8 members each were conducted at the three entire study areas. In all the three FGDs, both males and females were represented.

The member of the groups in all FGDs encompass the purposely selected VCT group (VCT negatives and VCT positives) and non VCT group, VCT counsellors,

community based organization leaders, women and youth association leaders, religious leaders, selected VCT coordinators and the coordinators of the three centers (study sites). The groups consist of participants from different levels, because it helps to get different information or response from different perspectives. All the FGDs were conducted by the researcher. But on some occasions, the FGDs were done in cooperation with the coordinators and VCT counsellors of the three centers. The entire focused group discussions were tape recorded with the participants' consent.

3.5. Data Analysis

After the quantitative data is administered and collected the responses of the participants was coded. Data entry coding and processing was made by CSPro version 3.0. The analysis of the quantitative data was done by using Statistical Programs for Social Sciences for Windows version 12.0 (SPSS 12.0 statistics software). Then analysis and cross tabulation of variables were made.

Uni-variate and bi-variate statistical analysis were performed. The univariate analysis was carried out to get the frequency distribution of background characteristics, to get the frequency to examine unusual responses and to check the internal consistency.

The bi-variate analysis using chi-square was performed to assess the relationship between the given variables and the association that a given variable has with background characteristics like age, sex, educational level etc of the participants.

The qualitative data obtained through in-depth interview and focused group discussions were analyzed by categorizing, coding and summarizing on master sheets. Then the result was reported using narrative technique.

CHAPTER FOUR

IV. ANALYSIS OF THE RESULTS

For this data Analysis, demographic characteristics of participants, VCT status of participants and service received at the VCT Centers, differences of risk behaviours among participants in the VCT and non VCT groups, association between selected demographic characteristics and selected HIV risk behaviours as well as some selected HIV risk behaviours and their relationship with one another is considered.

4.1. Background characteristics

Table 1 shows the frequency distribution of study subjects who have participated in the quantitative study (questionnaire) to assess the significant differences between individuals who received VCT(VCT group) and did not receive VCT (non VCT group) with regard to HIV risk behaviours.

Table 1- Frequency Distribution of Participants' Age and Sex by VCT Status

Background Characteristics		Group of respondents		Total Frequency (%)
		VCT group Frequency (%)	Non VCT group Frequency (%)	
Sex	Male	62(22.1%)	88(31.4%)	150(53.6%)
	Female	78(27.9%)	52(18.6%)	130(46.4%)
Total		140(50.0%)	140(50.0%)	280(100.0%)
Age Group	15 - 20	24(8.6%)	25(8.9%)	49(17.5%)
	21 - 25	31(11.1%)	52(18.6%)	83(29.6%)
	26 - 30	46(16.4%)	43(15.4%)	89(31.8%)
	31 - 35	27(9.6%)	10(3.6%)	37(13.2%)
	36 - 40	5(1.8%)	6(2.1%)	11(3.9%)
	> 40	7(2.5%)	4(1.4%)	11(3.9%)
Total		140(50.0%)	140(50.0%)	280(100.0%)

In the study, 150 males (53.6%) and 130 females (46.4%) are included. Sixty two (22.1%) males and 78(27.9%) females have received VCT service and 88(31.4%) males and 52(18.6%) females did not receive the service. Forty

seven percent of the participants are in the age group of 15-25, 45.0% between 26 and 35 and 7.9% are older than 35 years.

Table 2- Frequency Distribution of Educational Level of participants by VCT Status

Educational level		Group of respondents		Total
		VCT group	Non VCT group	
	illiterate	6(2.2%)	6(2.2%)	12(4.3%)
	primary school	42(15.2%)	14(5.1%)	56(20.3%)
	secondary school	59(21.4%)	86(31.2%)	145(52.5%)
	Technical school	18(6.5%)	24(8.7%)	42(15.2%)
	Higher education	10(3.6%)	8(2.9%)	18(6.5%)
	others	2(0.7%)	-	2(0.7%)
	Not Stated	1(0.4%)	-	1(0.4%)
Total		138(50.0%)	138(50.0%)	276(100.0%)

Regarding their educational level, almost all 263 (95.3%) of the participants are literate. Of these 145(52.5. %) have been attended secondary school, 56(20.3%) primary school, 42(15.2%) technical school, 18(6.5%) higher education and 2 participants (0.7%) are MA degree holders. The remaining 12 (4.3%) are illiterate who cannot read and write (see Table 2).

Table 3- Frequency Distribution of Participants' Religion and Ethnicity by VCT Status

Religion and Ethnicity		Group of respondents		Total
		VCT group	Non VCT group	
	Orthodox	107(38.5%)	107(38.5%)	214(77.0%)
	Muslim	26(9.4%)	20(7.2%)	46(16.5%)
	Protestant	5(1.8%)	5(1.8%)	10(3.6%)
	Catholic	2(0.7%)	5(1.8%)	7(2.5%)
	others	-	1(0.4%)	1(0.4%)
Total		140(50.4%)	138(49.6%)	278(100.0%)
Ethnicity	Amhara	68(24.5%)	63(22.7%)	131(47.3%)
	Oromo	21(7.6%)	25(9.0%)	46(16.6%)
	Tigre	21(7.6%)	19(6.9%)	40(14.4%)
	Gurage	14(5.1%)	21(7.6%)	35(12.6%)
	Silte	10(3.6%)	5(1.8%)	15(5.4%)
	SNNP	4(1.4%)	3(1.1%)	7(2.5%)
	Others	1(0.4%)	2(0.7%)	3(1.1%)
Total		139(50.2%)	138(49.8%)	277(100.0%)

Orthodox Christianity is the predominant religion (77.0%) followed by Muslim (16.5%), Protestant (3.6%) and Catholic 2.5%. Most (47.3%) of the participants are Amhara ethnically followed by Oromo (16.6%), Tigre (14.4%), Gurage (12.6%), Silte (5.4%), Southern Nations and Nationalities /SNNP (2.5%) and others (1.1%).

Table 4 - Frequency Distribution of Occupation of participants by VCT Status

Occupation		Group of respondents		Total
		VCT group	Non VCT group	
	Government and NGO Employees	12(4.5%)	17(6.3%)	29(10.8%)
	Private Business	33(12.3%)	49(18.2%)	82(30.5%)
	Unemployed	54(20.1%)	30(11.2%)	84(31.2%)
	Student	22(8.2%)	25(9.3%)	47(17.5%)
	Daily Labourers	3(1.1%)	4(1.5%)	7(2.6%)
	Sex Workers	7(2.6%)	7(2.6%)	14(5.2%)
	Others	4(1.5%)	2(0.7%)	6(2.2%)
Total		135(50.2%)	134(49.8%)	269(100.0%)

The result in Table- 4 shows that most of the participants 84 (31.2%) are unemployed and about 82(30.5%) run their own private business. The rest are students 47(17%), government and non government employees 29(11%), sex workers 14(5.2%), daily labourers 7(2.6%) and others 7 (2.2%).

Table -5 Frequency Distribution of Marital Status of participants by VCT Status

Marital Status		Group of respondents		Total
		VCT group	Non VCT group	
	Monogamous	17(6.3%)	13(4.8%)	30(11.0%)
	Polygamous	3(1.1%)	2(0.7%)	5(1.8%)
	Not legally married but living under one roof	18(6.6%)	15(5.5%)	33(12.1%)
	Single	67(24.6%)	93(34.2%)	160(58.8%)
	Separated but not legally divorced	9(3.3%)	3(1.1%)	12(4.4%)
	Divorced	7(2.6%)	3(1.1%)	10(3.7%)
	Widowed	16(5.9%)	6(2.2%)	22(8.1%)
Total		137(50.4%)	135(49.6%)	272(100.0%)

As it is indicated in the above Table, the majority (about 58.8%) of the participants are single or not married. Sixty eight participants who constitute about 23.8% are married: 30(11%) are monogamous, 5(1.8) are polygamous and 33(12.1%) are not legally married but living under one roof. The rest 44(16.2%) are separated but not legally divorced 12(4.4%), legally divorced 10(3.7%) and widowed 22(8.1%).

Table 6- Frequency Distribution of participants' living Status and Monthly income by VCT Status

Living Status and Monthly Income		Group of respondents		Total
		VCT group	Non VCT group	
Living Status	Dependent	75(27.2%)	86(31.2%)	161(58.3%)
	Independent	40(14.5%)	29(10.5%)	69(25.0%)
	Supporting oneself and Family	22(8.0%)	20(7.2%)	42(15.2%)
	others	2(0.7%)	2(0.7%)	4(1.4%)
Total		139(50.4%)	137(49.6%)	276(100.0%)
Monthly Income	No income	81(29.9%)	32(11.8%)	113(41.7%)
	Below 100 Birr	40(14.8%)	82(30.3%)	122(45.0%)
	From 100 to 500 Birr	12(4.4%)	19(7.0%)	31(11.4%)
	From 500 to 1,000 Birr	2(0.7%)	2(0.7%)	4(1.5%)
	Above 1,000	1(0.4%)	-	1(0.4%)
Total		136(50.2%)	135(49.8%)	271(100.0%)

Regarding the participants living status, 161 (58.3%) of the participants reported that they are dependent, 69 (25%) are self reliant and 42 (15.2%) of them support themselves and their families (See Table 6).

One hundred thirteen (41.7%) participants have no income and the average monthly income of 122(45%) participants is below birr 100. The average

monthly income of 31 (11.4%) participants ranges from 100 to 500 birr while those of 4 (1.48%) participants ranges from 500 to 1,000 birr.

4.2. VCT Status of Participants and Services Received at the VCT center

4.2.1. VCT and HIV Status of Participants

Table 7- Percentage Distribution of Participants' VCT and HIV Status by Sex

VCT and HIV Status	Sex				Total	
	Male		Female			
	No.	%	No.	%	No.	%
Received VCT(VCT Group)	60	21.4%	80	28.6%	140	50%
Didn't Receive VCT(VCT Group)	90	32.1%	50	17.9%	140	50%
Total	150	53.5%	140	46.5%	280	100%
HIV Status						
HIV Positive	24	17.1%	46	32.9%	70	50%
HIV Negative	36	25.7%	34	24.3%	70	50%
Total	60	42.8%	80	57.2%	140	100%

Table - 7 above presents the frequency distribution regarding the participants' status of VCT and HIV. As the table indicates the total number of participants who received VCT (VCT Group) and who did not receive VCT (Non VCT Group) is equal i.e., 140 (50%) are from VCT group and 140(50%) are from non VCT group. The sample includes a total of 150 males [sixty (42.9%) from VCT group and ninety (64.3%) from non VCT group] and 130 females [eighty (57.1%) from VCT group and fifty (35.7%) from the non VCT group.

Of the 140 participants in the VCT group, 70 (24 males and 46 female) participants are HIV positive and the rest 70(36 males and 34 females) are those who tested HIV negative.

Table 8- Percentage Distribution of Participants in the VCT Group who Received HIV Test for the Second Time

HIV Status for the First Time	HIV Test for the second Time					
	Yes		NO		Total	
	No	%	No.	%	No.	%
Positive	58	82.9%	12	17.1%	70	50%
Negative	41	58.6%	29	41.4%	70	50%

The majority 97(69.3%) of the VCT participants reported that they received HIV test for the second time after three or more months to detect whether they were in the window period at the time of the first test. More than three fourth 58(82.9%) of the HIV positive participants received the test for the second time (see Table 8). But HIV negative participants who tested for the second time is only (58.6%).

4.2.2. Services Received at the VCT Center

Table- 9 Percentage Distribution of Services Received at VCT Center by Participants in the VCT Group by Sex

Type of VCT Received	Participants in the VCT group		
	Sex		
	Male	female	Total
	No. (%)	No. (%)	No. (%)
Pre and post test counselling	57(33.6%)	77(47.9%)	134(95.7%)
Ongoing counselling only	4(2.9%)	2(1.4%)	6(4.3%)
Pre and post test counselling & home based counselling	7(5%)	7(5%)	14(10.0%)
Pre and post test, home based and Ongoing counselling	2(1.4%)	3(2.1%)	5(3.6%)
Pre and Post counselling and ongoing counselling	-	1(.7%)	1(.7%)
Total	60(42.9%)	80(57.1%)	140(100.0%)

As it is presented in Table 9, almost all 134 (95.7%) participants in the VCT group receive both pre and post test counselling at different VCT centers in Addis Ababa. The rest 6 (4.3%) participants reported that they received on going counselling only. Out of the 134 participants 20 (14.3%) reported that they received other services like home based counselling 14 (10%), ongoing

counselling 1 (.6%), and home based and ongoing counselling 5 (3.6%), in addition to the pre test and post test counselling.

Table-10: Percentage Distribution of HIV Positive Participants by the Services Received/ Receiving in the VCT Center by Sex

Service Received/ receiving	HIV Positive Participants		
	Sex		Total
	Male	female	
Ongoing Counselling	3(2.4%)	10(7.1%)	13(9.3%)
Home Based Counselling	2(1.4%)	8(5.7%)	10(7.1%)
Anti Retroviral Drugs(ART)	4(2.9%)	2(1.4%)	6(4.3%)
Psychosocial Services	2(1.4%)	2(1.4%)	4(2.9%)
Peer Education and Counselling		3(2.4%)	3(2.4%)
Ongoing and home based counselling	3(2.4%)	5(3.6%)	8(5.7%)
All Services	4(2.9%)	4(2.9%)	8(5.7%)
Others	6(4.3%)	14(10%)	20(14.3%)
Did not Receive any Service	35(25%)	33(23.6%)	68(48.6%)
Total	59(42.1%)	81(57.9%)	140(100.0%)

Table- 10 presents services given to the HIV positive participants with in and out side the VCT centers in Addis Ababa. As it was stated earlier, of the 280 participants 70(25%) were tested HIV positive. The result shows that most 68 (48.6%) of the participants reported that they did not get any service till the time of data collection. The rest 72 (51.4%) were receiving different services at different governmental, non governmental and private sector service providers. The services they are getting include: ongoing counselling 13 (9.3%), home based counselling 10 (7.1%), antiretroviral drugs (ART) 6(4.3%), psychosocial services 4 (2.9%), peer education and counselling 3 (2.4%), ongoing and home based counselling 8 (5.7%), all services listed above 8 (5.7%) and others 20 (14.3%). The services listed under others

include: financial and psychosocial assistances rendered at governmental and non governmental organizations (NGO'S) like Tesfa Goh Ethiopia, Pro Poor, Tila, OSSA (organization of social service for AIDS in Ethiopia) etc. The above table also shows that females were more using the services rendered at different centers as compared to males.

Table-11: Percentage distribution of HIV Negative Participants by the Support received / Receiving in the VCT Center to Continue being HIV Negative by Sex

Support Received/ receiving to continue being HIV Negative	VCT group					
	Received VCT			Not Received VCT		
	Sex		Total	Sex		Total
	Male	female		Male	female	
	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)
Ongoing Counselling	5(3.6)	6(4.3)	11(7.9)			
Peer Education and Counselling	19(13.6)	18(12.9)	37()	4(2.9)	1(.7)	5(3.6)
Ongoing Counselling & Peer Education and Counselling	8(5.7)	6(4.3)	14()	1(.7)	1(.7)	2(1.4)
Never Received any Service	23(16.4)	45(32.1)	68(48.6)	78(55.7)	45(32.1)	123(87.9)
Ongoing Counselling and Peer education and Counselling	5(3.6)	5(3.6)	10(7.1)	7(5)	3(2.1)	10(7.1)
Total	60(42.9)	80(57.1)	140(100.0)	90(64.3)	50(35.7)	140(100.0)

Participants in both VCT and non VCT groups were also asked about the supports given to them to continue being HIV negative like that of HIV positives. As indicated in Table 11, most (48.6%) of the participants who test HIV negative reported that they did not receive any support that helps them to stay being negative. Seventy two participants (51.4%) declared that they were getting ongoing counselling 11 (7.9 %), peer education and counselling 37 (26.5%), and ongoing counselling and peer education 24 (17.1%). Compared to other services, the number of participants who were receiving ongoing

counselling was lesser. Of the 140 non VCT participants, only 17 (12.1%) reported that they were participating in peer education. Thus, basing on the result it is possible to deduce that participants in the VCT group have more exposure and participation at the service /supports helped to continue being HIV positive than participants in the non VCT group.

4.3. Differences of risk behaviours among participants in the VCT and non VCT groups

4.3.1. Age of First Sexual Intercourse

Table 12- The Frequency, Percentage and Chi -Square Values of Participants' age of first Sexual Intercourse by VCT Group

Age of first Sexual Intercourse	Group of respondents			χ^2 test
	VCT group	Non VCT group	Total	
	No. (%)	No. (%)	No. (%)	
≤ 15	14(5.0%)	19(6.8%)	33(11.8%)	$\chi^2 = 2.039$ $P = 0.729$
16 – 20	97(34.6%)	90(32.1%)	187(66.8%)	
21 – 25	25(8.9%)	26(9.3%)	51(18.2%)	
26 – 30	4(1.4%)	4(1.4%)	8(2.9%)	
> 30	-	1(.4%)	1(.4%)	
Total	140(50.0%)	140(50.0%)	280(100.0%)	

Table 12 presents the frequency distribution and chi-square values of the age of first sexual intercourse. The mean age of the participants' age of first intercourse is 18.6. The highest and lowest ages for the first sexual intercourse of the participants are 33 and 5 respectively. The majority 78.6% (39.6% VCT group and 38.9% Non VCT group) of participant had their first experience of sexual intercourse between the age of 5 and 20. For the rest 21.0% (10.3%, VCT and 10.7%, Non VCT group) the age for the first sexual intercourse ranged from 21 to 30. The result of the chi square shows that there is no significant difference between the VCT group and Non VCT group

in relation to the age of first sexual intercourse ($\chi^2 = 2.039$, $N = 280$, $P = 0.729$).

4.3.2. Multiple and High Risk Sexual Partner

4.3.2.1 Number of Sex Partners

Table - 13: The Frequency, Percentage and Chi -Square Values of

Participants' Number of Life Time and Recent Sex partner

Number of Sexual Partner		Group of respondents			χ^2 test	r
		VCT group	Non VCT group	Total		
		Frequency (%)	Frequency (%)	Frequency (%)		
Number of Life time Sexual Partner	One Partner	42(15%)	25(8.9%)	67(23.9%)	$\chi^2 = 5.670^*$ $P < .05$	$r = .142^*$ $p < .05$
	Two or more partners	98(35%)	115(41%)	213(76%)		
	Total	140(50%)	140(50%)	280(100%)		
Number of Sex Partner in the Last six Months	One Partner	67(24.1%)	44(15.8%)	111(39.9%)	$\chi^2 = 8.494^{**}$ $P < .05$	$r = .175^{**}$ $p < .01$
	Two or more partners	71(25.5%)	96(34.5%)	167(60.1%)		
	Total	138(49.6%)	140(50.4%)	278(100.0%)		

* P [is less than ~ .05] or significant at the 0.05 level (2-tailed).

