ASSESSMENT OF HIV/AIDS RISK BEHAVIOR DIFFERENCE BETWEEN OUT OF SCHOOL ANTI-AIDS CLUB MEMBERS AND NON-CLUB MEMBER YOUTHS, JIMMA AND AGARO TOWNS, SOUTH WEST ETHIOPIA.

BY

MESERET YAZACHEW, MD.

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTERS OF PUBLIC HEALTH

APRIL 2003
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Assessment of HIV/AIDS risk behavior difference between anti-AIDS club members and non-member youths

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DECLARATION

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in this or another university and that all sources of materials used for this thesis have been fully acknowledged.

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This thesis work has been submitted for examination with my approval as university advisor.

Dr. Ahmed Ali (BSc, MPH, PhD) _____
Advisor's name Signature

Dedication

In memory of my beloved sisters Alemitu Deressa and Chuche Kibi whose untimely loss to death was a painful experience for me.

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LIST OF ABBREVIATIONS

AIDS	Acquired Immuno-deficiency Syndrome
BSS	Behavioral Surveillance Survey
CI	Confidence Interval
DHS	Demographic and Health Survey
FGAE	Family Guidance Association of Ethiopia
FGD	Focus Group Discussion
HAPCO	HIV/AIDS Prevention and Control Office
HIV	Human Immunodeficiency Virus
IEC	Information Education and Communication
IPPF	International Planned Parenthood Federation
KAP	Knowledge, Attitude and Practice
MOH	Ministry of Health
NGO	Non-Governmental Organization
OR	Odds Ratio
PSI	Population Service International
SD	Standard Deviation
SMASH	Social Marketing for Adolescent Sexual Health
SSA	Sub-Saharan Africa
STDs	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
TV	Television
TWG	Technical Working Group
UNAIDS	United Nations Programs on HIV/AIDS
UNECA	United Nations Economic Commission for Africa
UNFPA	United Nations Fund for Population Agency
UNICEF	United Nations Children's Fund
VCT	Voluntary Counseling and Testing
WHO	Word Health Organization
X^2	Chi-Squire
X^2_C	Yates Corrected Chi-Squire
X^2_{MH}	Mantel Haenszel Summary Chi-Squire

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ABSTRACT

Sexual risk behaviors remained one of the most important tools for assessing the trend of HIV/AIDS epidemic in SSA regions. Further more, they are the major indicators utilized in several evaluative studies for the effectiveness of HIV/AIDS intervention programs, essentially targeting young people. The present study had an objective of assessing the difference in the sexual risk behaviors for HIV infection between out of school anti-AIDS club members and non-member youths in Jimma and Agaro Towns from January to February 2003. Quasi-experimental design in which proportions of major risk behaviors for HIV infection among randomly selected sample of anti-AIDS club member youths of Jimma town compared with a similar sample of non-club member youths in Agaro Town was employed. A pre-tested interviewer administered questionnaire was used to collect data. FGDs were also conducted in the two groups to complement the quantitative findings. The study participants were categorized into four homogenous strata based on their sex and age.

Among the study participants, about one third of the club members and a quarter of non-club members admitted to have practiced sexual activity with the mean age at sexual debut of 16.8(61.9) and 16.8(62.1), respectively. Of the sexually active respondents, 30.3% of club members and 16.4% of the non-club members reported to have had two or more non-commercial sexual partners in the last one year, while only 46% and 39.3%, respectively used condom consistently. The differences were not statistically significant in both cases. Club members were found to have better scope of knowledge and attitude and more proportions perceive them themselves to be at risk of

HIV infection compared to the non-club members. Both quantitative and qualitative design identified the presence of major misconceptions pertaining to HIV transmission and the role of condom among the non-club member comparison groups.

Adolescents and in-school youth were more likely to limit self to a single partner than the older groups. On the other hand alcohol and khat consumption were shown to have a potentiating effect for risky sexual practice.

From this study it was concluded that youths organized under anti-AIDS clubs in Jimma town had a better off knowledge, attitude and perception pertaining to HIV/AIDS, while risk practice remained uniform with that of un-intervened group. Thus, more intensified, and comprehensive approach with adequate policy and social support from relevant sectors is highly recommended.

1. INTRODUCTION

The spectre of the human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) epidemic has, over the last two decades, grown from a localized health concern to a global issue that now looms large in national and international agendas. The disease is usually seen as a medical issue with prevention, treatment and care as the main defensive weapons. Such remedies, however, cannot be successful by themselves without addressing the changes in behavior that must be achieved, if AIDS is to be defeated [1].