** P [is less than ~ .01] or significant at the 0.01 level (2-tailed).

Table 13 presents percentage data on life time and recent (six months) number of sexual partners by VCT and non VCT group. Almost three fourth (76.1%) of participants had sexual relations with more than one life time partner while 67(23.9%) were monogamous. Similarly; the table shows that 60.1% of study participants had more than one sex partner in the last six months. The over all results in both life time and recent number of sex partner/s indicate more multiple sex partners were reported by non VCT group (41% life time and 34.5% in the last six months) than VCT group (35% life

time and 25.5% in the last six months). On the other way round, a larger percentage of VCT group than non VCT group (15% versus 8.9%, life time and 24.1 % versus 15.8 % in the last six months) reported only one sex partner.

Among the VCT participants who reported to have had only one partner, the majority ranked VCT (65.2%) and religious institutions (33.7%) as the first and second service enabled them to be faithful. While the non VCT group reported that mass media (56.5%) and religious institutions (34.8%) were the most important services helped them to be faithful (see Table-A in Appendix IV). From this result it can be possible to deduce that VCT service for VCT group and mass media for non VCT group have the most significant impact in limiting themselves to one sex partner. Religious institutions were the common service that helped both participants in the VCT and non VCT group to be faithful.

The over all association between the independent variables, VCT group and Non VCT group, and dependent variable, number of sex partner in the last six months, $\chi^2 = 8.494$, $df = 1$, $N = 278$, $p < 0.01$ is significant. There is also a significant difference between VCT and non VCT groups in relation to life time sex partner ($\chi^2 = 5.670$, $df = 1$, $N = 280$, $P < 0.05$). The result of Pearson correlation analysis revealed that significant associations were also found between the two groups and number of life time partner/s, $r = .142$, $p < .05$ and number of partner/s in the six months, $r = .175$, $p < .01$ (see correlation Table- 1 from appendix V). The number of life time sex partner of the participants were positively associated with the number of sex partners the participants had in the last six months, $r = .443$, $p < .01$ i.e., those who had

multiple life time sex partner also had multiple sex partners in the last six month and vice versa.

The over all result of the study in Table- 13 illustrates that participants in the non VCT group were more likely than participants in the VCT group to report two or more life time partners (41% versus 35%) and recent partners (34.5% versus 25.5%).

4.3.2.2. High Risk Sexual partner

Table - 14: Frequency Distribution of Participants responding "Yes" in having sex with Prostitutes, Casual and high risk partners in the last six months.

Sex with High Risk Partner in the last six months		Group of respondents			χ^2 test	r
		VCT group	Non VCT group	Total		
		Frequency (%)	Frequency (%)	Frequency (%)		
Sex with casual sexual partner	Yes	69(24.6)	98(35.0)	167(59.6)	$\chi^2 = 12.478^{***}$ P = .000	r = -.211** p = .003
	No	71(25.4)	42(15.0)	113(40.4)		
	Total	140(50.0)	140(50.0)	280(100.0)		
Sex with a prostitute(for men)	Yes	23(15.3)	29(19.3)	52(34.7)	$\chi^2 = .276$ P = .600.	r = .043 p = .603
	No	39(26.0)	59(39.3)	98(65.3)		
	Total	62(41.3)	88(58.7)	150(100.0)		
Sex with high risk partner like HIV positives, partner who does not know his HIV status etc (for Women)	Yes	18(13.8)	28(21.5)	46(35.4)	$\chi^2 = 12.919^{***}$ P = .000	r = -.315***
	No	60(46.2)	24(18.5)	84(64.6)		
	Total	78(60.0)	52(40.0)	130(100.0)		

*** P [is less than ~ .01] or significant at the 0.001 level (2-tailed).

** P [is less than ~ .01] or significant at the 0.01 level (2-tailed).

Table 14 shows the percent distribution of high risk sexual partners like, casual partners, prostitutes and high risk partners such as HIV positives, partner who does not know his/her HIV status and so on. Out of the total 280

participants the majority 167(59.6%) reported that they had sex with casual sex partner/s and 113(40.4%) said that they did not have casual partner in the last six months.

Of all the 150 male and 130 female respondents, 52 (34.7%) males and 46 (35.4%) females reported that they had sex with prostitutes and HIV positives, partner who does not know his/her HIV status etc respectively.

In the six months time, compared to participants who received VCT service, participants who did not receive the service were highly (more) engaged in having sex with casual partner (35% versus 24.4% VCT) for both men and women, with prostitutes (19.3% versus 15.3%) for men and with high risk partners (21.5% versus 13.8%) for women.

The over all association shows that there is no statistically significant difference between participants who received VCT and participants who did not receive VCT comparing the percentage of men who have had sex with prostitutes ($\chi^2 = 0.276$, $P = 0.600$). However, there is a statically significant difference between the two groups regarding sexual relations with casual partners ($\chi^2 = 12.478$, $P < 0.001$) and sexual relations with risk partners ($\chi^2 = 12.919$, $p < 0.001$). In addition the correlation analysis showed that a significant reverse association exists between the two groups in having sex with casual partners ($r = -.211$, $p < 0.01$) and sex with high risk partners ($r = -.315$, $p < 0.001$), (see correlation Table-1 from appendix V).

Accordingly, participants who did not receive VCT service participated in more risky behaviours i.e. having sex with casual partners and high risk partners than who received the service, though there is no such difference between the groups for men who had sex with prostitutes.

4.3.3. Condom use: Consistent and Correct use of condom

Table- 15: Condom Use with Regular and Casual Partners among Participants in the VCT and Non VCT Groups

Condom use		Group of respondents			χ^2 test
		VCT group	Non VCT group	Total	
		Frequency (%)	Frequency (%)	Frequency (%)	
With Regular Sex Partner	Yes	99(35.4)	89(31.8)	188(67.1)	
	No	41(14.6)	50(17.9)	91(32.5)	
	Not Stated	-	1(.4)	1(.4%)	
	Total	140(50.0)	140(50.0)	280(100.0)	
$\chi^2 = (2) 2.422$ $P = .298$					
With casual sexual partner	Yes	65(38.9)	85(50.9)	150(89.8)	
	No	4(2.4)	13(7.8)	17(10.2)	
	Total	69(41.3)	98(58.7)	167(100.0)	
$\chi^2 = (1) 12.478^{***}$ $P = .000$					

*** P [is less than $\sim .01$] or significant at the 0.001 level (2-tailed).

Table-15 reports condom use with regular and casual partners among participants in VCT group and non VCT group. Over all, 67.1% of participants who had sex with regular partner in the last six months used condoms and 32.5 % report never using condoms. Even though participants in the VCT group exceed those in the non VCT group with 4.4% in using condom with primary partner, the difference is not statically significant ($\chi^2 = 2.422$, $df = 2$, $N = 167$, $P = .298$).

Of the 167, respondents who had sex with casual partner in the last Six months, the majority [89.8%: (38.9% VCT and 50.9 % non VCT)] used condom with their casual partners. Thus, participants in the non VCT group used condom with casual partners more significantly than those who were in the VCT group ($\chi^2 = 12.478$, $df = 2$, $N = 167$, $P < .001$).

Condom use with casual partners in the last six months is positively correlated with participants' condom use in their last sexual intercourse with casual

partner, $r = .171$, $N = 164$, $p < .05$ (see correlation Table- 2 from appendix V). It means that a participant who has used condom with casual partners in the last six months is more likely to use condom with casual partners during last sexual intercourse and during anal sex.

Table-16: Condom use at Last Sexual Intercourse with Regular and casual partner/s among participants in the VCT and Non VCT Group

Condom use at last Sexual Intercourse		Group of respondents			χ^2 test
		VCT group	Non VCT group	Total	
		Frequency (%)	Frequency (%)	Frequency (%)	$\chi^2 = (2) 15.136^{**}$
With Regular Sex Partner	Yes	77(27.9%)	45(16.3%)	122(44.2%)	$P = .001$
	No	56(20.3%)	84(30.4%)	140(50.7%)	
	No Regular Partner	5(1.8%)	9(3.3%)	14(5.1%)	
	Total	138(50.0%)	138(50.0%)	276(100.0%)	
With casual sexual partner	Yes	53(20.0%)	25(9.4%)	78(29.4%)	$\chi^2 = (2) 29.091^{***}$ $P = .000$
	No	36(13.6%)	80(30.2%)	116(43.8%)	
	No Casual Partner	42(15.8%)	29(10.9%)	71(26.8%)	
	Total	131(49.4%)	134(50.6%)	265(100.0%)	

*** P [is less than $\sim .01$] or significant at the 0.001 level (2-tailed).

** P [is less than $\sim .01$] or significant at the 0.01 level (2-tailed).

As it can be seen from Table 16, for a more reliable evaluation of condom use, participants in both VCT and non VCT groups were asked to indicate whether they had used condoms during the last time they had sexual intercourse with their regular and casual partners. Almost half (50.7%) of the respondents did not use condom with regular partner and less than half (43.8%) of them did not use it with casual partner in their last sexual intercourse. On the other hand 27.9 % (all HIV positives) of participants in the VCT group used condom with their regular partners. There were statically

significant differences ($\chi^2 = 15.136$, $df = 2$, $N = 276$, $P = .001$).in condom use with regular partner during the last Sexual intercourse between the two groups.

With regard to condom use during the last sexual intercourse with casual partners 20 % of the participants in the VCT group used it, but condom use was reported only by 9.4% in the non VCT group. High significant differences emerged between the two groups in the use of condom at last sexual intercourse with casual partner/s ($\chi^2 = 29.09$, $df = 2$, $N = 265$, $P < .001$)

In general there is significant difference between individuals who received VCT and who did not receive the service in relation to condom use at last sexual intercourse with both regular and casual partner/s. That is an individual who received VCT is more prone in using condom than who did not received the service.

4.3.3.1. Consistent use of Condom

Table-17: Consistent (Frequent) use of condoms with casual and regular partner among participants in VCT and Non VCT groups

Frequency of condom use		Group of respondents			χ^2 test
		VCT group	Non VCT group	Total	
		Frequency (%)	Frequency (%)	Frequency (%)	
With /Regular Sex Partner	Always	72(28.9%)	49(19.7%)	121(48.6%)	$\chi^2 = (4) 22.299^{***}$ P =.000
	Usually	7(2.8%)		7(2.8%)	
	Sometimes	5(2.0%)	15(6.0%)	20(8.0%)	
	Rarely	10(4.0%)	21(8.4%)	31(12.4%)	
	Never	29(11.6%)	41(16.5%)	70(28.1%)	
	Total	123(49.4%)	126(50.6%)	249(100.0%)	
With casual sexual partner	Always	48(28.7%)	21(12.6%)	69(41.3%)	$\chi^2 = (4) 41.868^{***}$ P =.000
	Usually	3(1.8%)	7(4.2%)	10(6.0%)	
	Sometimes	6(3.6%)	22(13.2%)	28(16.8%)	
	Rarely	3(1.8%)	28(16.8%)	31(18.6%)	
	Never	9(5.4%)	20(12.0%)	29(17.4%)	
		Total	69(41.3%)	98(58.7%)	

*** P [is less than ~ .01] or significant at the 0.001 level (2-tailed).

The result of the data in Table 17 show roughly one third (28.9%) of the participants in the VCT group and one fifth (19.7%) of participant in the non VCT reported that they “always” use condoms with their regular partner. Nine percent of participants in the VCT group and fourteen percent of participants in the non VCT group used condoms inconsistently/ infrequently. The rest 28.1% (11.6% in the VCT and 16.5% in the non VCT) never used condoms with their primary sex partners.

Similarly, it is indicated in the table that 48 (28.7%) of participants in the VCT group and 21 (12.6%) of participants in the non VCT group out of the 167 samples who had sex with casual partners, used condom consistently /regularly. According to the respondents self report, participants in the non VCT group used condom with casual partners more inconstantly than participants in the VCT group (34.2% versus 7.2%). The number of

respondents who "Never" used condom with casual partner, 20 (12%) is also greater than those in the VCT group, 9 (5.4%).

Those participants who reported consistent use of condoms were also asked to rate the service helped them to use condom consistently. Among the 48 participants in the VCT group who used condoms consistently the majority 29(60.4%) of them rate VCT service first for helping them to use condoms consistently. The rest rated mass media 11(22.9%), friends 3(6.3%), Community Based organizations 3(6.3%), anti HIV/AIDS clubs 2(4.2%), and others 2(4.2%). On the other hand, of participants in the non VCT group reported consistent use of condom, 45.8% rate mass media, 22.5 % rate friends, 13% rate anti HIV/AIDS clubs, 9.1 % rate VCT and 8.7% rate other services like NGOs to be the service that helped them to use condom consistently. In general, VCT service for the VCT group and mass media for the non VCT group were the most significant services that helped participants to use condom consistently (see Table B from appendix IV).

The chi-square analysis comparing the groups' inconsistent use of condom with both regular, $\chi^2 = 22.299$, $df = 4$, $N = 249$, $P < 0.001$ and casual, $\chi^2 = 41.868$, $df = 4$, $N = 167$, $P < .001$ partner/s were statistically significant 0.001 level (see table 17). The result of the comparison of the two groups indicated that participants in the non VCT group reported significantly less often in consistent use of condoms with both regular and casual partners in the last six months. Furthermore the number of participants in the non VCT group who reported that they never use condoms or use it inconsistently was exceptionally higher than among participants in the VCT group.

4.3.3.2. Correct use of condom

Table- 18: Incorrect use of condoms with casual partner in the last six Months

Used Condoms Incorrectly	Group of respondents				χ^2 test
		VCT group	Non VCT group	Total	
		Frequency (%)	Frequency (%)	Frequency (%)	
With Regular Partner	Yes	28(14.9%)	42(22.3%)	70(37.2%)	$\chi^2 = (1) 7.170^{**}$ $P = .007$
	No	71(37.8%)	47(25.0%)	118(62.8%)	
	Total	99(52.7%)	89(47.3%)	188(100.0%)	
With Casual Partner	Yes	17(11.4%)	51(34.2%)	68(45.6%)	$\chi^2 = (1) 17.642^{***}$ $P = .000$
	No	48(32.2%)	33(22.1%)	81(54.4%)	
	Total	65(43.6%)	84(56.4%)	149(100.0%)	

*** P [is less than $\sim .001$] or significant at the 0.001 level (2-tailed).

** P [is less than $\sim .01$] or significant at the 0.01 level (2-tailed).

As it can be seen from Table 18, more participants in the non VCT group (22.3%) than those in the VCT group (14.9%) reported that they had an experience of condom's breaking, tearing, slipping or failing at least once during intercourse with the regular partners in the last six months. Even though, more than half (54.4%) of the participants did not have such experiences, incorrect use of condom with casual partners was also reported by 34.2 % of participants in the non VCT group and by 11.4% of the participants in the VCT group. Thus, from the data it can be concluded that participants in the non VCT group experienced more condom's slippage, breakage and cut than their counter part. Conforming with this, the chi square result also shows that there were statically significant differences in incorrect use of condoms with regular partner/s, ($\chi^2 = 7.17$, $df = 1$, $N = 188$, $p < .05$) and casual partner, $\chi^2 = 17.642$, $df = 1$, $p < .001$ between the two groups.

In addition, the frequency of condoms' slipping off, tearing, breaking or failing during sexual intercourse with casual partner/s was positively significant with the two groups, $r = .340$, $N = 151$, $P < .001$. The slipping off, tearing, breaking or failing of condoms during intercourse with casual partner was negatively correlated with condom use at last sexual intercourse with both casual partners, $r = -.172$, $N = 148$, $P < .05$, and regular partner/s, $r = -.213$, $N = 138$, $P < .01$ (see correlation Table-2 from appendix V). That is the more frequent the condoms are slipping off, tearing, breaking or failing, the less condoms are used during at last sexual intercourse and vice versa.

Out of the thirty seven VCT participants who used condoms correctly in the last six months, the majority 27 (57.4%) put VCT service in the first place for helping them in using condoms correctly. Furthermore, 10 (21.3%) participants in the VCT group reported mass media as the most significant service helping them to use condom correctly. On the other hand, 19 participants out of the 30 non VCT participants, half (50%) of them reported that mass media played a major role in their use of condom correctly. Services like friends, religious institutions, community based organizations (CBOs), family and anti HIV/AIDS clubs, were also reported by some participants in VCT and non VCT groups in assisting them to use condom correctly. This implies that VCT service for participants in the VCT group and mass media for the non VCT group are the significant and effective service in aiding correct use of condoms.

4.3.4. Communication Between partners about Condom use

Table-19: Frequency of convincing or protecting, partner/s not to make sex without condom and acceptance or respect for partner's demand/ interest for using condom

	Group of respondents			χ^2 test	
		VCT group	Non VCT group		Total
Frequency of convincing partner/s not to make sex without condom	Always	61(23.0%)	36(13.6%)	97(36.6%)	$\chi^2 = (4) 24.946^{***}$ $P = .000$
	Usually	20(7.5%)	7(2.6%)	27(10.2%)	
	Sometimes	5(1.9%)	10(3.8%)	15(5.7%)	
	Rarely	4(1.5%)	10(3.8%)	14(5.3%)	
	Never	41(15.5%)	71(26.8%)	112(42.3%)	
	Total	131(49.4%)	134(50.6%)	265(100.0%)	
Frequency of protecting partner/s not to make sex without condom	Always	54(20.5%)	33(12.5%)	87(33.1%)	$\chi^2 = (4) 14.497^{**}$ $P = .006$
	Usually	19(7.2%)	10(3.8%)	29(11.0%)	
	Sometimes	6(2.3%)	8(3.0%)	14(5.3%)	
	Rarely	9(3.4%)	15(5.7%)	24(9.1%)	
	Never	43(16.3%)	66(25.1%)	109(41.4%)	
	Total	131(49.8%)	132(50.2%)	263(100.0%)	
Frequency of acceptance or respect for partner's demand/ interest for using condom	Always	58(21.8%)	31(11.7%)	89(33.5%)	$\chi^2 = 32.925^{***}$ $P = .000$
	Usually	22(8.3%)	8(3.0%)	30(11.3%)	
	Sometimes	2(.8%)	10(3.8%)	12(4.5%)	
	Rarely	7(2.6%)	10(3.8%)	17(6.4%)	
	Never	11(4.1%)	33(12.4%)	44(16.5%)	
	Never asked	32(12.0%)	42(15.8%)	74(27.8%)	
	Total	132(49.6%)	134(50.4%)	266(100.0%)	

*** P [is less than ~ .01] or significant at the 0.001 level (2-tailed).

** P [is less than ~ .01] or significant at the 0.01 level (2-tailed).

Flemmig and Johiro (1997) and Clatts et al, (2002) stated, in addition to technical skills, interpersonal negotiation skill is very essential for using condoms consistently and correctly.