HIV/AIDS has become one of the most devastating epidemics in human history. It marks a severe development crisis in Sub-Saharan Africa, which remains by far the worst affected region in the world [2]. According to the recent joint United Nations Program on HIV/AIDS and WHO report, there are about 42 million people living with HIV world wide, 29.4 million of which are in sub-Saharan Africa [3]. In this region, 10 million young people (aged 15-24) and almost 3 million children under 15 are living with the virus.

The HIV/AIDS pandemic in Africa poses extra ordinary leadership challenges. The level of death and dislocation threatened by the pandemic is worse than any natural disaster or war that Africa has faced for a century if not longer [4]. Some have said that the level of mobilization required is equivalent to that needed to fight a war of national liberation.

AIDS poses one of the most serous threats to the health and well being of young people in Sub-Saharan Africa. Globally, more than half of new HIV cases occur among young women and men aged 15 to 24 years. In Africa, an estimated 1.7 million young people aged 10 to 24 are infected annually [5].

The highest prevalence of HIV in Ethiopia is also observed in the age groups 15 to 24; indicating recent infection still widely going on [6]. The same report indicated that, as in other SSA, the route of transmission in Ethiopia is heterosexual. Further, other sexually transmitted diseases and having multiple sexual partners are the two most important factors promoting the transmission of HIV [6].

Generally, young people today are at high risk of unintended pregnancies and STIs, including HIV/AIDS, since they are sexually active at younger ages than previous generations or delay in marriage until they are older, and do not use condoms regularly enough to ensure protection. In many countries a significant proportion of young people start sexual activity before the age of 15 [2,7]. As a group they tend to be uninformed or misinformed about sexuality and reproductive health and are reluctant to take action to protect themselves. Recent review of a series of National Demographic and Health Surveys of 39 African, Asian and Latin American countries has revealed that in over half of the countries, at least 90% of the female population have heard of AIDS, and in more than three fourths of the countries, at least 90% of the male population have heard of the disease [1]. In all countries surveyed a large majority of men, ranging from 60 to 90%, reported that they had changed their behavior to avoid AIDS. In contrast, in only

half the countries have a majority of female respondents made a behavioral change. The 2000 DHS Ethiopia has shown that 85% of women reported to have heard about HIV/AIDS but only 13% of them were using condoms [8]. Several other KAP studies on HIV/AIDS/STDs in Ethiopia have revealed such a marked discrepancy between knowledge and high-risk behavior scores [9-11].

Since no vaccine or cure is available for AIDS the only feasible mechanism for prevention and control of HIV/AIDS is intensifying Information Education and Communication strategies for behavior change, particularly targeting the young people [12]. Achievement in behavioral change requires locally appropriate, targeted information, training in negotiation and decision making skills, social and legal support for safer behaviors, access to the means of prevention (e.g. Condoms and clean needles) and motivation to change behavior [2].

Relatively few interventions to prevent sexually transmitted diseases among adolescents have been carefully evaluated so far. However, those programs that are proved to be effective in changing behavior have common feature of comprehensive approach whereby mass media, interpersonal communication as well as provision of products and health services incorporated [13].

Despite the widespread prevention and control programs against HIV/AIDS using various approaches, initiated by different organizations and groups, evaluative researches on the effectiveness of these programs are rarely done in Ethiopia.

UNAIDS-Ethiopia Technical working group (TWG), after assessing the national response to HIV/AIDS epidemic in 1997, has recommended that the MOH should facilitate and coordinate the involvement of all actors at all levels in the country to develop research informed and pre-tested IEC interventions directed at the general public and those targeted at specific groups such as youth and groups of individuals known to practice high risk behaviors; adequate plans for their evaluation must be provided in order to yield information on what works best [14]. The 2002 global report on HIV/AIDS epidemic also underscored that prevention efforts must be tailored to developments in the epidemic, on the research front, and to evaluations that confirm success or failure.

This study therefore, aims at assessing the presence of significant difference in the sexual behavior and attitudes about HIV/AIDS between members of out of school anti-AIDS clubs youths and those of non-club members in Jimma and Agaro towns of Jimma Zone, Oromiya Regional State. As part of the evaluation components, knowledge, perception and attitude about HIV/AIDS of the two groups have been assessed. Reported changes of their behavior were also identified and proportions for the two groups have been compared. It is hoped that the out-come of this study would shade some light as to the effectiveness of organizing anti-AIDS clubs as one of the strategies of HIV/AIDS prevention and control programs and might be used by local or regional planners for further expansion and/or strengthening the method.