The results indicates that the two groups (VCT and non VCT) differ with regard to their overall frequency of protecting and / or convincing the partner not to make sex without condom and in respecting partner's interest for using condom (see table 19). Generally speaking, participants in the VCT group who "Always" negotiate with their partners not to make sex without condom and respect their partner's interest for using condom (21.6%) are more than participants in non VCT group (12.3%). Further more the number participants

in the non VCT group is 10% less by frequently convincing, protecting and accepting their partner's interest for using condom (23.7%) than participants in VCT group (33.6%). On the other hand, the number of participants in the non VCT group who "Never" convinced 71 (26.8%) and protected 66 (25.1%) their partner not to make sex without condom and who "Never" accepted their partner's interest for using condom 33 (12.4%) is greater than the number of participants in the VCT group i.e. 41(15.5%), 43 (16.3%) and 11(4.1%) respectively.

Significant group difference was noted for scales that assessed the negotiation skill about condom use. These two groups were significantly ($P < .001$) different in their skill in convincing their partner not to make sex with out condom ($\chi^2 = 24.946, p < 0.001$) and in accepting their partner's demand for using condom ($\chi^2 = 32.925, p < 0.001$). The two groups were also significantly ($p < .01$) different in protecting their partner not to make sex without condom ($\chi^2 = 14.97, p < .05$).

4.3.5. Exposure to STDS/STIs

Table-20: History of contracting STDs and Number of STDs Diagnosis by Group of Respondents

		Group of respondents			χ^2 test
		VCT group	Non VCT group	Total	
		Frequency (%)	Frequency (%)	Frequency (%)	
History of contracting STDs	Yes	33(11.8%)	23(8.2%)	56(20.0%)	$\chi^2 = (1) 2.23$ P = .135
	No	107(38.2%)	117(41.8%)	224(80.0%)	
Total		140(50.0%)	140(50.0%)	280(100.0%)	
Number of an STD Diagnosis in the last six months	Never	3(5.4%)	5(8.9%)	8(14.3%)	$\chi^2 = (1) 8.374^{****}$ P = .079
	only once	20(35.7%)	8(14.3%)	28(50.0%)	
	2 - 5 Times	7(12.5%)	9(16.1%)	16(28.6%)	
	6 - 10 Times		1(1.8%)	1(1.8%)	
	> 10 Times	3(5.4%)		3(5.4%)	
Total		33(58.9%)	23(41.1%)	56(100.0%)	

**** P [is less than . 1] or significant at the 0.1 level (2-tailed).

A look to Table 20 indicates that among the 280 sexually active participants, 56 (20.0%) reported histories of STDs in the last six months. Thirty- three (58.9%) of them are members of VCT group; in these 33, almost half (17) are

HIV positive. About 86% (54% VCT and 32% non VCT) of the 56 participants with history of STD have been treated for STDs. There is no statically significant difference between the VCT and non VCT group with regard to exposure to STDs ($\chi^2 = (1) 2.23$, $p = 0.135$). But there is a significant difference, $\chi^2 = 8.374$, $df = 1$, $N = 56$, $p < .1$, between the two groups with regard to STD diagnosis. It means that participants in the VCT group are prone to STD treatment than participants in non VCT.

4.3.6. Receiving or Donating Untested blood

Table-21: Frequency Distribution of receiving or donating untested blood by VCT Group

Received/ Donated untested Blood		Group of respondents			χ^2 test
		VCT group	Non VCT group	Total	
		Frequency (%)	Frequency (%)	Frequency (%)	
Received untested Blood	Yes	14(5.0%)	2(.7%)	16(5.8%)	$\chi^2 = (1) 9.550^{**}$ P = .002
	No	125(45.0%)	137(49.3%)	262(94.2%)	
	Total	139(50.0%)	139(50.0%)	278(100.0%)	
Donated untested Blood	Yes	9(3.2%)	6(2.2%)	15(5.4%)	$\chi^2 = (1) .612$ P = .434
	No	131(47.0%)	133(47.7%)	264(94.6%)	
	Total	140(50.2%)	139(49.8%)	279(100.0%)	

*** P [is less than ~ .01] or significant at the 0.01 level (2-tailed).*

Table 21 indicates that almost all (94.4%, average) of participants in both VCT and non- VCT group neither received nor donated untested blood. Fourteen members of the non VCT groups (5%) reported that they received untested blood. eleven of them are HIV positives may be due to this exposure. The statistical test indicate that there is significant difference between the two groups in relation to receiving untested blood ($\chi^2 = 9.550$, $df = 1$, $p < 0.01$). But both the crude percentage and chi-square value shows that there is no sign.

4.3.7. Sharing Potentially Contaminated Instruments or Tools for Daily base Needs and Traditional Practices

Table-22: Frequency Distribution of Respondents who were sharing potentially Contaminated Instruments for Daily base Needs and Traditional Practices

Shared Potentially Contaminated Instruments	Group of respondents				χ^2 test
		VCT group	Non VCT group	Total	
For daily need bases	Yes	31(11.1%)	27(9.6%)	58(20.7%)	$\chi^2 = (1) .348$ $P = .555$
	No	109(38.9%)	113(40.4%)	222(79.3%)	
	Total	140(50.0%)	140(50.0%)	280(100.0%)	
For health related traditional practices like 'Gig Menkel', 'Tatate' etc	Yes	21(7.5%)	17(6.1%)	38(13.6%)	$\chi^2 = 2.438$ $P = .296$
	No	119(42.5%)	121(43.2%)	240(85.7%)	
	Not Stated	-	2(.7%)	2(.7%)	
	Total	140(50.0%)	140(50.0%)	280(100.0%)	
For beauty related traditional practices like 'tattooing'	Yes	20(7.2%)	25(9.0%)	45(16.2%)	$\chi^2 = 2.768$ $P = .251$
	No	119(42.8%)	112(40.3%)	231(83.1%)	
	Not Stated	-	2(.7%)	2(.7%)	
	Total	139(50.0%)	139(50.0%)	278(100.0%)	

As it is presented in the above table the majority of participants in both VCT and non VCT group reported that they did not share potentially sharp instruments for daily base needs (79.3%), for healthy (85.7%) and beauty (83.1%) related traditional practices. That is, the majority have high knowledge that these instruments are susceptible to HIV transmission and practice safer behaviours with this regard.

Even if, the number is minimum compared to the ones who didn't share, 20.7%(11.1% VCT and 9.6 % non VCT) , 13.6 % (7.5 % VCT and 6.1% non VCT) and 16.2% (7.2 % VCT and 9% non VCT) of the participants reported, respectively, that they have shared potentially contaminated sharp instruments for daily base needs, health or beauty related traditional practices at least once.

The difference among the VCT and non VCT group in sharing potentially contaminated sharp instrument for the above three purpose is not statistically significant. The Chi square values for sharing contaminated sharp instruments for daily base need, health and beauty related traditional practices are: $\chi^2 = 0.348$, df = 1, N = 280, P = 0.555; $\chi^2 = 2.438$, df = 2, N = 280, P = 0.296 and $\chi^2 = 2.768$, df = 2, N = 278, P = 0.251 respectively. That is, receiving or not receiving VCT service has no effect in increasing or decreasing the practice of sharing sharp instruments which exposes for contracting HIV /AIDS.

4.3.8. Sexual Trading

Table- 23: Paying and/or Receiving money or material goods for Sex

	Group of respondents				χ^2 test
		VCT group	Non VCT group	Total	
Paid/give money or material goods for Sex (males)	Yes	20(13.1%)	31(20.3%)	51(33.3%)	$\chi^2 = (1) .295$ $P = .863$
	No	42(27.5%)	56(36.6%)	98(64.1%)	
	Not Stated	2(1.3%)	2(1.3%)	4(2.6%)	
	Total	64(41.8%)	89(58.2%)	153(100.0%)	
Received money or material goods for Sex (females)	Yes	14(10.7%)	13(9.9%)	27(20.6%)	$\chi^2 = (1) .904$ $P = .636$
	No	60(45.8%)	38(29.0%)	98(74.8%)	
	Not Stated	4(3.1%)	2(1.5%)	6(4.6%)	
	Total	78(59.5%)	53(40.5%)	131(100.0%)	

Table 23 presents that 33.3% of male and 20% of female participants reported that they traded sex in the last six months. Males (33.3%), especially those in the non VCT group (which accounts 60.8% of participant who paid money for sex) than females (20.6%), which are equal in both VCT and non VCT group, reported the highest rate in paying money, drugs or material goods for sex.

Of those who traded sex, about 78.4 % of men and 81% of women reported trading sex for money, drugs or material goods more than two times. There

were no significant differences between VCT and non VCT group with regard to trading sex.

4.3.9. Use of Alcohol and Drugs for Sexual Initiation

Table-24: Frequency Distribution of Alcohol and /or Drug use

Substances used for Sexual initiation	Group of respondents			χ^2 test	
		VCT group	Non VCT group		Total
Alcohols	Yes	40(14.3%)	54(19.3%)	94(33.6%)	$\chi^2 = (2) 3.162$ $P = .206$
	No	98(35.0%)	84(30.0%)	182(65.0%)	
	Not Sated	2(.7%)	2(.7%)	4(1.4%)	
Total		140(50.0%)	140(50.0%)	280(100.0%)	
Drugs	Yes	32(11.5%)	49(17.6%)	81(29.0%)	$\chi^2 = (2) 5.635$ $P = .060$
	No	106(38.0%)	87(31.2%)	193(69.2%)	
	Not Stated	2(.7%)	3(1.1%)	5(1.8%)	
Total		140(50.2%)	139(49.8%)	279(100.0%)	

**** P [is less than $\sim .1$] or significant at the 0.1 level (2-tailed).

Table 24 reports use of drugs and/or alcohol for sexual initiation among participants who received VCT service and who did not receive the service. Overall, 36.6% reported that they used alcohols for sexual initiation in the last six months. Similarly, 29% of participants in both groups used drugs for sexual initiation. The rates were higher among participants in the non VCT group than non VCT group in using alcohol for sexual initiation (19.3% versus 14.3%). In the same pattern, drugs were used more among the non VCT group (17.6%) for sexual initiation in the last six months compared to the participants in VCT group (11.5%). However, there is no significant differences between participants in VCT and non VCT in using alcohols ($\chi^2 = (2) 3.162$, $p = 0.206$) and drugs ($X^2 = (2) 5.635$, $p = 0.060$) for sexual initiation in the last six months.

Concerning the frequency, out of 94 participants who used alcohol for sexual initiation 79 (84%) [36 (45.7) VCT and 43 (45.7%) non VCT] participants used alcohol more than two times for sexual intention in the last six months while

16(16%) used it only once. In the same pattern, 88% [34 .6% VCT and 53.1% non VCT], used drugs more than two times but the rest 14 (17.3%) used it only once for sexual initiation.

4.4. Main Results of Qualitative Analysis:

4.4.1. Focus Group Discussions (FGD) and Interviews

4.4.1.1. Focus Group Discussions (FGD)

During the Focused Group Discussion only some of the major risk behaviors for HIV listed in the literature [Flemmig & Johiro (1997); Shabbir and Larson, (1991) and Gebre, (1990) cited in Hibist, (2001); Engender Health, (2005); Gonzales et al (1999); Pieris & Coldwell, (1999); Blake et al (2001)] were identified. These include:

- ❖ Unprotected sex or sex with out condom. The discussants said that some people believe and convince themselves that << there is no AIDS in the night we don't have to use condom>>
- ❖ Having many partner; regular and casual
- ❖ Peer influence/pressure, which leads specially adolescents to abuse substances like hashish or Chat and be involved in early sexual initiation.
- ❖ Sexual trading especially for females
- ❖ Use of alcohol and drugs immediately before sex and
- ❖ Inability to quit habitual risk behaviours even when they know that such behaviours expose them to HIV infection.

However, some of the behaviours mentioned in the literature were not considered as major causes of HIV in their communities. The prevalent beliefs

between all the groups were that, donating and /or receiving untested blood and sharing sharp instruments for daily base needs and traditional practice, are not major risk behaviours. Almost all people from different age groups and educational levels are conscious of these ways of transmission and they do not practice them in their daily activities.

Moreover, the risk behaviours related to sexual life, like multiple sex partners, sexual trading etc, are identified as the most difficult risk behaviours to reduce.

According to the group, the main utilities of VCT service include: to know HIV status and lead life accordingly to it and to reduce risk behaviours. In particular, the VCT service helps HIV positive persons to prevent the spreading of HIV infection and re infection with different viruses and to avoid pregnancy (if both partners are positive), to treat and take care of self health.

The majority of the focused group participants agreed that VCT is the most effective intervention in reducing unprotected sex or sex with out condom and number of sex partners. For instance one of the FGD participants who is home based care giver said *"I am distributing condom and selling them and I have seen that the demand of condom is increasing from time to time. Most of my customers are those who received VCT. Therefore I can say that VCT is effective in reducing unprotected sex."* All groups agreed that VCT is effective in reducing number of sex partners because, be the result positive or negative, those who received VCT have less sex partners than those who did not receive VCT.

For some of the people participated in FGD, VCT is effective in reducing alcohol and drug use for sexual initiation but for their it is effective only for HIV positives not for HIV negatives and who did not test for HIV (home based care

givers). Moreover, most of participants in FGD believed that VCT has no effect in reducing sexual trading and the rest did not give their response. According to the three sex workers participated in the FGD VCT has no effect on sexual trading, since it is not behavioural problem rather it is due to economic problem.

VCT is not effective in reducing sexual trading one of the three said "I have received VCT, I use condom consistently and correctly but I couldn't stop trading sex because of the financial problem I had."

Finally, as stated above, almost all the discussants believed that there is no difference between those who received VCT and who did not receive it in sharing sharp instruments. Other services like mass media, educational programs, books, advertisements, anti HIV/AIDS clubs, NGOs etc played a major role in reducing these behaviours more than VCT.

In general, all the groups agreed that VCT is effective in reducing risk behaviours and in preventing HIV transmission. But this does not mean that VCT is the only service to reduce these risks, other institutions and support providers like mass media, religious institutions, CBOs, family, anti HIV/AIDS clubs etc have also a major role and should work cooperatively to have healthy generation.

4.4.1.2. Interviews

Almost all of the interviewee who received VCT confirmed that VCT has a great role in helping them to reduce their past risk behaviours for contracting HIV. Compared to those who tested negative, the positive once reported less risk behaviours after receiving VCT service. On the other hand, those who did not receive VCT service did not observe such difference in their behaviours. The following are some of the quotation taken from the interviews.

Mr A is a 34 years old man. He is married and has two children. He has received VCT one and half years ago. He is HIV positive. He has tested after his wife tested for pregnancy and discovered to be HIV positive. He believes that knowing once sero status is very essential for reducing risk behaviours. For instance, he said *"I had a lot of sex partners with whom I never used condoms. I had sex with prostitutes, I used to smoke, chew chat, drinking heavy alcohols and had sex under their influence. But after I received VCT and knew my status, I have never tried these behaviours at all. In addition I used condom consistently and correctly with my wife."*

Mrs B is a 24 years old woman. She was a sex worker and she is divorced. She has received VCT and she has known to be HIV positive 5 years ago. She did not start ART(Antiretroviral Drugs) since her CD₄ is high. Before she received VCT she has had several partners with whom she traded sex. She has also never used condom. After she knew her sero status she completely stopped not only sexual trading, but also sexual intercourses. She said *"I do not have any interest for sex."* She is financially supported by an NGO. She is also receiving continuous counselling from this organization which she mentioned in helping her to stop her risk behaviours.

Mr C is a 31 years old man. He is running his own business and he is single. He received VCT two years ago and tested HIV negative, but he did not return to VCT for the second test. He said *"I meet a lot of women in my private shop. I could not resist to women I know how to convince women, they are easily convinced by me, sometimes me and my friends are even surprised of this. I usually use drugs for this purpose and I don't have time to think and decide to make sex with them. Rather I just jump to make sex with out any protection (condom). I tried to stop this behaviours of mine but I really could not. I am afraid to test for the second time even though I suspect my self."*

Ms D is a 27 years old girl. She completed tenth grade. She did not receive VCT. She started sexual intercourse at the age of 15 with a 43 years old man whom she met on her way to school. After that she has had sexual relation with several partners, *"Not less than 60"* she said. She is using condoms inconsistently. Because many of her partners are refusing to use it and she also can not agitate them to use. Even some of her partners, who are willing to use condom sometimes break condoms purposively. She said *"Especially when I use hashish, and shisha I do not ask for condom. I already lost my hope of living and receiving or not receiving VCT has no value since I am already infected with the disease."*

The over all interview result shows that after receiving VCT service, the risk behaviours of most of the participants have been reduced. But for those who did not receive VCT and did not know their status, no differential reduction of risk behaviours was reported.

The counsellors and coordinators of VCT centers also strongly believe that VCT is the most effective intervention in reducing risk behaviours mentioned

above. They also strongly recommended that the service delivery system and the VCT manual needs revision to be more effective in risk reduction. Some of the problems at the VCT Centers stated by the counsellors and coordinators of VCT are lack of trained man power or counsellors, absence of ongoing and follow up counselling, lack of referral system, burnout and lack of regular training for the counsellors.

CHAPTER FIVE

V. DISCUSSION

The main objective of this study is to assess the effectiveness of VCT in reducing risk behaviours, by making comparison between participants in the VCT and non VCT group. Although much has been learned from previous research studies from the Western countries, answer to certain questions on the effectiveness of VCT in reducing risk behaviours in the Ethiopian context is necessary. The major objective is to individuate the eventual presence of a significant difference between participants in VCT and non VCT group in relation to: 1. multiple and high risk sex partners, 2. condom use, 3. exchanging sex for money, drugs, shelter etc, 4. history of STD diagnosis, 5. receiving untested blood, 6. sharing potentially contaminated instruments for daily base needs and traditional practices, and 7. use of drugs and alcohol for sexual initiation.

Basically VCT is theorized to reduce risk behaviours through provision of information about AIDS and encouraging individuals to learn about their HIV status (USAID, 2004; Baldwin, Whitely and Baldwin, 1990). Since in the VCT service is typically involved only one pre-test and one post-test counselling session, reduction of risk behaviour is unlikely after such a brief intervention (Krantz, 1998). But VCT is left the most relevant service in reducing the spread of HIV/AIDS through risk reduction and provision of care and support for HIV infected individuals (MOH, 2002; FHI, 2002). Thus the purpose of analysis was to identify differences in reported HIV risk behaviours among

participants in the VCT and non-VCT groups to assess the effectiveness of VCT service rendered in Addis Ababa.

The results of this study show that almost three fourth (76%) of participants had sexual relation with two or more lifetime sex partners. Similarly, 60% of the study participants had reported that they had two or more partners in the last six months. This figure goes along with the results of the studies conducted by Turner et al (1988) cited in Johnson (1993) and Hernaldes, and Smith (1990) cited in Desiderato and Crawford (2002). Turner's and Hernaldes and Smith's studies respectively indicated that 60% and 56% of their study participants had sexual relations with more than two partners.

The result of data from participants in both VCT and non VCT services in Addis Ababa also illustrates that participants in the non VCT group were more likely than participants in the VCT group to report two or more life time (41% versus 35%) and recent (34.5% versus 25.5%) partners. On the other way round, a larger percentage of VCT group than non VCT group participants, reported only one sex partner. Among the monogamous VCT participants the majority (65.2%) ranked VCT as the first and second service helped them to be faithful. With this regard, participants in non VCT group reported mass media and religion was the most significant service helped them to be limited to one sex partner.

The over all result indicated that there were a significant difference between the two groups, in relation with having multiple lifetime and recent sex partners. That is participants in non VCT group reported greater number of lifetime and recent sex partners than participants in VCT group. Thus, confirming with the hypothesis of the study, the result illustrates that VCT is

effective in reducing reported number of both lifetime and recent sex partners. This result contradicts with the results of the review of studies by Lance et al (1998), which found no significant difference between individuals who received VCT and who did not receive VCT in reducing number of sexual partners.

Furthermore, the result revealed that number of life time partner/s of participants were positively associated with the number of recent sex partner/s i.e., participants who had sexual relation with multiple life time partners also had recent multiple sex partners and vice versa.

The previous research finding indicated that individuals with multiple lifetime and recent partners are more exposed to HIV infection than monogamous individuals (Johnson, 1993; Genet et al 2002; Turner 1998; Baldwin and Baldwin, 1988; McDonald et al, 1990 cited in Desiderato and Crawford, 2002). Relying on these research findings and the percent study result, it can be deduced that participants who reported multiple lifetime and recent partners have more exposure to HIV infection than who reported only one partner. In this sense, compared to VCT group, non VCT group participants who reported more multiple partners are in high risk for contracting HIV/AIDS.

But this does not mean that having only one partner (being monogamous) is completely safe. Because, as it is said in Flemmig and Johiro (1997), and in Lane and Placio (2003), in addition to multiple partners, even sexual relation with single risk partner like prostitute, HIV positive individuals or individuals who did not know their HIV status are also at high risk for contracting HIV/AIDS. In present study, it is found that participants in non VCT group compared with those in VCT group were more engaging in sexual

intercourses with casual partner/s (35% versus 24.4%), with prostitutes/for men (19.3% versus 15.3%) and with high-risk partners, like HIV positive partners, partners who have had multiple partners etc. (21.5% versus 13.8%). Except for men who had sex with prostitutes, there was significant difference between the two groups with regard to having sex with casual partners and high risk partners. Going in concordance with Lane and Palecio, 2003, the study found that VCT was effective in enabling the clients to choose partners who are at low risk for contracting HIV/AIDS.

In general, confirming with previous research studies in the literature, VCT service was effective in reducing sexual relation with high-risk partners except for men who have sex with prostitutes. In contrast with the finding of Lance et al (1998), this study finds that VCT is effective in reducing reported number of sex partners.

Another good result of VCT to reduce risk of HIV infection among sexually active individuals is through promoting condom use (Slomin-Neve, 2002). Indeed, in this study the majority of participants used condom with regular (67.1%) and casual (89.8%) partners.

Participants of the VCT group reported only 3.6% higher levels of condom use with regular partner and 12% lower level of condom use with casual partner. Thus, participants in the non VCT group used condoms with casual partner more significantly than those who are in the VCT group. But no significant difference was observed between the two groups with regard to condom use with regular partner. Contradicting with this finding, Clattes et al (2002) found that participants in VCT group reported 160% higher level of condom use with regular and casual partners compared to control groups and non VCT group.

The study's result also disagrees with Lance et al (1998) and Higgins et al (1991). This finding implies that individuals who received VCT service reported lower level of condom use with casual partners compared to participants who did not receive VCT. However, condom use with regular partner is slight higher in among VCT participants. This difference might be because of the presence of HIV positive individuals in the VCT group who reported lower rate of unprotected sex with regular partner, which is only 4.8%.

For more reliable evaluation of condom use, condom uses at last sexual intercourse with regular and casual partners was assessed. A significant difference between the two groups was observed in relation to condom use at last sexual inter course with both regular and casual partners. A Pearson correlation analysis also shows that there is strong positive correlation between condom use in the last six months and condom use at last sexual intercourse with both partner groups. This implies that an individual who used condoms in the last six months is more likely to use it in his/her last sexual intercourse.

Condom use alone may not be effective unless and otherwise it is used consistently and correctly (Lance et al, 1998 and Flemmig and Johiro, 1997). The analysis of data in this study indicates that, among participants in both VCT and non VCT groups, as indicated in the percentage and chi square analysis, those who were in the VCT group are more likely to use condom with regular and casual partners compared to participants in the non VCT group.

The above finding is consistent with previous researches findings and indicates that VCT service is particularly effective in assisting a participant in VCT group to use condoms consistently. Similarly, Clattes et al (2002) found that individuals who received HIV counselling reported 43% more in using condoms consistently as compared to control groups and groups who did not receive the intervention.

In a related finding, a review of 27 research studies on the effect of VCT revealed that HIV positive groups and sero-discordant increased consistent use of condom than untested participants (non VCT group) during their assessment time (Lance et al, 1998). More consistent use of condom during sexual intercourses with regular partner, compared with casual partner, was reported among VCT and non VCT groups. These differences with partner's group could be due to the inclusion of 25% of HIV positive people in the sample. This group seems to be more likely to use condoms consistently with regular partner than HIV negative and non-VCT groups, which goes with the result of review of studies by Lance et al, 1998. However, the result contradicts with the findings of Laukamm-Josten (2000), which revealed that condom is used most frequently with casual and unknown sex partner and least frequently with regular or primary sex partner.

Furthermore, 60% of VCT participants who used condom consistently rate VCT first and rest said mass media, CBO's etc for promoting their consistent use of condom. On other hand, though the percentage is lower, 45.5% of participants the non-VCT participant's who were using condom consistently rate mass media first for assisting them to use condoms consistently. The possible explanation for these findings is that VCT service is an effective intervention in promoting consistent use of condom among VCT clients.

Condoms should not only be used consistently but also correctly to be an effective means of reducing the spread of HIV/AIDS, which can also be promoted by VCT (McDonald et al, 1990 cited in Desiderato and Crawford, 2002 and Flemming and Johiro, 1997). The result of the study, as presented in percentage and Chi Square analysis, indicated that more participants in the non VCT group (14.9%) reported that they had an experience of condom's breaking, tearing, slipping and failing at least once during intercourse with regular partners in the last six months. With similar fashion, incorrect use of condom with casual partner was also reported by 34% of participants in the non VCT group and 11.4% of participants in the VCT group (See Table 17).

The figure of condom's slipping off or breakage in this study are relatively higher compared with the results of studies conducted abroad. For instance, in the study of Desiderata and Crawford (2002), the possibility of condom's slipping off or breakage is less than 1%.

Furthermore, the present findings shows that participants in the non VCT group reported significantly more condom slippage, breakage, tearing or failing at least once during intercourse with both regular and casual partners than those in the VCT group in the last six months.

The overall result showed that there were statistically significant differences between the two groups in relation to correct use of condoms. That is, participants in the VCT group reported more correct use of condom compared to participants in the non VCT group.

As in frequent/consistent use of condom, VCT service was rated first by half of VCT participants (50%) as the major service that played a major role in their use of condoms correctly, while rest of participants in VCT GROUP

whom used it correctly reported mass media. It can be deduced from the result that VCT for participants in the VCT group and mass media for the non VCT group were the most significant and effective service in aiding correct use of condom. Thus, it is possible to investigate from the study result that VCT is an effective intervention for promoting correct use of condom among the majority of VCT participants.

In addition to the technical skills in using condoms consistently and correctly, interpersonal (negotiation) skill is very essential for using condom (Flemmig and Johiro, 1997). But such discussion or negotiation, which is associate with, reduced risk sexual behaviours, are never easy to have especially for women, who do not have freedom to communicate and negotiate with partner/s (Lancet, 2000).

Thus, VCT is the most significant service in enhancing the communication and negotiation skills by providing safe environment in which the partners and the counsellors open discussion. Consistent with these assumptions, the finding of this study revealed that a significant difference between VCT and non VCT groups was noted in the participants' negotiation skill about condom use (See Chi Square value on Table 18). That is, participants in the VCT group than non VCT group were more frequently in convincing their partner not to make sex with out condom (23% versus 13.6%), in protecting partner/s not to make sex without condom (20.5 % versus 12.5%) and in respecting partners' demand or interest for using condom (21.8% versus 11.7%). This result also confirms with Flemmig and Johiro (1997) that investigated individuals who received VCT service are more likely to try to insist condom use and communicate with his/her partner about the risky sexual behaviours than who did not receive the service.

These results of previous and present studies imply that VCT service is effective in promoting the clients skill in convincing and protecting partner/s not to make sex without condom and in respecting their partner/s demand for condom use.

Exposure to STDs/STIs like gonorrhoea, syphilis etc where also a significant predictor of risk behaviours among participants in the intervention conditions in previous research studies (Johanson, 1993; Lancet et al, 1998; Flemming and Johiro 1997, and Kamb, Fishbein and Dougals (1998). In the current study, 20 percent of the 280 sexually active participants reported for having histories of STDS in the last six months. More than half of the participants with history of STDs were from the VCT group of which 17 (30.6%) are sero positives. With regard to exposure to STDs no significant difference was observed. These findings do not go along with the study by Kamb, Fishbein and Dougals, 1998. However, significant difference was observed between the two groups with regard to STD diagnosis. That is participant in the VCT group (54%) were more accustomed to the diagnosis of STDs than participant in non VCT group (32%).

The current study further noted that receiving or not receiving VCT service has no differential impact in having history of STDS. But the result implies that VCT service might have impact in aiding client who has already contracted STD to be diagnosed, and get treated. Because a lager percentage of participants in VCT group have been treated for STDs.

Blood donation and reception were not investigated as risk behaviour in this study. Because almost all (94.3%) of study participants in both VCT and non VCT group reported that they neither received nor donated untested blood.

Compared to the participants in the non VCT group 2(0.7%) more participant in the VCT group 14 (5%) reported that they received untested blood. Eleven out of the fourteen participants in the VCT group who received untested blood were sero positives, which is may be due to this exposure. The over all result of the chi square analysis shows that participants who received VCT especially sero positives are highly engaged in receiving untested blood than non VCT participants and there were a significant difference between them. Relying on the result it is not possible to confidently say VCT is effective or not effective. Because, the reception of the untested blood might be before they get VCT service.

Like the reception and donation of untested blood, sharing potentially contaminated tools for daily base needs and traditional practices is rare among the study participants (see Table 22). This implies that the majority of participants have high knowledge that these instruments are susceptible to HIV infection and applied this knowledge in their life by practically not using these tools. Even though the number is low some participants reported that they shared these instruments for daily base needs (20.7%), health (13.6%) and beauty (16.2%) related traditional practices at least once. No significant difference where observed between the two groups in relation with sharing potentially contaminated instruments like needles, blades and other skin-piercing instruments for daily need basis and traditional practices. Thus, receiving or not receiving VCT service has no significant impact in increasing or decreasing the practices of sharing those instruments that can expose HIV infection. That is a VCT service is unlikely to have had a net impact on the behaviours of participants with this regard. This implies that other service like mass media, peer education programs, etc. other than VCT might have

positive impact on the knowledge and behaviours of the participants i.e., not to use the above instruments in common.

Almost one third of male (33.3%) and one fifth of female (20%) participants have engaged in paid sex i.e. males reported higher rate in paying money or material goods for sex in the last six month. Of those who traded sex, the majority (78% males and 81% females) were engaged in commercial sex more than two times. The chi square analysis noted no significant difference between participants who received VCT and who did not receive the service. Accordingly the effectiveness of VCT service is unlikely in reducing commercial sex among VCT participants.

Numerous previous research studies on the association between alcohol and drug use and HIV risk behaviours, indicated that their use immediately before sex have significant impact in impairing sexual decision making than leads to unwanted and unprotected sex (Example, CDC, 1996, Clatts et al 2002, Fullilove et al 1990, Flemmig, and Johino,1997 and Genet et al, 2002). The present study found that 94 (33.6%) participants used alcohol and 81 (29%) used drugs immediately before sex in the last six months. Out of these, 79 (91.4%) and 71 (88%) participants reported that they used alcohol and drugs more than two times in the last six months respectively. The rates of alcohol and drug use were higher among participants in the non VCT group than those in the VCT group. But statistical significant difference was not detected among the participants in the two groups. Thus, intervention at the VCT centers has no such effect on the use of alcohols and drugs for sexual initiation which impairs sexual decision making.

There was statistically significant difference in number of sex partners, alcohol and drug use for sexual initiation, exposure to STDs and in having sex with casual partner among a male and female participants in the last six months. But there was no significant difference between males and females with respect to condom use and sharing potentially contaminated instruments like needles, blades etc for daily base needs and traditional practices.

CHAPTER SIX

VI. CONCLUSION AND RECOMMENDATION

6.1. Summary

The main objective of the study is to assess the effectiveness of VCT in reducing risk behaviour among individuals who received VCT and who did not receive VCT. To attain the specific objectives significant differences between participants in VCT group and non VCT group with regard to major HIV risk behaviours were assessed. The major HIV risk behaviours in which basic questions in the study include condom use, number of sexual partner, high risk sex partners, exposure to STDs (excluding HIV/AIDS), sexual trading, use of alcohol and drugs for sexual initiation, and sharing potentially contaminated instruments for daily base needs and traditional practices. Basic questions were raised on these risk behaviours to assess the effectiveness of VCT by investigating the significant differences between participants in the VCT group and non VCT group.

In order to achieve the specific objectives of the study and clearly answer the basic questions, descriptive survey method was used. Thus, to apply this method effectively questionnaire was administered to 140 individuals who never received VCT and 140 individuals who received VCT service at least six months before the data collection.

Interview and focused group discussion was also made with both participants in the VCT group, and participants in non VCT group, VCT counsellors, religious leaders, community leaders, home based care givers, coordinators of anti HIV/ AIDS clubs and peer education leaders. Percentage, chi square and Pearson correlation coefficient were employed to analyze the data

collected from the participants. Therefore, basing on the analysis of the data obtained through the questionnaire, interview and focus group discussion, the most important findings of the study are summarized and concluded as follow:

The study result indicates that the majority of participants had sexual relations with two or more lifetime (76%) and recent (60 %) sexual partners. There is a significant difference between individuals who received VCT (VCT group) and who did not receive the service (non VCT group). Non VCT Participants were more significantly involved in sexual relation with two or more lifetime (42 %) and recent (35%) partners than VCT participants (35% life time and 25.5 % recent partners). In other words, a larger percentage of VCT group than non VCT group (15% versus 8.9% life time, and 24.1 % versus 15.8 % in the last six months) reported only one sex partner and more than 65% of these raked VCT service first and second for helping them to be faith full. Therefore there is an evidence to say VCT service is effective in rendering number of life time and recent sex partner.

The significant difference was inspected between VCT and non VCT group with regard to reported sexual intercourse with casual and high risk partners except prostitutes. It means participants in the non VCT group than those in VCT group were more likely to engage in sexual intercourse with casual and high risk partners. Thus, it is passable to deduce that VCT service is effective in reducing sexual involvement with casual and high risk partner except with prostitutes. Because no such significant difference is investigated for men who have sex with prostitutes.

Contradicting with previous studies by Lance et al (1998); Clatts at al (2002); and Higgins et al (1998) the result of this study shows participants in the non

VCT group used condom with casual partners more significantly than those who were in the VCT group ($\chi^2 = 12.478$, $df = 2$, $N = 167$, $P < .001$). Participants, in the non VCT group use condom with their casual partners more (50.9%) than those in the VCT group (38.9%). But no statistically significant difference is investigated between VCT and non VCT groups in use of condom with regular partner. Thus, there is no sufficient evidence for the effectiveness of VCT service in enhancing condom use with both regular and casual partners in the last six months.

However, significant difference was investigated between the two group i.e., individuals who received VCT service are more prone in using condom with both casual and regular partner at last sexual intercourse than those who did not receive the service. This result shows that there is an evidence for the effectiveness of VCT in enhancing condom use at least during the last sexual intercourse.

Consistent with previous studies like Clatts et al (2002) and Lance et al (1998), significant difference is investigated between the two groups in consistent use of condom. That is condom is more consistently used by VCT groups than non VCT group.

Incorrect use of condom or condom's breakage, tearing, slipping or failing was experienced among non-VCT groups than VCT groups in the last six months.

Negotiation skill about condom use with partner is significantly different among VCT and non VCT groups. Clients of VCT service (VCT group) are more frequently convince and protect their partner not to have sex without condom and respect their partner's interest /demand of using condom than non VCT participants.

The result further shows that VCT has no significant impact in the prevalence of STDs. But it has an impact in assisting its clients who already contracted STDs to be diagnosed and get treated. Because there is no significance difference between participants history of STDs, while there is significant difference with respect to STDs diagnosis.

Almost one third of male and one fifth of female participants were engaged in commercial sex. No significant difference is examined between VCT (23.8%) and non VCT (30.2%). Accordingly, there is no sufficient evidence for the effectiveness of VCT service in reducing sexual trading.

Participants in the non VCT group (19.3%) were more significantly than those in non VCT group (14.3%) in using alcohol for sexual initiation. Though drugs were also used more among the non VCT group (17.6%) compared to the participants in VCT group (11.5%), there is no significant differences between them in using alcohols for sexual initiation in the last six months. Thus, there is no evidence in the effectiveness of VCT in reducing alcohol use for sexual initiation.

Almost all (94.3%) of participants did not receive or donate interested blood in the last six months. But there is a significant difference between VCT and non VCT group with this regard. Surprisingly, of the 16 participants who received untested blood, 14 one from VCT group.

Last but not least sharing potentially contaminated instruments with needles, blades, etc for daily base needs and traditional practices is also very rare among study participants. That is, about 80%, 86% and 83% of study participants did not share these instruments for daily base needs, for healthy

and beauty related traditional practices respectively. This implies that there is high awareness and practice of not using these tools. Even among those who reported for sharing these instrument there is no significant difference between VCT and non VCT group. Therefore, there is no sufficient evidence for the net impact of VCT service with regard to sharing potentially contaminated instruments. Services other than VCT may have a positive impact with this regard.