2. REVIEW OF LITERATURES

2.1 Global situations and trends of HIV/AIDS

The HIV/AIDS pandemic claimed more than 3 million lives, and an estimated 5 million people acquired the human immuno-deficiency virus (HIV) in the world in the year 2002 alone. Globally, there are about 42 million people living with the virus as of end 2002, of which 70 percent are in Sub-Saharan Africa (SSA). Approximately 3.5 million new infections occurred in the region, while the epidemic claimed the lives of an estimated 2.4 million Africans in the past year [3]. The same report indicated, current projections suggest that an additional 45 million people will become infected with HIV in 126 low- and middle-income countries between 2002 and 2010, unless the world succeeds in mounting a drastically expanded, global prevention effort. Implementation of a full prevention package by 2005 could cut the number of new infections by 29 million by 2010 [3].

With in Africa, HIV infection in adults aged 15-49 years exceeds 10% in about one in four of the countries, more than 20% in 7 countries and more than 30% in four countries [15]. As of end of 2001, the adult HIV prevalence has risen higher than thought possible: Botswana (38.8%), Zimbabwe (33.7%), Swaziland (33.4%) and Lesotho (31%) [2].

Approximately, only 75,000 new HIV infections occurred in industrialized countries in 2001 [15]. Of those more than half were marginalized individuals. For example, in USA, African-Americans comprising only 13% of the population disproportionately accounted for an estimated 54% of new HIV infections in 2000. Yet, there are new, hopeful signs

that the epidemic could eventually be brought under control. Positive trends seem to be taking hold among younger people in a number of countries.

In South Africa, for pregnant women under 20, HIV prevalence rate fell to 15.4% in 2001 (down from 21% in 1998) [2]. A similar decline in HIV prevalence has also been detected among young inner city women in Addis Ababa in Ethiopia [2]. Infection levels among women aged 15-24 attending antenatal clinics dropped from 24.2% in 1995 to 15.1% in 2001. This suggests that awareness campaigns and prevention programs are bearing fruits.

In some other countries, there are evidences that have indicated the direct relationship between declining of HIV prevalence and improvement in risk behaviors and/or maintaining preventive practices. For example, two of the African countries (Uganda and capital city of Zambia) that have seen declines in HIV during the nineties, there is evidence for a reduction in multiple partnerships, increase in age of sexual debut, and greater use of condoms with non-regular partners (non-marital/non-cohabiting) [2,15]. Despite some success stories, the global response remains severely under-funded, limited in scale and scope, fragmented, and of varying quality and effectiveness.

2.2 The Ethiopian Situation

According to the latest MOH report, the adult HIV prevalence in Ethiopia is 6.6 percent, which is lower than the 2000 report (7.3%) [6]. The report noted that this change in national HIV prevalence does not imply that the HIV epidemic in Ethiopia is declining. The current estimate is a combination of possible stabilization of the epidemic, a result of more extensive surveillance data and the reclassification of rural-urban sites. The number of persons living with HIV/AIDS in 2001 is estimated at 2.2 million (2million adults and 0.2 million children), with the highest prevalence in the age group 15 to 24 years [6]. The higher prevalence among the youth implies that more infections are occurring recently and therefore the epidemic is on the increase.

During the earlier evidence of HIV infection in Ethiopia, the major mode of transmission was assumed to be through the re-use of inadequately sterilized hypodermic needles [16]. However, the current understanding underpins the heterosexual contact to be the major route of transmission in Ethiopia as well as other Sub-Saharan countries [2,6,17,18]. The major risk factor, therefore, is mainly having multiple partner sexual contact [6,12].

The 2002 MOH report further indicated that, about 91 percent of infections occur among adults between 15 and 49 years. Given that the age range encompasses the most economically productive segment of the population, the epidemic impacts negatively on labor productivity. It is also a period of life when investments in education are just beginning to pay off. On the other hand, children between the ages of five and 14 represent few cases of AIDS ("Window of hope"), giving an opportunity for intensive

and targeted intervention programs, before they become sexually active to protect them from acquiring the virus. By doing so, the continued high rate of infection among the youth would possibly be reversed.

With the current pace, estimates and projections have indicated that the prevalence rate would continue to increase until 2004 after which it is expected to level off at a rate of 7 percent [6]. Because of AIDS, the life expectancy will be 50 years instead of the expected 59 years in 2014.

In response to the first evidence of HIV/AIDS, continued progression to the present status and the future predictions, the Government of Ethiopia has taken various measures in an attempt to control the epidemic. It established a National Task Force in 1985 and National AIDS Control Program at a departmental level under the MOH in 1987 to assist effective coordination of prevention and control of HIV infection [12,17]. A surveillance system on AIDS cases was also introduced in 1989 that markedly improved the quality of data generated from regions [18]. The government also launched a National Policy on HIV/AIDS in 1998 [17]. The policy is designed to guide the implementation of successful programs to prevent the spread of HIV and ADIS, to care for those with AIDS and to reduce the adverse socio-economic consequences of the epidemic [19].