6.2. Conclusion

As stated in the limitation and delimitation part, it is assumed that the present study suffers from various limitations because of the sensitivity of the subject matter i.e., risk behaviours and the probability of the inconsistency of self reported risk behaviours. With an appreciation of these potential limitations, the results of the present study can be concluded as follows:

The result of the study investigated that there is an evidence to say, VCT service is effective in reducing reported number sex partners.

VCT service is effective in reducing sexual involvement with casual and high risk partner except with prostitutes. Since statistically significant difference was not found among male participants in having sex with prostitutes, there is no sufficient evidence for the effectiveness of VCT in reducing the involvement of men's sexual intercourse with prostitutes.

There is no sufficient evidence for the effectiveness of VCT service in enhancing condom use with both regular and casual partners in the last six months. But condom is highly used among VCT participants during their last sexual encounter than between non-VCT groups. Therefore, receiving VCT service makes no effect in once condom use with casual partners in the last

six months though it has effect in using condom at the last sexual intercourse is significant.

Compared to non VCT participants, VCT participants are more likely to use condom consistently with both regular and casual partners/s. Among VCT participants who used condom consistently, more consistent use of condom with regular than casual partner is reported. This may be because of the inclusion of 25% sero positive participants who more likely to use condom consistently with regular partner. Thus, there is an evidence for the effectiveness of VCT in promoting consistent use of condom.

VCT service is also an effective intervention in promoting correct use of condom. Because, participants in the non VCT service are more likely experienced incorrect use of condom at least once in the last six months than those in the VCT group.

There is significant difference between VCT and non VCT group with regard to negotiation skill about condom use with partner

VCT service is not effective in decreasing the prevalence (history of STDs) of, but it is significantly effective with respect to early STDs diagnosis and treatment. There is also no sufficient evidence for the effectiveness of VCT service in reducing exchange of sex for money and material goods

There is evidence in the effectiveness of VCT in reducing alcohol use for sexual initiation but there is no sufficient evidence for its reduction for drug use.

There is no sufficient evidence for the effectiveness of VCT service in reduction of receiving untested blood, because more participants in the VCT group was involved in receiving untested blood than participants in the non VCT group.

There is no sufficient evidence for the net impact of VCT service with regard to sharing potentially contaminated instruments, receiving or not receiving VCT service has no effect in decreasing the practice of sharing sharp instruments which exposes for contracting HIV /AIDS

Indeed the result of the study showed that VCT service was effective in reducing important risk behaviours related to HIV/AIDS infection. Compared to participants in non VCT group, VCT had a significant and positive effect on VCT participants' number of sex partner, sexual intercourse with high risk partners (excluding sex with prostitutes), consistent and correct use of condom, negotiation skill about condom use, and in assisting STDs diagnosis and treatment.

Accordingly, specific to this study, VCT service is differentially effective in reducing number of sex partner, and sexual relation with high partners except sex with prostitutes, increasing consistent and correct use of condom, enhancing negotiation skills about condom use with respective partners, in aiding its clients with the history of STDs to be diagnosed, and get treated and use of drugs for sexual initiation.

However, there is no sufficient evidence for the effectiveness of VCT service in reducing other risk behaviours including , sex with prostitutes, trading sex for money or material goods, having sex under the influence of alcohol, receiving untested blood, and sharing potentially contaminated instruments for daily base needs and traditional practices.

For these results, it is possible to have two explanations. The first is that participants both VCT and non VCT reported low level of engagement in risk behaviours like receiving or donating untested bloods and sharing potentially contaminated instruments. The second explanation is that services given at

VCT centers as information found from VCT clients and counsellors during interview are concentrated mostly on the use of condoms, negotiation skills about condom use, number of sex partner, diagnosis and treatment of STDs and use of drugs for sexual initiation and other areas like sharing sharp instrument, sex with prostitutes, trading sex for money or material goods etc are given less attention

6.3. RECOMMENDATION AND SUGGESTIONS FOR FUTURE STUDY

Depending on the finding of the study, it is reasonable to recommend the following:

- VCT service was found to be effective in reducing the number of risk sex partners, frequency of intercourse with high risk partners and use of drugs as well as enhancing consistent and correct use of condoms and STD diagnosis. But this does not mean that the service is holistic. Therefore, the service should be strengthened to provide more effective behavioural intervention and preventive measures.
- Effectiveness of VCT service is unlikely in reducing commercial sex among VCT participants. Thus, more effort has to be made to reduce sexual trading by participating sex workers in different income generating activities.
- Since STD control is one of the most effective ways of preventing the increase of HIV/AIDS, VCT program should promote awareness of the symptoms, early diagnosis and treatment of STDs.
- Behavioural interventions like VCT should involve intensive education to discourage use of alcohol and/or drugs for sexual initiation, and sharing sharp instruments as well as promoting sterilizing these instruments either for daily base needs or traditional practices.
- In this study, the majority (81.4%) of VCT clients received pre test and post test counselling only. Therefore, to be more effective it is

suggested that VCT services should provide more ongoing counselling sessions.

- To reduce the impact of HIV, HIV positive individuals and AIDS cases should be provided with intensive and ongoing counselling and home based care services.
- Adequate research should be undertaken on the effectiveness of VCT service in reduction of risk behaviours in order to improve its quality accordingly.
- To obtain valid and more reliable results future studies on the effectiveness of VCT should take into account other extraneous variables that may affect the effectiveness of the services. These variables may include: religion, family, peer groups, mass media, and so on.

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Appendix I

**ADDIS ABABA UNIVERSITY
GRADUATE STUDIES
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY**

The aim of this questionnaire is to collect data or information on HIV/AIDS risk behaviours among individuals who received Voluntary HIV Counselling and Testing (VCT) and those who did not received the service in Addis Ababa. The questionnaire may explore personal information but at the sometime this information is very essential for the successful completion of the research study. Thus I kindly request you to fill this questionnaire as carefully and accurately as possible.

Concerning confidentiality, I want to assure you that each and every of your information will be kept secretly. None of your answers will be available to anyone at any time. All the information you give us will be kept private. To secure this you do not have to write your name on any part or page of the questionnaire. Therefore, do not put your name anywhere on this questionnaire

☛ **Please remember:**

- Do not put your name on this form.
- Your answers are private. We will not tell anyone what you write.

GENERAL DIRECTION

This questionnaire consists of six parts. These six parts consists questions on: background information, sexual partners, consistent and proper use of condoms, sharing sharp instrument, Sexual trading and alcohol and drug use respectively. Thus, Please read each questions carefully and give your best and accurate answers depending on the directions given in each part.

Thank You in Advance

Date: _____

Code: _____

PART I: GENERAL INFORMATION

Direction: The following item assesses about your personal background information. Please, read the questions carefully and put ✓ mark on your correct answer in the box or space provided.

1. Sex:

1. Male

2. Female

2. Age: _____

3. What is the highest formal school you completed?

1. No formal education

2. Elementary School

3. Secondary School

4. Technical / College

5. University

6. Other, Please specify _____

4. Religion:

1. Orthodox

2. Islam

3. Protestant

4. Catholic

5. Other (Please specify) _____

5. Ethnicity: _____

6. Occupation: _____

7. Family Status:

1. Mother and father living together

2. Mother and father separated

3. Mother and father divorced

4. Lost mother or father by death

5. Lost mother or father by death

6. Other, Please specify _____

8. Average monthly income:
- | | | | |
|-----------------------|--------------------------|------------------------|--------------------------|
| 1. less than 100 Birr | <input type="checkbox"/> | 4. 1000-1500 Birr | <input type="checkbox"/> |
| 2. 100-500 Birr | <input type="checkbox"/> | 5. 1500-2000 Birr | <input type="checkbox"/> |
| 3. 500-1000 Birr | <input type="checkbox"/> | 6. More than 2000 Birr | <input type="checkbox"/> |

9. Your current marital status

- | | |
|---------------------------------|--------------------------|
| 1. Married (monogamous) | <input type="checkbox"/> |
| 2. Married (polygamous) | <input type="checkbox"/> |
| 3. Cohabiting | <input type="checkbox"/> |
| 4. Single | <input type="checkbox"/> |
| 5. Separated | <input type="checkbox"/> |
| 6. Divorced | <input type="checkbox"/> |
| 7. Widowed | <input type="checkbox"/> |
| 8. Other (Please specify) _____ | |

10. Living status

- | | |
|------------------------------------|--------------------------|
| 1. Dependent | <input type="checkbox"/> |
| 2. Independent | <input type="checkbox"/> |
| 3. Responsible for your dependents | <input type="checkbox"/> |
| 4. Other (Please specify) _____ | |

11. Did you receive VCT (voluntary HIV Counselling and Testing)?

- | | |
|--------|--------------------------|
| 1. Yes | <input type="checkbox"/> |
| 2. No | <input type="checkbox"/> |

12. If your answer is "Yes" for Question Number " 30 " what kind of VCT did you received?

- | | |
|---------------------------------------|--------------------------|
| 1. Pre-test Counselling only | <input type="checkbox"/> |
| 2. Post-test Counselling only | <input type="checkbox"/> |
| 3. Both pre and post test counselling | <input type="checkbox"/> |
| 4. Ongoing Counselling | <input type="checkbox"/> |
| 5. Home based counselling | <input type="checkbox"/> |
| 6. Did not receive any service | <input type="checkbox"/> |

13. Is there an HIV positive person in the family?

- | | |
|--------|--------------------------|
| 1. Yes | <input type="checkbox"/> |
| 2. No | <input type="checkbox"/> |

14. If your answer for question Number "13" is "Yes", what is your relationship with the person?

- 1. Father
- 2. Mother
- 3. Sister
- 4. Brother
- 5. Husband
- 6. Wife
- 7. Other (Please specify) _____

PART II: SEXUAL BEHAVIOURS AND VCT (VOLUNTARY HIV COUNSELLING AND TESTING) SERVICE

Direction: The following questions ask about sexual behaviours like condom use, number of sexual partners etc and use of VCT. Please read the following statements carefully and give your answers accordingly.

1. Have you ever had sexual intercourse?

- 1. Yes
- 2. No

2. If your answer for question number "1" is "Yes" what is the age at which you had sex for the first time? _____

3. How many sex partners did you have in your life?

- 1. One person
- 2. Two persons
- 3. 3-5 Persons
- 4. 6-10 Persons
- 5. More than 10 Persons

4. How many different sexual partner/s have you had sex with in the last six months?

- 1. One person
- 2. Two persons
- 3. 3-5 Persons
- 4. 6-10 Persons
- 5. More than 10 Persons

5. If your answer for question number "4" is "1" which source of information and education about HIV/AIDS helps you to limited with one partner? Please put them in rank order using numbers (1, 2, 3, 4...)!

1. Friends
2. Voluntary HIV/AIDS Counselling and Testing (VCT) Center
3. Anti HIV/AIDS Clubs
4. Religious institutes (e.g, Churches, Mosque, etc)
5. Community Based Organizations /CBOs (e.g., Idir, Mehabers, etc)
6. Family
7. Mass media
8. Other (Please, specify) _____

6. If you have sexual partner/s, does your partner/s have other sexual partner/s other than you?

1. Yes
2. No
3. Do not know

7. In last six months did you have sex with your primary/ steady sexual partner (husband/wife, boyfriend or girl friend)?

- 1 Yes
2. No

8. If your answer for question number "7" is "Yes", how often did you use condom with your primary or steady sexual partner?

1. Always
2. Mostly
3. Sometimes
4. Rarely
5. Never

9. If your answer for question number "8 " is "1", which source of information and education about HIV/AIDS helps you to always use condoms with your primary sexual partner? Please put them in rank order using numbers (1, 2, 3, 4...)!

- 1. Friends
- 2. Voluntary HIV/AIDS Counselling and Testing (VCT) Center
- 3. Anti HIV/AIDS Clubs
- 4. Religious institutes (e.g, Churches, Mosque, etc)
- 5. Community Based Organizations /CBOs (e.g., Idir, Mehabers, etc)
- 6. Family
- 7. Mass media
- 8. Other (Please, specify) _____

10. Did condoms slips off, tear, break or fail while you make sex with primary partner in the last six months?

- 1 Yes
- 2. No

11. Of all the times you used condoms with your primary sexual partner, how often condom slips off, tear, break or fail during intercourse **in the last six months**?

- 1. Never
- 2. Only once
- 3. 2 -5 times
- 4. 6 -10 times
- 5. More than 10 times

12. If your answer for question number "11 " is "1", which source of information and education about HIV/AIDS helps you to **use** condoms correctly (without slipping off, tearing or breaking) with your primary sexual partner/s? Please put them in rank order using numbers (1, 2, 3, 4...)!

- 1. Friends
- 2. Voluntary HIV/AIDS Counselling and Testing (VCT) Center
- 3. Anti HIV/AIDS Clubs
- 4. Religious institutes (e.g, Churches, Mosque, etc)
- 5. Community Based Organizations /CBOs (e.g., Idir, Mehabers, etc)
- 6. Family
- 7. Mass media
- 8. Other (Please, specify) _____

13. In the last six months did you have sex with casual/occasional sexual partner (any partner other than husband/wife, boyfriend or girl friend)?
1. Yes
 2. No
14. If your answer for question number "13" is "Yes", **how often** did you use condom with your casual/occasional sexual partner in the past six months?
1. Always
 2. Mostly
 3. Sometimes
 4. Rarely
 5. Never
15. If your answer for question number "14" is "1", which source of information and education about HIV/AIDS helps you to always use condoms with your casual/ occasional sexual partner? Please put them in rank order using numbers (1, 2, 3, 4...)!
1. Friends
 2. Voluntary HIV/AIDS Counselling and Testing (VCT) Center
 3. Anti HIV/AIDS Clubs
 4. Religious institutes (e.g, Churches, Mosque, etc)
 5. Community Based Organizations /CBOs (e.g., Idir, Mehabers, etc)
 6. Family
 7. Mass media
 8. Other (Please, specify) _____
16. Did condoms slips off, tear, break or fail while you make sex with casual partner in the last six months?
- 1 Yes
 2. No
17. Of all the times you used condoms with your casual/occasional sexual partner, how often condoms slips off, tear, break or fail during intercourse in the last six months?
1. Never
 2. Only once
 3. 2 -5 times
 4. 6 -10 times
 5. More than 10 times

18. If your answer for question number "17 " is "17", which source of information and education about HIV/AIDS helps you to **use** condoms correctly (without slipping off, tearing or breaking) with your casual/occasional sexual partner/s?

Please put them in rank order using numbers (1, 2, 3, 4...)!

1. Friends
2. Voluntary HIV/AIDS Counselling and Testing (VCT) Center
3. Anti HIV/AIDS Clubs
4. Religious institutes (e.g, Churches, Mosque, etc)
5. Community Based Organizations /CBOs (e.g., Idir, Mehabers, etc)
6. Family
7. Mass media
8. Other (Please, specify) _____

19. In the last six months, did you have anal sex?

1. Yes
2. No

20. If your answer for question number "19" is "Yes", how often did you use condom during the anal sex?

1. Always
2. Mostly
3. Sometimes
4. Rarely
5. Never

21. Have you used condoms in your last sexual intercourse with your regular partner/s?

1. Yes
2. No
3. No regular partner

22. Have you used condoms in your last sexual intercourse with your casual partner/s?

1. Yes
2. No
3. No casual partner

23. Did you receive guidelines on how to use condom?

1. Yes
2. No

24. Are you sure for using condoms correctly in the last six months?

1. Yes

2. No

25. **In the last six months**, how often did you convince your partner not to make sex without condoms?

1. Always

2. Mostly

3. Sometimes

4. Rarely

5. Never

26. **In the last six months**, how often did you protect your partner not to make sex without condoms?

1. Always

2. Mostly

3. Sometimes

4. Rarely

5. Never

27. In the last six months how often you respect your partner's demand/ interest for using condoms?

1. Always

2. Mostly

3. Sometimes

4. Rarely

5. Never

28. If you never used condoms, do you have intention to always use condom in the future?

1. Yes

2. No

29. In the last six months, did you have sexual intercourse with prostitute/s?

(Only for males)

1. Yes

2. No

30. If your answer for question number "29" is "Yes", in the last six months how often did you use condom during your sexual intercourse with prostitute/s? (Only for males)

- 1. Always
- 2. Mostly
- 3. Sometimes
- 4. Rarely
- 5. Never

31. In the last six months, did you have sexual intercourse with high risk partners like partner who make sex with prostitute, partner with multiple partners etc? (Only for females)

- 1. Yes
- 2. No

32. If your answer for question number "31" is "Yes", in the last six months, how often did you use condom during your sexual intercourse high risk partners? (Only for females)

- 1. Always
- 2. Mostly
- 3. Sometimes
- 4. Rarely
- 5. Never

33. What is your personal risk for acquiring HIV/AIDS?

- 1. Great
- 2. Moderate
- 3. Small
- 4. No risk

34. In the last six months, did you have history of STDs like syphilis, gonorrhoea etc?

- 1. Yes
- 2. No

35. In the last six months, how often have you been treated for STDs?

- 1. Never
- 2. Only once
- 3. 2 - 5 Times
- 4. 6 - 10 Times
- 5. More than 10 Times

36. In the last six months, have you received untested blood?
1. Yes
 2. No
37. In the last six months, did you donate untested blood?
1. Yes
 2. No
38. Have you tested for HIV/AIDS?
1. Yes
 2. No
39. If your answer for question number "32" is yes", what is your status for the first test?
1. Positive
 2. Negative
40. Have you tested for the second time after 3 or more months after the first test?
1. Yes
 2. No
41. If your answer for question number " 34" is " Yes" what is your HIV status for the second test?
1. Positive
 2. Negative
42. If your HIV status for the second test is positive, what kind of service are you receiving?
1. Ongoing counselling
 2. Home based counselling
 3. Antiretroviral drugs (ART)
 4. Psychosocial Support
 5. Peer education and counselling
 6. Not receiving any kind of service
 7. Other (please specify)
43. If your HIV status for the second test is negative, what kind of service are you receiving?
1. Ongoing counselling
 2. Peer education and counselling
 3. Not receiving any kind of service
 4. Other (please specify)

PART III: SHARING SHARP INSTRUMENT

Direction: The following questions ask about sharing sharp instrument that can transmits HIV/AIDS. Please read the following statements carefully and give your answer accordingly

1. In the last six months, did you use sharp instruments (e.g. needles, razor or blade etc) for daily base needs?

1. Yes

2. No

2. How often you share these sharp instruments for daily base needs in the last six months?

1. Never

2. Only once

3. 2 - 5 Times

4. 6 - 10 Times

5. More than 10 Times

3. How often, in the last six month, have you sterilized the sharp instruments (e.g. needle, razor/ blade, knife) before re-using them?

1. Never

2. Only once

3. 2 - 5 Times

4. 6 - 10 Times

5. More than 10 Times

4. In the last six months, how often you share these sharp instruments for healthy related traditional practices?

1. Never

2. Only once

3. 2 - 5 Times

4. 6 - 10 Times

5. More than 10 Times

5. How often you share these sharp instruments for beauty related traditional practices daily base needs in the last six months?

1. Never

2. Only once

3. 2 - 5 Times

4. 6 - 10 Times

5. More than 10 Times

PART IV: SEXUAL TRADING

Direction: The following questions ask about paying or receiving money for sex.

Please read the following statements carefully and give your answer accordingly?

1. During the past 6 months, have you paid/give money or material goods for your casual sex partner/s (sexual partner other than husband/wife or boy friend/girlfriend) in exchange for sex(only for men) ?

1. Yes

2. No

2. If your answer for question number "1" is "Yes", How often you paid/give your casual sex partner/s (sexual partner other than husband/wife or boyfriend/girlfriend) money or material goods in exchange for sex in the last six months?

1. Never

2. Only once

3. 2 - 5 Times

4. 6 - 10 Times

5. More than 10 Times

3. Have you **received** money or any material in exchange of sex **in the last six months?**(Only for women)

1. Yes

2. No

4. If your answer for question number "3" is "Yes" how often you received money or any material in exchange of sex **in the last six months?**

1. Never

2. Only once

3. 2 - 5 Times

4. 6 - 10 Times

5. More than 10 Times

5. If you **never paid received** money or material goods in exchange of sex, which source of information and education about HIV/AIDS helps you to do so? Please put them in rank order using numbers (1, 2, 3, 4...)!

1. Friends
2. Voluntary HIV/AIDS Counselling and Testing (VCT) Center
3. Anti HIV/AIDS Clubs
4. Religious institutes (e.g, Churches, Mosque, etc)
5. Community Based Organizations /CBOs (e.g., Idir, Mehabers, etc)
6. Family
7. Mass media
8. Other (Please, specify) _____

PART V. ALCOHOL AND DRUG USE

Direction: The following questions ask about alcohol and drug use which can facilitate conditions to involve in risk behaviours. Please read the following statements carefully and give your answer accordingly.

1. In the past 6 months, did you use alcohol (e.g. Beer, "Arake", "Tela" etc) immediately before sex or for sexual initiation?

1. Yes
2. No

2. Thinking about all the times you had sex with your partner/s in the past 6 months, how often you had sex being under the influence alcohol(e.g. Beer, "Arake", "Tej" etc)?

1. Never
2. Only once
3. 2 - 5 Times
4. 6 - 10 Times
5. More than 10 Times

3. In the past 6 months, did you use any particular drugs_(e.g. "chat", hashish, etc) immediately before sex or for sexual initiation?

1. Yes
2. No

4. Thinking about all the times you had sex with your partner/s in the past 6 months, how often you had sex being under the influence drugs (e.g. "chat", hashish, etc)

- 1. Never
- 2. Only once
- 3. 2 - 5 Times
- 4. 6 - 10 Times
- 5. More than 10 Times

5. If you "never" used alcohol or drugs that makes you out of your control during sexual intercourse, which source of information and education about HIV/AIDS helps you to do so? Please put them in rank order using numbers (1, 2, 3, 4...)!

- 1. Friends
- 2. Voluntary HIV/AIDS Counselling and Testing (VCT) Center
- 3. Anti HIV/AIDS Clubs
- 4. Religious institutes (e.g, Churches, Mosque, etc)
- 5. Community Based Organizations /CBOs (e.g., Idir, Mehabers, etc)
- 6. Family
- 7. Mass media
- 8. Other (Please, specify) _____

**አዲስ አበባ የኒሽርሲቲ
የድህረ ምረቃ ትምህርት ቤት
የሥነ ልቦና ትምህርት ክፍል**

የዚህ መጠይቅ ዋና አላማ በአዲስ አበባ ውስጥ በፈቃደኝነት ላይ የተመሰረተ የኤች አይ ቪ/ኤድስ የምክርና የምርመራ አገልግሎት ባገኙትና ባላገኙት (ተጠቃሚ በሆኑና ባልሆኑ) ሰዎች ዘንድ ለቫይረሱ የሚያጋልጡ ባህሪያትን በተመለከተ መረጃ ለመሰብሰብ ነው።

መጠይቁ ግላዊ መረጃዎች ሊጠይቅዎ ይችላል። ሆኖም ግን ይህ መረጃ ለጥናቱ መሳካት በጣም አስፈላጊ ስለሆነ በተቻለ መጠን በትክክል እንዲሞሉ በአክብሮት እጠይቃለሁ።

እያንዳንዱ የግል መረጃዎ ሁሉ በምስጢር ስለሚያዝ ምንም ነገር ሊያሰጋዎ እንደማይገባ ላረጋግጥልዎ እወዳለሁ። አንድም መረጃ መቼም ቢሆን ለማንም ሰው ወይም አካል አልፎ አይሰጥም። የሰጡት መረጃ ሁሉ በምስጢር የሚቀመጥ ነው። ይህንንም ተግባራዊ ለማድረግ ይቻል ዘንድ ሥምዎን በየትኛውም የመጠይቁ ክፍል እና ገፅ ላይ መጻፍ አያስፈልግዎትም።

ማሳሰቢያ

- በቅፁ ላይ ስምዎን አይሙሉ።
- የሚሰጡት መልስ ሁሉ በምስጢር ይያዛል።

አጠቃላይ መመሪያ

ይህ መጠይቅ አምስት ክፍሎች አሉት። እነዚህም ክፍሎች የያዙት ጥያቄዎች በቅደም ተከተል በሚከተሉት ነጥቦች ላይ ነው። አጠቃላይ የግል መረጃ፣ የግብረ ሥጋ ግንኙነት ባህሪ (ያታዊ ጓደኛ፣ የኮንዶም አጠቃቀም ወዘተ) እና በፈቃደኝነት ላይ የተመሰረተ የኤች አይ ቪ/ኤድስ የምክርና የምርመራ አገልግሎት ፣ ሥራት ነገሮችን በጋራ ስለመጠቀም፣ በገንዘብ የሚደረግ የግብረ ሥጋ ግንኙነት እና አልኮልና አደንዛዥ እፅን ለወሲባዊ ግንኙነት መጠቀምን ያጠቃልላል።

ስለሆነም፣ እባክዎ እያንዳንዱን ጥያቄ በጥሞና በማንበብ የራስዎን ትክክለኛ መልስ በመመሪያው መሠረት ይመልሱ።

በቅድሚያ ስለ ትብብርዎ አመሰግናለሁ!!

ቀን:- _____
ቀጽ:- _____

ተራ ቁጥር	ጥያቄ	መልስ
13	በቤተሰብዎ ውስጥ ኤች አይ ቪ ፓዘቲቭ የሆነ ሰው አለ?	1. አዎ 2. የለም
14	ለጥያቄ ቁጥር « 13 » የሰጡት መልስ "አዎ" ከሆነ ግንኙነትዎ ምንድን ነው?	1. አባት 2. እናት 3. እሀት 4. ወንድም 5. ባል 6. ማስት 7. ሌላ ካለ (ይግለጹ) -----

ክፍል ሁለት:- የግብረ ሥጋ ግንኙነት ባህሪይ እና በፈቃደኝነት ላይ የተመሰረተ የኤች አይ ቪ/ኤድስ ካንጫንስሊንግና የደም ምረመራ

መመሪያ:- የሚከተሉት ጥያቄዎች የግብረ ሥጋ ግንኙነት ባህሪይ ወይም የደታ ተጓዳኝ የኮንዶም አጠቃቀም ወዘተ... እና በፈቃደኝነት ላይ የተመሰረተ የኤች አይ ቪ/ኤድስ መረጃን የሚጠይቁ ናቸው:: ጥያቄዎቹን በጥንቃቄ በማንበብ ተሰማሚውን መልስ ያካብቡ :: በፀሐፍ መገለፅ አባክዎ ሊያስፈልግዎ በተሰጠው ባዶ ቦታ ላይ በፀሐፍ ሐሳብዎን ይግለጹ::

ተራ ቁጥር	ጥያቄ	መልስ
1	የግብረ ሥጋ ግንኙነት ፈፅመው ያውቃሉ?	1. አዎ 2. አላውቅም
2	ለ«1ኛው» ጥያቄ የሰጡት መልስ «አዎ» ከሆነ ለመጀመሪያ ጊዜ የግብረ ሥጋ ግንኙነት የፈፀሙት በግምት በስንት አመትዎ ነበር?	-----
3	በሕይወትዎ! ስንት የደታ ተጓዳኝ ወይም የግብረ ሥጋ ጓደኛ ነበረዎት?	1. አንድ ብቻ 2. ሁለት ብቻ 3. ከ 2 - 5 4. ከ 6 - 10 5. ከ 10 በላይ
4	ባለፉት ስድስት ወራት ውስጥ ስንት የደታ ተጓዳኝ ወይም የግብረ ሥጋ ጓደኛ ነበረዎት?	1. አንድ ብቻ 2. ሁለት ብቻ 3. ከ 2 - 5 4. ከ 6 - 10 5. ከ 10 በላይ
5	ለ «3ኛው ወይም 4ኛው» ጥያቄ የሰጡት መልስ « አንድ ብቻ» ከሆነ እንዲወሰኑ የበለጠ የረዳዎ ክፍት ያገኙት የኤች አይ ቪ/ኤድስ መረጃና ትምህርት ነው? እባክዎ መልስዎን ተራ ቁጥር በመጠቀም (1ኛ፣ 2ኛ፣ 3ኛ፣ 4ኛ፣ 5ኛ...ወዘተ... በማለት) በትደም ተክተል ያስቀምጡ::	1. ጓደኛ/ኛች 2. በፈቃደኝነት ላይ የተመሠረተ የካውንስሊንግ አገልግሎትና ደም ምርመራ ጣቢያ 3. የዐረ ኤች አይ ቪ/ኤድስ ክብባት 4. የሃይማኖት ተቋማት (አብያተ-ክርስቲያናት፣ መስጊዶች፣ እድባራት ወዘተ...) 5. የማህበረሰብ ተቋማት (እድሮች፣ ማህበራት ወዘተ ...) 6. ቤተሰብ 7. መገናኛ ብዙሀን 8. ሌላ ካለ (ይግለጹ)-----
6	የግብረ ሥጋ ጓደኛ/ኛች ካለዎት የግብረ ሥጋ ጓደኛዎ/ ጓደኛችዎ ክስርዎ ሌላ የግብረ ሥጋ ጓደኛ /ኛች አላት/ አለው/ አላቸው?	1. አዎ 2. የሰውም /የላትም/ የላቸውም 3. አላውቅም
7	ባለፉት ስድስት ወራት ውስጥ ከቋሚ የደታ ተጓዳኝዎ (ፍቅረኛዎ) ጋር የግብረ ሥጋ ግንኙነት ፈፀመዋል?	1. አዎ 2. አልፈዎም
8	ለ «7ኛው» ጥያቄ የሰጡት መልስ «አዎ» ከሆነ፣ ባለፉት ስድስት ወራት! ከቋሚ የደታ ተጓዳኝዎ (ፍቅረኛ) ጋር የግብረ ሥጋ ግንኙነት ሲፈፀሙ ምን ያህል ጊዜ ኮንዶም ተጠቅመዋል?	1. ሁል ጊዜ 2. አብዛኛውን ጊዜ 3. አልፎ አልፎ 4. ጥቂት ጊዜ 5. ፈፅሞ ተጠቅሜ አላውቅም
9	ከቋሚ የደታ ተጓዳኝዎ(ፍቅረኛዎ) ጋር ሁል ጊዜ ኮንዶም የሚጠቀሙ ከሆነ እንዲጠቀሙ የበለጠ የረዳዎ ክፍት ያገኙት የኤች አይ ቪ/ኤድስ መረጃና ትምህርት ነው? እባክዎ መልስዎን ተራ ቁጥር በመጠቀም (1ኛ፣ 2ኛ፣ 3ኛ፣ 4ኛ፣ 5ኛ ወዘተ... በማለት) በትደም ተክተል ያስቀምጡ::	1. ጓደኛ/ኛች 2. በፈቃደኝነት ላይ የተመሠረተ የካውንስሊንግ አገልግሎትና ደም ምርመራ ጣቢያ 3. የዐረ ኤች አይ ቪ/ኤድስ ክብባት 4. የሃይማኖት ተቋማት (አብያተ-ክርስቲያናት፣ መስጊዶች፣ እድባራት ወዘተ...) 5. የማህበረሰብ ተቋማት (እድሮች፣ ማህበራት ወዘተ ...) 6. ቤተሰብ 7. መገናኛ ብዙሀን 8. ሌላ ካለ (ይግለጹ)-----

ተራ ቁጥር	ጥያቄ	መልስ
10	ባለፉት ስድስት ወራት ውስጥ ከቋሚ የየታ ተጓዳኝ (ፍቅረኛ) ጋር የግብረ ሥጋ ግንኙነት ሲያደርጉ ኮንዶም ወልቆብዎት ተቀድዶብዎት ተቆርጦብዎት ተስናክሎብዎ ወይም ስህተት ተፈጥሮብዎ ያውቃል?	1. አዎ 2. ተስናክሎብኝ አያውቅም
11	ባለፉት ስድስት ወራት ውስጥ ከቋሚ የየታ ተጓዳኝ (ፍቅረኛ) ጋር የግብረ ሥጋ ግንኙነት ሲያደርጉ በግምት ምን ያህል ጊዜ ኮንዶም ወልቆብዎት ተቀድዶብዎት ተቆርጦብዎት ተስናክሎብዎ ወይም ስህተት ተፈጥሮብዎ ያውቃል?	1. ፈፅሞ ተስናክሎብኝ አያውቅም 2. አንድ ጊዜ ብቻ 3. ከ 2 - 5 4. ከ 6 - 10 5. ከ 10 ጊዜ በላይ
12	ለ «11ኛው» ጥያቄ የሰጡት መልስ «ፈፅሞ ተስናክሎብኝ አያውቅም» ከሆነ ኮንዶም በትክክል እንዲጠቀሙ የበለጠ የረዳዎ/የጠቀሙዎ ከየት ያገኙት የኤች አይ ቪ/ኤድስ መረጃና ትምህርት ነው? አባዘዎ መልስዎን ተራ ቁጥር በመጠቀም (1ኛ፣ 2ኛ፣ 3ኛ፣ 4ኛ፣ 5ኛ፣ ወዘተ... በማለት) በቅደም ተከተል ያስተምጡ።	1. ጓደኛ/ኛች 2. በፈቃደኝነት ላይ የተመሠረተ የካወንሰሊንግ አገልግሎትና ደም ምርመራ ጣቢያ 3. የዐረ ኤች አይ ቪ/ኤድስ ክበባት 4. የሃይማኖት ተቋማት (አብያተ-ክርስቲያናት፣ መስጊዶች፣ እድባራት ወዘተ...) 5. የማህበረሰብ ተቋማት (አድሮች፣ ማህበራት ወዘተ ...) 6. ቤተሰብ 7. መገናኛ ብዙሀን 8. ሌላ ካለ (ይግለፅ)-----
13	ባለፉት ስድስት ወራት ውስጥ በአጋጣሚ ካገኙት/ጅት (ቋሚ ካልሆነ) የየታ ተጓዳኝ ጋር የግብረ ሥጋ ግንኙነት ፈፀመዋል?	1. አዎ 2. አልፈፀምኩም
14	ለ «13ኛው» ጥያቄ የሰጡት መልስ «አዎ» ከሆነ፣ ባለፉት ስድስት ወራት በአጋጣሚ ካገኙት/ጅት (ቋሚ ካልሆነ) የየታ ተጓዳኝ ጋር የግብረ ሥጋ ግንኙነት ከፈፀሙባቸው ግዜያት ውስጥ ምን ያህል ጊዜ ኮንዶም ተጠቅመዋል?	1. ሁል ጊዜ 2. አብዛኛውን ጊዜ 3. አልፎ አልፎ 4. ጥቂት ጊዜ 5. ፈፅሞ አልተጠቀምኩም
15	በአጋጣሚ ካገኙት/ጅት (ቋሚ ካልሆነ) የየታ ተጓዳኝ ጋር ኮንዶም የሚጠቀሙ ከሆነ ለመጠቀም እንዲወስኑ የረዳዎ ከየት ያገኙት የኤች አይ ቪ/ኤድስ መረጃና ትምህርት ነው? አባዘዎ መልስዎን ተራ ቁጥር በመጠቀም (1ኛ፣ 2ኛ፣ 3ኛ፣ 4ኛ፣ 5ኛ ወዘተ በማለት) በቅደም ተከተል ያስተምጡ።	1. ጓደኛ/ኛች 2. በፈቃደኝነት ላይ የተመሠረተ የካወንሰሊንግ አገልግሎትና ደም ምርመራ ጣቢያ 3. የዐረ ኤች አይ ቪ/ኤድስ ክበባት 4. የሃይማኖት ተቋማት (አብያተ-ክርስቲያናት፣ መስጊዶች፣ እድባራት ወዘተ...) 5. የማህበረሰብ ተቋማት (አድሮች፣ ማህበራት ወዘተ ...) 6. ቤተሰብ 7. መገናኛ ብዙሀን 8. ሌላ ካለ (ይግለፅ)-----
16	ባለፉት ስድስት ወራት ውስጥ በአጋጣሚ ካገኙት/ጅት (ቋሚ ካልሆነ) የየታ ተጓዳኝ ጋር የግብረ ሥጋ ግንኙነት ሲያደርጉ ኮንዶም ወልቆብዎት ተስናክሎብዎ ወይም ስህተት ተፈጥሮብዎ ያውቃል?	1. አዎ 2. ተስናክሎብኝ አያውቅም
17	ለ «16ኛው» ጥያቄ የሰጡት መልስ «አዎ» ከሆነ፣ ባለፉት ስድስት ወራት ቋሚ ካልሆነ የየታ ተጓዳኝ ጋር የግብረ ሥጋ ግንኙነት ሲፈፀሙ በግምት ምን ያህል ጊዜ ኮንዶም ወልቆብዎት ተቀድዶብዎት ተቆርጦብዎት ተስናክሎብዎ ወይም ስህተት ተፈጥሮብዎ ያውቃል?	1. ፈፅሞ ተስናክሎብኝ አያውቅም 2. አንድ ጊዜ ብቻ 3. ከ 2 - 5 4. ከ 6-10 5. ከ 10 ጊዜ በላይ
18	ለ «17ኛው» ጥያቄ የሰጡት መልስ «ፈፅሞ ተስናክሎብኝ አያውቅም» ከሆነ፣ ኮንዶም በትክክል እንዲጠቀሙ የበለጠ የረዳዎ/የጠቀሙዎ ከየት ያገኙት የኤች አይ ቪ/ኤድስ መረጃና ትምህርት ነው? አባዘዎ መልስዎን ተራ ቁጥር በመጠቀም (1ኛ፣ 2ኛ፣ 3ኛ፣ 4ኛ፣ 5ኛ ወዘተ በማለት) በቅደም ተከተል ያስተምጡ።	1. ጓደኛ/ኛች 2. በፈቃደኝነት ላይ የተመሠረተ የካወንሰሊንግ አገልግሎትና ደም ምርመራ ጣቢያ 3. የዐረ ኤች አይ ቪ/ኤድስ ክበባት 4. የሃይማኖት ተቋማት (አብያተ-ክርስቲያናት፣ መስጊዶች፣ እድባራት ወዘተ...) 5. የማህበረሰብ ተቋማት (አድሮች፣ ማህበራት ወዘተ ...) 6. ቤተሰብ 7. መገናኛ ብዙሀን 8. ሌላ ካለ (ይግለፅ)-----
19	ባለፉት ስድስት ወራት በፈንጠባ የግብረ ሥጋ ግንኙነት/ወሲብ ፈፀመው ያውቃሉ?	1. አዎ 2. አላውቅም
20	ለ «19ኛው» ጥያቄ የሰጡት መልስ «አዎ» ከሆነ፣ ባለፉት ስድስት ወራት በፈንጠባ የግብረ ሥጋ ግንኙነት/ ወሲብ ሲፈፀሙ ምን ያህል ጊዜ ኮንዶም ተጠቅመዋል?	1. ሁል ጊዜ 2. አብዛኛውን ጊዜ 3. አልፎ አልፎ 4. ጥቂት ጊዜ 5. ፈፅሞ ተጠቅሜ አላውቅም

ተራ-ቁጥር	ጥያቄ	መልስ
21	ለመጨረሻ ጊዜ ከቋሚ የሥራ ተቃዳኝ ጋር የግብር ሥጋ ግንኙነት ሲፈፀም ኮንዶም ተጠቅመዋል?	1. አዎ 2. አልተጠቀምኩም 3. ቋሚ የሥራ ተቃዳኝ የለኝም
22	ለመጨረሻ ጊዜ በአጋጣሚ ካገኙት/ኛት(ቋሚ ካልሆነ) የሥራ ተቃዳኝ ጋር የግብር ሥጋ ግንኙነት ሲፈፀም ኮንዶም ተጠቅመዋል?	1. አዎ 2. አልተጠቀምኩም 3. ቋሚ የልሆነ የሥራ ተቃዳኝ የለኝም
23	ስለ ኮንዶም አጠቃቀም ዝርዝር መመሪያ ተሰጥዎት ያውቃል?	1. አዎ 2. ተሰጥቶኝ አያውቅም
24	ባለፉት ስድስት ወራት ኮንዶም በትክክል ስለመጠቀምዎ እርግጠኛ ነዎት?	1. አዎ 2. እርግጠኛ አይደለሁም
25	ባለፉት ስድስት ወራት ያለኮንዶም ወሲብ መፈፀም እንዲለሰብዎት የሥራ ተቃዳኝ ምን ያህል ጊዜ አሳምነው ያውቃሉ ?	1. ሁል ጊዜ 2. አብዛኛውን ጊዜ 3. አልፎ አልፎ 4. ጥቂት ጊዜ 5. ፈጽሞ አሳምኜ አላወቅም
26	ባለፉት ስድስት ወራት የሥራ ተቃዳኝዎ ከእርስዎ ጋር ያለኮንዶም ወሲብ እንዳይፈፀም ያደረጉት/የተከሰቱት ለምን ያህል ጊዜ ነው ?	1. ሁል ጊዜ 2. አብዛኛውን ጊዜ 3. አልፎ አልፎ 4. ጥቂት ጊዜ 5. ፈጽሞ ተከሰኩ አላወቅም
27	ባለፉት ስድስት ወራት የግብር ሥጋ ግንኙነት ከፈፀሙባቸው ጊዜያት ውስጥ የግብር ሥጋ ግንኙነት ጓደኛዎን/ የሥራ ተቃዳኝዎን የኮንዶም እንጠቀም ጥያቄ ለምን ያህል ጊዜ ተቀብለዋል ?	1. ሁል ጊዜ 2. አብዛኛውን ጊዜ 3. አልፎ አልፎ 4. ጥቂት ጊዜ 5. ፈጽሞ ተቀብየ አላወቅም 6. ተጠይቀ አላወቅም
28	ከአሁን በፊት ኮንዶም ፈፅሞ ተጠቅመው የማያውቁ ከሆነ ወደፊት ሁል ጊዜ ስመጠቀም ሀሳብ አለዎት?	1. አዎ 2. የለኝም
29	ባለፉት ስድስት ወራት ከሲቶኖ አዳሪ/ዎች ጋር የግብር ሥጋ ግንኙነት ፈፅመው ያውቃሉ? (በወንዶች ብቻ የሚመለስ)	1. አዎ 2. አልፈፀምኩም
30	ለ «29ኛው» ጥያቄ የሰጡት መልስ « አዎ » ከሆነ ባለፉት ስድስት ወራት ከሲቶኖ አዳሪ/ዎች ጋር ግንኙነት ሲፈፀም ምን ያህል ጊዜ ኮንዶም ተጠቅመዋል? (በወንዶች ብቻ የሚመለስ)	1. ሁል ጊዜ 2. አብዛኛውን ጊዜ 3. አልፎ አልፎ 4. ጥቂት ጊዜ 5. ፈፅሞ ተጠቅሜ አላወቅም
31	ባለፉት ስድስት ወራት ለ ኢች አይ ቪ/ኤድስ የመጋለጥ እድሉ ከፍተኛ ከሆነ ወይም ከሲቶኖ አዳሪ/ዎች ጋር የግብር ሥጋ ግንኙነት ካደረገ ሰው ጋር የግብር ሥጋ ግንኙነት ፈፅመው ያውቃሉ?(በሰቶች ብቻ የሚመለስ)	1. አዎ 2. አልፈፀምኩም
32	ለ «31ኛው» ጥያቄ የሰጡት መልስ « አዎ » ከሆነ ባለፉት ስድስት ወራት ለ ኢች አይ ቪ/ኤድስ የመጋለጥ እድሉ ከፍተኛ ከሆነ ሰው ጋር ግንኙነት ሲፈፀም ምን ያህል ጊዜ ኮንዶም ተጠቅመዋል? (በሰቶች ብቻ የሚመለስ)	1. ሁል ጊዜ 2. አብዛኛውን ጊዜ 3. አልፎ አልፎ 4. ጥቂት ጊዜ 5. ፈፅሞ ተጠቅሜ አላወቅም
33	ለኢች አይ ቪ/ኤድስ የመጋለጥ እድል ምን ያህል ነው?	1. ከፍተኛ 2. መካከለኛ 3. ዝቅተኛ 4. የመጋለጥ እድል የለኝም
34	ባለፉት ስድስት ወራት በግብር ሥጋ ግንኙነት/ በወሲብ በሚተላለፉ እንደ ጨብጥ ፣ ቂጥኝ ወይም ሌሎች የአበሳሰር በሽታዎች ተይዘው ያውቃሉ ?	1. አዎ 2. አላወቅም
35	ለ «34ኛው» ጥያቄ የሰጡት መልስ « አዎ » ከሆነ ባለፉት ስድስት ወራት ያህል ጊዜ ለአበሳሰር በሽታ ህክምና አድርገዋል?	1. ፈፅሞ አድርጌ አላወቅም 2. አንድ ጊዜ ብቻ 3. ከ 2 - 5 ጊዜ 4. ከ 6 - 10 ጊዜ 5. ከ 10 ጊዜ በላይ
36	ባለፉት ስድስት ወራት ውስጥ የኢች አይ ቪ/ኤድስ ምርመራ ያልተደርገለት ደም ተሰጥቶዎት ያውቃል ?	1. አዎ 2. አያውቅም
37	ባለፉት ስድስት ወራት ውስጥ የኢች አይ ቪ/ኤድስ ምርመራ ሳያደረጉ ለሌላ ሰው ደም ሰጥተው ያውቃሉ?	1. አዎ 2. አላወቅም

ተራ ቁጥር	ጥያቄ	መልስ
38	ለኢች አይ ቪ/ኤድስ የደም ምርመራ አድርገው ያውቃሉ?	1. አዎ 2. አላውቅም
39	ለጥያቄ ቁጥር "36" የሰጡት መልስ «አዎ» ከሆነ የመጀመሪያ የምርመራ ውጤት ምን ነበር?	1. ፓዘቲቭ (Positive) 2. ኔጂቲቭ (Negative)
40	ከመጀመሪያ ምርመራ ሁኔታ (ከ3 ወር በኋላ) በድጋሚ ተመርምረዋል?	1. አዎ 2. አልተመረመርኩም
41	ለጥያቄ ቁጥር «38» የሰጡት መልስ «አዎ» ከሆነ የምርመራ ውጤት ምን ነበር?	1. ፓዘቲቭ (Positive) 2. ኔጂቲቭ (Negative)
42	የምርመራ ውጤት ፓዘቲቭ (Positive) ከሆነ ከሚከተሉት ውስጥ የየትኛው አገልግሎት ተጠቃሚ ነዎት? (ከአንድ የበለጠ መልስ መስጠት ይቻላል)	1. ቀጣይነት ያለው የካህን/ሰላጊ አገልግሎት (Ongoing counseling) 2. የቤት ለቤት የካህን/ሰላጊ አገልግሎት (Home based counseling) 3. የአድሜ ማራዘሚያ መድኃኒት 4. ሥነ ልቦናዊ እና ማህበራዊ አገልግሎቶች 5. የአቻ ለአቻ ትምህርት እና ካህን/ሰላጊ አገልግሎት 6. ምንም እይነት አገልግሎት አላገኘሁም 7. ሌላ ካለ (ይግለፁ) -----
43	የምርመራ ውጤት ኔጂቲቭ (Negative) ከሆነ በዚህ አንዲቀጥሎ የተሰጥዎት ድጋፍ (ከአንድ የበለጠ መልስ መስጠት ይቻላል)	1. ቀጣይነት ያለው የካህን/ሰላጊ አገልግሎት (Ongoing counseling) 2. የአቻ ለአቻ ትምህርት እና ካህን/ሰላጊ አገልግሎት 3. ምንም እይነት አገልግሎት አላገኘሁም 4. ሌላ ካለ (ይግለፁ) -----

ክፍል ሦስት:- ስለት ነገሮችን በጋራ መጠቀም

መመሪያ:- የሚከተሉት ጥያቄዎች ኤች አይ ቪ/ኤድስ ሊያስተላልፉ የሚችሉ ስለታማ ነገሮችን በጋራ ስለመጠቀም ይጠይቃሉ::
አባዘም ጥያቄዎቹን በጥንቃቄ ያንብቡና ተገቢውን መልስ ይሰጡ ::

ተራ ቁጥር	ጥያቄ	መልስ
1	ባለፉት ስድስት ወራት እንደ መርፌ፣ ምላጭ፣ ስሪንጅ ወዘተ... ያሉ ስለታማ ነገሮችን ሲፈልጉ ከሌሎች ሰዎች ተውሰው ተጠቅመዋል ያዉቃሉ ?	1. አዎ 2. አላውቅም
2	ባለፉት ስድስት ወራት እንደ መርፌ፣ ምላጭ፣ ስሪንጅ ወዘተ... ያሉ ስለታማ ነገሮችን ሲፈልጉ ከሌሎች ሰዎች በግምት ምን ያህል ጊዜ ተውሰው ተጠቅመዋል?	1. ፈፅሞ በጋራ አልተጠቀምኩም 2. አንድ ጊዜ ብቻ 3. ከ 2 - 5 4. ከ 6 - 10 5. ከ 10 ጊዜ በላይ
3	ባለፉት ስድስት ወራት እንደ መርፌ፣ ምላጭ፣ ስሪንጅ ወዘተ... ያሉ ስለታማ ነገሮችን ከመጠቀም በፊት ምን ያህል ጊዜ ተቀላቀለ ወይም አዕድተኛ ተጠቅመዋል?	1. ሁል ጊዜ 2. አብዛኛውን ጊዜ 3. አልፎ አልፎ 4. ጥቂት ጊዜ 5. ፈጽሞ አዕድቸ አላዉቅም
4	ባለፉት ስድስት ወራት የኢች አይ ቪ ቫይረስን ሊያስተላልፉ የሚችሉ ባህላዊ የጤና መጠበቂያ መሳሪያዎችን ለምሳሌ የግግ መንቀጥጥ፣ የባላብጥ፣ የአንጥል መቆረጫ፣ ወዘተ... ከሌሎች ሰዎች ጋር በጋራ ምን ያህል ጊዜ ተጠቅመዋል?	1. ፈፅሞ በጋራ አልተጠቀምኩም 2. ጥቂት ጊዜ ብቻ 3. አልፎ አልፎ 4. አብዛኛውን ጊዜ 5. ሁል ጊዜ
5	ባለፉት ስድስት ወራት የኢች አይ ቪ ቫይረስን ለማስተላለፍ የተጋለጡ ስለታሉ ባህላዊ ማስጠንቀቂያዎች ለምሳሌ ለንቅላት መርፌ፣ ለመቀንደቢያ፣ ለመቀንደቢያ ምላጭ ወዘተ... ከሌሎች ሰዎች ጋር በጋራ ምን ያህል ጊዜ ተጠቅመዋል?	1. ፈፅሞ በጋራ አልተጠቀምኩም 2. ጥቂት ጊዜ ብቻ 3. አልፎ አልፎ 4. አብዛኛውን ጊዜ 5. ሁል ጊዜ

Appendix II

Discussion Guide for Focused Group Discussions

Name of the Moderator _____

Name of the Rap-porter _____

Date _____ Total Time taken _____ minutes

FGD Participants: Characteristics of the Groups

NO	Sex	Age	Remark
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Discussion Points

1. In Ethiopian context what are the major risk behaviours for HIV/AIDS infection?
2. Which groups of population in the community are more venerable for HIV/AIDS infection?

3. Use of VCT is effective in reducing risk behaviours?
4. Is VCT service effective in reducing HIV the following risk behaviours:
 - A. Unprotected sexual intercourse/ increasing use of condom,
 - B. Having Multiple sexual Partner/ reducing number of sexual partner,
 - C. Having sex for money or material goods/ reducing sexual trading,
 - D. Having sex with prostitutes,
 - E. Having sex with high risk partner,
 - A partner/s who have history of having sex with prostitutes,
 - A partner/s who tested HIV positive,
 - A partner/s whose HIV status is not known,
 - F. Use of alcohol(beer, 'Local Arake', 'Tej, etc..) for sexual initiation that exposes for unprotected sexual intercourse,
 - G. Use of drugs (e.g. Chate, Hashish, Shisha, etc..) for sexual initiation that exposes for unprotected sexual intercourse,
 - H. Sharing sharp instruments in common,
5. What are the effective interventions used to reduce HIV risk behaviours other than VCT?
6. Which intervention is most effective for the reduction of HIV risk behaviours?
7. How do you evaluate the contribution of VCT in the reduction of risk behaviour?

Appendix III

Questions for Interview

Name of the Interviewer _____

Date _____ Total Time taken _____ minutes

Characteristics of Interview Participants

NO	Sex	Age	Remark
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Semi structured Interview Questions

I. Sexual Behaviour

1. How many people have you had sex with in the last six month?
2. How often have you used condoms when having sex with your regular partner(s) in the last month?
3. How often did you use condoms when you had sex with casual partners?
4. How often have you used condoms when you have been paid for sex in the six last month?

II. Sharing sharp instruments

1. How many times in the last six month have you used sharp instruments (e.g. needle, razor/ blade, knife) after someone else had already used it?
2. How often, in the last six month, have you sterilized the sharp instruments (e.g. needle, razor/ blade, knife) before re-using them?

III. Alcohol and Drug Use

1. How many times have you used alcohol(Beer, Tej, 'Arake', etc) that may put you and your partner/s at risk of being engaged in unprotected sex in the last six month?
2. How many times have you used drugs(Chat, Hashish, Shisha, etc) that may put you and your partner/s at risk of being engaged in unprotected sex in the last six month?

Appendix IV

Services Helped Participants in both VCT and non VCT Group

Table- A Services helped Participants to be faithful

Group of respondents		Didn't mention the case	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Total
VCT group	Friends	16(18.0%)	2(2.2%)	9(10.1%)	22(24.7%)	18(20.2%)	13(14.6%)	7(7.9%)		87(100%)
	VCT	1(1.1%)	45(50.6%)	13(14.6%)	7(7.9%)	9(10.1%)	4(4.5%)	6(6.7%)	2(2.2%)	87(100%)
	Anti HIV/AIDS Clubs	11(12.4%)	8(9.0%)	13(14.6%)	14(15.7%)	17(19.1%)	7(7.9%)	10(11.2%)	7(7.9%)	87(100%)
	Religious	14(15.7%)	16(18.0%)	14(15.7%)	10(11.2%)	8(9.0%)	14(15.7%)	6(6.7%)	4(4.5%)	87(100%)
	CBOs	13(14.6%)	1(1.1%)	5(5.6%)	8(9.0%)	8(9.0%)	11(12.4%)	24(27.0%)	17(19.1%)	87(100%)
	Family	17(19.1%)	6(6.7%)	18(20.2%)	7(7.9%)	8(9.0%)	12(13.5%)	8(9.0%)	11(12.4%)	87(100%)
	Mass Media	14(15.7%)	8(9.0%)	11(12.4%)	14(15.7%)	10(11.2%)	7(7.9%)	(5.6%)	18(20.2%)	87(100%)
	other services	81(91.0%)	1(1.1%)	3(3.4%)	2(2.2%)					87(100%)
Non VCT group	Friends	11(15.9%)	3(4.3%)	12(17.4%)	12(17.4%)	10(14.5%)	5(7.2%)	6(8.7%)	8(11.6%)	67(100%)
	VCT	20(29.0%)	4(5.8%)	2(2.9%)	7(10.1%)	4(5.8%)	10(14.5%)	8(11.6%)	12(17.4%)	67(100%)
	Anti HIV/AIDS Clubs	11(15.9%)	11(15.9%)	9(13.0%)	9(13.0%)	15(21.7%)	6(8.7%)	6(8.7%)		67(100%)
	Religious Institutions	14(20.3%)	14(20.3%)	10(14.5%)	8(11.6%)	8(11.6%)	9(13.0%)	4(5.8%)		67(100%)
	CBOs	22(31.9%)		3(4.3%)	9(13.0%)	9(13.0%)	8(11.6%)	6(8.7%)	9(13.0%)	67(100%)
	Family	17(24.6%)	5(7.2%)	10(14.5%)	11(15.9%)	6(8.7%)	5(7.2%)	9(13.0%)	4(5.8%)	67(100%)
	Mass Media	6(8.7%)	23(33.3%)	16(23.2%)	7(10.1%)	2(2.9%)	5(7.2%)	4(5.8%)	4(5.8%)	67(100%)
	Other services	61(87.1%)	5(7.1%)			1(1.4%)		1(1.4%)		67(100%)

Table-B Services helped Participants to use condom consistently with Casual Partner

Groups		Didn't mention the case	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Total
VCT group	Friends	9(18.8%)	3(6.3%)	8(16.7%)	15(31.3%)	9(18.8%)		1(2.1%)	3(6.3%)		48(100%)
	VCT	3(6.3%)	29(60.4%)	2(4.2%)	2(4.2%)	4(8.3%)	5(10.4%)	1(2.1%)	2(4.2%)		48(100%)
	Anti HIV/AIDS Clubs	6(12.5%)	2(4.2%)	12(25.0%)	11(22.9%)	6(12.5%)	4(8.3%)	4(8.3%)	3(6.3%)		48(100%)
	Religious	12(25.0%)		2(4.2%)	5(10.4%)	5(10.4%)	6(12.5%)	14(29.2%)	4(8.3%)		48(100%)
	CBOs	7(14.6%)	3(6.3%)	2(4.2%)	3(6.3%)	6(12.5%)	13(27.1%)	4(8.3%)	9(18.8%)	1(2.1%)	48(100%)
	Family	11(22.9%)		9(18.8%)	4(8.3%)	4(8.3%)	5(10.4%)	6(12.5%)	9(18.8%)		48(100%)
	Mass Media	6(12.5%)	11(22.9%)	11(22.9%)	5(10.4%)	6(12.5%)	4(8.3%)	2(4.2%)	3(6.3%)		48(100%)
	other services	43(89.6%)	2(4.2%)	1(2.1%)					1(2.1%)	1(2.1%)	48(100%)
Non VCT group	Friends	4(18.2%)	5(22.7%)	5(22.7%)	4(18.2%)	2(9.1%)		1(4.5%)	1(4.5%)		22(100%)
	VCT	10(45.5%)	2(9.1%)	1(4.5%)	4(18.2%)		1(4.5%)	2(9.1%)	1(4.5%)	1(4.5%)	22(100%)
	Anti HIV/AIDS Clubs	7(30.4%)	3(13.0%)	8(34.8%)	1(4.3%)	2(8.7%)	1(4.3%)		1(4.3%)		23(100%)
	Religious Institutions	10(45.5%)		1(4.5%)	4(18.2%)	1(4.5%)	4(18.2%)	2(9.1%)			22(100%)
	CBOs	11(50.0%)		1(4.5%)	2(9.1%)	1(4.5%)	2(9.1%)	3(13.6%)	2(9.1%)		22(100%)
	Family	11(50.0%)			1(4.5%)	3(13.6%)	2(9.1%)	2(9.1%)	3(13.6%)		22(100%)
	Mass Media	3(12.5%)	11(45.8%)	3(12.5%)	1(4.2%)	2(8.3%)	2(8.3%)		2(8.3%)		24(100%)
	Other services	21(91.3%)	2(8.7%)								23(100%)

Table- C Services helped Participants to use condom correctly with Casual Partner

Groups		Didn't mention the case	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Total
VCT group	Friends	6(12.8%)	2(4.3%)	8(17.0%)	13(27.7%)	9(19.1%)	2(4.3%)	3(6.4%)	1(2.1%)	47(100.0%)
	VCT	1(2.1%)	27(57.4%)	3(6.4%)	5(10.6%)	4(8.5%)	2(4.3%)	1(2.1%)	2(4.3%)	47(100.0%)
	Anti HIV/AIDS Clubs	3(6.4%)	4(8.5%)	12(25.5%)	7(14.9%)	5(10.6%)	7(14.9%)	2(4.3%)	5(10.6%)	47(100.0%)
	Religious	8(17.0%)		4(8.5%)	2(4.3%)	5(10.6%)	8(17.0%)	12(25.5%)	6(12.8%)	47(100.0%)
	CBOs	7(14.9%)	1(2.1%)	3(6.4%)	2(4.3%)	9(19.1%)	5(10.6%)	6(12.8%)	11(23.4%)	47(100.0%)
	Family	4(8.5%)	1(2.1%)	8(17.0%)	5(10.6%)	4(8.5%)	10(21.3%)	8(17.0%)	5(10.6%)	47(100.0%)
	Mass Media	4(8.5%)	10(21.3%)	4(8.5%)	9(19.1%)	6(12.8%)	5(10.6%)	2(4.3%)	5(10.6%)	47(100.0%)
	other services	42(89.4%)	-	2(4.3)				1(2.1%)		47(100.0%)
Non VCT group	Friends	5(13.5%)		6(16.2%)	10(27.0%)	5(13.5%)	2(5.4%)	1(2.7%)		37(100.0%)
	VCT	3(7.9%)	6(15.8%)		3(7.9%)	4(10.5%)	4(10.5%)	4(10.5%)	6(15.8%)	38(100.0%)
	Anti HIV/AIDS Clubs	5(13.5%)	3(8.1%)	6(16.2%)	5(13.5%)	2(5.4%)	5(13.5%)	1(2.7%)	2(5.4%)	37(100.0%)
	Religious Institutions	9(24.3%)	1(2.7%)	1(2.7%)	1(2.7%)	6(16.2%)	3(8.1%)	4(10.8%)	4(10.8%)	37(100.0%)
	CBOs	5(13.2%)		3(7.9%)	4(10.5%)	1(2.6%)	4(10.5%)	8(21.1%)	5(13.2%)	38(100.0%)
	Family	8(21.6%)		6(16.2%)	2(5.4%)	4(10.8%)	3(8.1%)	2(5.4%)	3(8.1%)	37(100.0%)
	Mass Media	2(5.3%)	19(50.0%)	5(13.2%)	2(5.3%)		1(2.6%)		1(2.6%)	38(100.0%)
	Other services	26(70.3%)	1(2.7%)	1(2.7%)					1(2.7%)	37(100.0%)

Table- D Services helped Participants not to pay or receive money or material goods for sex

Groups		Didn't mention the case	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Not Stated	Total
VCT group	Friends	13(9.3%)	57(40.7%)	19(13.6%)	8(5.7%)	13(9.3%)	1(.7%)	5(3.6%)	2(1.4%)	22(15.7%)	140(100.0%)
	VCT	23(16.4%)	9(6.4%)	30(21.4%)	15(10.7%)	12(8.6%)	10(7.1%)	12(8.6%)	7(5.0%)	22(15.7%)	140(100.0%)
	Anti HIV/AIDS Clubs	34(24.3%)	13(9.3%)	8(5.7%)	14(10.0%)	17(12.1%)	14(10.0%)	11(7.9%)	7(5.0%)	22(15.7%)	140(100.0%)
	Religious	22(15.7%)	9(6.4%)	4(2.9%)	16(11.4%)	14(10.0%)	20(14.3%)	14(10.0%)	18(12.9%)	22(15.7%)	140(100.0%)
	CBOs	34(24.3%)	7(5.0%)	14(10.0%)	8(5.7%)	13(9.3%)	7(5.0%)	17(12.1%)	17(12.1%)	22(15.7%)	140(100.0%)
	Family	20(14.3%)	10(7.1%)	21(15.0%)	19(13.6%)	18(12.9%)	8(5.7%)	9(6.4%)	13(9.3%)	22(15.7%)	140(100.0%)
	Mass Media	112(80%)	2(1.4%)	2(1.4%)	1(.7%)					22(15.7%)	140(100.0%)
	other services	23(16.4%)	14(10.0%)	3(2.1%)	13(9.3%)	9(6.4%)	9(6.4%)	17(12.1%)	15(10.7%)	37(26.4%)	140(100.0%)
Non VCT group	Friends	24(17.1%)	12(8.6%)	13(9.3%)	13(9.3%)	20(14.3%)	9(6.4%)	6(4.3%)	5(3.6%)	38(27.1%)	140(100.0%)
	VCT	32(22.9%)	16(11.4%)	12(8.6%)	7(5.0%)	12(8.6%)	14(10.0%)	5(3.6%)	4(2.9%)	38(27.1%)	140(100.0%)
	Anti HIV/AIDS Clubs	25(17.9%)	3(2.1%)	10(7.1%)	14(10.0%)	7(5.0%)	18(12.9%)	11(7.9%)	14(10.0%)	38(27.1%)	140(100.0%)
	Religious Institutions	31(22.1%)	2(1.4%)	20(14.3%)	11(7.9%)	7(5.0%)	5(3.6%)	12(8.6%)	14(10.0%)	38(27.1%)	140(100.0%)
	CBOs	12(8.6%)	36(25.7%)	27(19.3%)	7(5.0%)	4(2.9%)	6(4.3%)	6(4.3%)	4(2.9%)	38(27.1%)	140(100.0%)
	Family	99(70.7%)	3(2.1%)							38(27.1%)	140(100.0%)

Table- E Services helped Participants not to use alcohols and drugs for Sexual Initiation

Groups		Didn't mention the case	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Not Stated	Total
VCT group	Friends	18(16.5%)	5(4.6%)	17(15.6%)	22(20.2%)	13(11.9%)	18(16.5%)	3(2.8%)	6(5.5%)	7(6.4%)	109(100%)
	VCT	4(3.7%)	56(51.4%)	18(16.5%)	10(9.2%)	8(7.3%)	2(1.8%)	3(2.8%)	1(.9%)	7(6.4%)	109(100%)
	Anti HIV/AIDS Clubs	6(5.5%)	10(9.2%)	25(22.9%)	15(13.8%)	17(15.6%)	11(10.1%)	12(11.0%)	5(4.6%)	7(6.4%)	109(100%)
	Religious	12(11.0%)	9(8.3%)	14(12.8%)	12(11.0%)	17(15.6%)	15(13.8%)	14(12.8%)	9(8.3%)	7(6.4%)	109(100%)
	CBOs	10(9.2%)	3(2.8%)	5(4.6%)	12(11.0%)	11(10.1%)	18(16.5%)	25(22.9%)	18(16.5%)	7(6.4%)	109(100%)
	Family	14(12.8%)	8(7.3%)	8(7.3%)	8(7.3%)	12(11.0%)	15(13.8%)	17(15.6%)	20(18.3%)	7(6.4%)	109(100%)
	Mass Media	14(12.8%)	10(9.2%)	13(11.9%)	18(16.5%)	15(13.8%)	7(6.4%)	7(6.4%)	16(14.7%)	7(6.4%)	109(100%)
	other services	97(89.0%)	1(.9%)	1(.9%)			1(.9%)	1(.9%)	1(.9%)	7(6.4%)	109(100%)
Non VCT group	Friends	10(11.0%)	10(11.0%)	17(18.7%)	19(20.9%)	12(13.2%)	3(3.3%)	3(3.3%)	6(6.6%)	11(12.1)	91(100%)
	VCT	20(22.0%)	14(15.4%)	1(1.1%)	6(6.6%)	6(6.6%)	6(6.6%)	16(17.6%)	11(12.1%)	11(12.1%)	91(100%)
	Anti HIV/AIDS Clubs	13(14.3%)	9(9.9%)	11(12.1%)	12(13.2%)	17(18.7%)	7(7.7%)	4(4.4%)	7(7.7%)	11(12.1%)	91(100%)
	Religious Institutions	13(14.3%)	22(24.2%)	8(8.8%)	2(2.2%)	11(12.1%)	12(13.2%)	10(11.0%)	1(1.1%)	11(12.1%)	91(100%)
	CBOs	19(20.9%)	1(1.1%)	2(2.2%)	10(11.0%)	6(6.6%)	13(14.3%)	16(17.6%)	13(14.3%)	11(12.1%)	91(100%)
	Family	13(14.3%)	3(3.3%)	14(15.4%)	16(17.6%)	9(9.9%)	9(9.9%)	5(5.5%)	11(12.1%)	11(12.1%)	91(100%)
	Mass Media	6(6.6%)	21(23.1%)	23(25.3%)	10(11.0%)	4(4.4%)	7(7.7%)	4(4.4%)	5(5.5%)	11(12.1%)	91(100%)
	Other services	78(85.7%)		2(2.2%)						11(12.1%)	91(100%)

Appendix V

Correlation Tables

Correlation Table- I

		Group of respondents	No. of Life time Sex Partner	No. of Sex Partner in the Last six Months	Sex with prostitute (men)	Sex with high risk partners(Women)	History STDs	Alcohol Use for sexual Initiation	Drug Use for sexual Initiation
Group of respondents	<i>r</i>	1.000	.142*	.175**	.043	-.315**	.060	-.051	-.034
	<i>p</i>	.	.017	.003	.603	.000	.327	.400	.571
	<i>N</i>	280	280	278	150	130	271	280	279
Type of VCT Received	<i>r</i>	.972**	.145*	.191**	.034	-.346***	.057	-.060	-.094
	<i>p</i>	.000	.015	.001	.677	.000	.351	.313	.117
	<i>N</i>	280	280	278	150	130	271	280	279
Number of Life time Sexual Partner	<i>r</i>	.142*	1.000	.443**	-.112	-.121	.007	-.100	-.087
	<i>p</i>	.017	.	.000	.174	.169	.909	.096	.148
	<i>N</i>	280	280	278	150	130	271	280	279
Number of Sex Partner in the Last six Months	<i>r</i>	.175**	.443**	1.000	-.132	-.152	-.054	-.077	-.113
	<i>p</i>	.003	.000	.	.108	.085	.378	.203	.061
	<i>N</i>	278	278	278	149	129	269	278	277
Sex with Casual sexual partner	<i>r</i>	-.211**	.111	-.098	1.000	.a	1.000	.a	.041
	<i>p</i>	.000	.166	.101	.a	.a	.a	.a	.628
	<i>N</i>	280	156	280	280				
Sex with a prostitute(men)	<i>r</i>	.043	-.112	-.132	1.000	.a	.193	.206	.191
	<i>p</i>	.603	.174	.108	.a	.a	.021	.011	.019
	<i>N</i>	150	150	149	150	0	143	150	149
Sexual intercourse with high risk partner (Women)	<i>r</i>	-.315***	-.121	-.152	.a	1.000	.341**	.233**	.227**
	<i>p</i>	.000	.169	.085	.a	.a	.000	.008	.010
	<i>N</i>	130	130	129	0	130	128	130	130
History of contracting STDs	<i>r</i>	.060	.007	-.05	.193*	.341**	1.000	.120*	.118
	<i>p</i>	.327	.909	.378	.021	.000	.a	.049	.053
	<i>N</i>	271	271	269	143	128	271	271	270
Used alcohols for sexual Initiation	<i>r</i>	-.051	-.100	-.077	.206*	.233**	.120	1.000	.858**
	<i>p</i>	.400	.096	.203	.011	.008	.049	.a	.000
	<i>N</i>	280	280	278	150	130	271	280	279
Used Drugs for sexual Initiation	<i>r</i>	-.034	-.087	-.113	.191*	.227**	.118	.858**	1.000
	<i>p</i>	.571	.148	.061	.019	.010	.053	.000	.
	<i>N</i>	279	279	277	149	130	270	279	279

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

a. Cannot be computed because at least one of the variables is constant.

r. Pearson Correlation, P. Sig. (2-tailed). N. Number of participants

Correlations Table - II

		Group of respondents	Service Received by HIV positive	Support Received by HIV Negative	Sex with Casual sexual partner	condom use with casual sexual partner	Incorrect use of condom with Casual Sex Partner	Frequency of Incorrect use of condom with Casual Partner	Condom use at last Intercourse with Regular Partner	Condom use at last Intercourse with casual Partner
Group of respondents	<i>r</i>	1.000	-.074	.297**	-.211**	.122	-.344**	.340**	.224**	.076
	<i>p</i>	.	.359	.000	.000	.117	.000	.000	.000	.218
	<i>N</i>	280	156	280	280	167	149	151	276	265
Type of VCT Received	<i>r</i>	.972**	-.117	.271**	-.227**	.121	-.335**	.333**	.217**	.055
	<i>p</i>	.000	.144	.000	.000	.119	.000	.000	.000	.373
	<i>N</i>	280	156	280	280	167	149	151	276	265
Service Received for being positive	<i>r</i>	-.074	1.000	-.369**	.111	-.139	.139	-.037	.070	-.163*
	<i>p</i>	.359	.	.000	.166	.231	.256	.768	.390	.050
	<i>N</i>	156	156	156	156	76	69	68	153	145
Support Received continue being Negative	<i>r</i>	.297**	-.369**	1.000	-.098	.152	-.061	.053	.074	.163**
	<i>p</i>	.000	.000	.	.101	.051	.463	.520	.218	.008
	<i>N</i>	280	156	280	280	167	149	151	276	265
Sex with Casual partner	<i>r</i>	-.211**	.111	-.098	1.000	a.	a.	-.091	.026	.359**
	<i>p</i>	.000	.166	.101	a.	a.	a.	.269	.668	.000
	<i>N</i>	280	156	280	280	167	149	151	276	265
condom use with casual sexual partner	<i>r</i>	.122**	-.139	.152	a.	1.000	a.	.041	.102	.171*
	<i>p</i>	.117	.231	.051	a.	a.	a.	.628	.193	.029
	<i>N</i>	167	76	167	167	167	149	144	166	164
Incorrect use of condom with Casual Sex Partner	<i>r</i>	-.344**	.139	-.061	a.	a.	1.000	-.342**	-.213**	-.172*
	<i>p</i>	.000	.256	.463	a.	a.	a.	.000	.009	.036
	<i>N</i>	149	69	149	149	149	149	138	148	148
Frequency of Incorrect use of condom with Casual Partner	<i>r</i>	.340**	-.037	.053	-.091	.041	-.342*	1.000	.155	.132
	<i>p</i>	.000	.768	.520	.269	.628	.000	a.	.059	.108
	<i>N</i>	151	68	151	151	144	138	151	149	149
Condom use at last Sexual Intercourse with primary/ Regular sex Partner	<i>r</i>	.224**	.070	.074	.026	.102	-.213**	.155	1.000	.090
	<i>p</i>	.000	.390	.218	.668	.193	.009	.059	a.	.146
	<i>N</i>	276	153	276	276	166	148	149	276	264
Condom use at last Sexual Intercourse with casual sex Partner	<i>r</i>	.076	-.163*	.163**	.359**	.171*	-.172*	.132	.090	1.000
	<i>p</i>	.218	.050	.008	.000	.029	.036	.108	.146	a.
	<i>N</i>	265	145	265	265	164	148	149	264	265

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

a Cannot be computed because at least one of the variables is constant.

r. Pearson Correlation, P. Sig. (2-tailed). N. Number of participants

Declaration

"I here by declared that this thesis is my original work. It has not been presented for a degree in any other University and that all source of materials used for the thesis have been duly acknowledged."

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This Thesis Has Been Submitted for Examination with My Approval as a University Advisor.

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