Very recently, the Behavioral Surveillance Survey (BSS), one of the tools for the second-generation surveillance, was introduced in Ethiopia in 2001 to complement the

extensive sero prevalence and HIV surveillance systems instituted nationally and for the validation of the systems one another. In addition, an HIV/AIDS Prevention and Control Office (HAPCO) is established to mobilize multi-sectoral and grass root efforts in the fight against the HIV/AIDS epidemic.

All these efforts have started paying off, as there are evidences of gaining success in acquiring knowledge by the general community [8,11,20-21]. There is also evidence that HIV prevalence in Addis Ababa appears to be leveling off and may even improve further if prevention and control efforts are sustained (peak of prevalence in 1995, 21.2%, declined to 15.6% end 2001) [6]. Infection levels among women aged 15-24 attending antenatal clinics dropped from 24.2% in 1995 to 15.1 in 2001 [3].

2.3 Young people and risk behaviors for HIV/AIDS

The need for adolescent health service no longer requires justification. More than half of the world's population is below 25 years with four out of five young people living in developing countries [22]. Ethiopia is also a country characterized by a young population. According to Ministry of Health (MOH) report, young people aged 10-24 constitute more than a third of the total population, roughly 21 million [23].

Apart from the shear number, the life style of young people usually involves greater risk taking behavior than those younger children and adults. Adolescence is an important and developmentally complex period of life when many forms of experimentation occur. Adolescents experiment and challenge and their physical, mental and social development allow them to take risks. Sexual experimentation, substance use and

abuse and the tendency to indulge in dangerous sport and other activities reflect the incredible energy of adolescents [24].

Changing conditions are bringing about changes in behavior and countries have recognized that behavior formed in the second decade of life has lasting implications for individuals and public health [22].

Children and adolescents are often considered to be especially vulnerable to a wide range of sexual and reproductive health problems including HIV/AIDS [22, 24,]. Of the estimated 333 million new STDs that occur in the world every year, at least 111 million (a third) occur in young people under 25 [1].

Many interrelated and complex factors, such as poor education, unemployment and poverty, put adolescents in developing countries at higher risk of acquiring STDs including HIV/ADIS [25]. Ethiopia is not an exception to such a grim situation. Poor access to education, health services and job security are among the major problems that youth in Ethiopia face. According to the National Ministry of Labor and Social Affairs, 87% of all registered job seekers are between the ages of 15 and 29 years [26]. Joblessness has many implications. Ethiopian youth, especially in urban areas, are under great economic stress leading to hopelessness, occasional depression, self-hatred, and involvement in activities that are anti-social [24].

All these hostile conditions would inevitably lead the youth to risky sexual behavior, substance use and abuse and other frustration-induced misbehaviors.

As reported by Romaniuk, [27] sexuality is an area that has long attracted researchers because of the identified relationships between sexual behaviors and certain reproductive health problems. In sub-Saharan Africa, the first studies on sexual behavior were conducted to determine the causes of wide spread infertility and sterility. They found out that the causes were STDs, which after the beginning of the AIDS epidemic in the early 1980s also found to increase the probability of sexual transmission of HIV.

Among several sexual behaviors, early sexual activity poses major health risks for young women and men [5]. Most adolescents, when entering into sexual relations for the first time, do not use any form of protection. This leaves them vulnerable to unplanned parenthood and STIs. Adolescent women who have sex at a very early age are more biologically susceptible to a number of STIs, including HIV/AIDS, than adult men [5].

Several studies in Africa have shown that early sexual initiation among adolescents is a common practice. One study conducted in 1995 in Cameroon revealed that 3 in 10 and 2 in 10 males and females, respectively already had sex by age 14, the corresponding mean age at sexual debut being 15.6 Vs 15.8 [27]. Another study carried out in 1995 on sexual behavior among youths in Guinea reported the average age at first intercourse to be 16.3 years for young women and 15.6 for young men [28].

Review of Demographic and Health Surveys, 1994-1998, among 11 sub-Saharan African countries* by the population Reference Bureau has indicated that, in six from the 11 countries, nearly one-fifth of young women first had sexual intercourse before age 15. The percentage of young men who first engaged in sex before age 15 ranges from 4 percent in Ghana to 39 percent in Zambia [5].

Apart from early sexual commencement, unsafe sexual practices such as having multiple sexual partners and non-use of condoms with casual partners are also important risky behaviors exposing the youth to HIV/AIDS. Sexual behavior study in Guinea indicated that, of the sexually active respondents, only 29% have used a condom [28]. Similar study in Zambia (1997) revealed that most of the adolescents (87%, average age of 17) are sexually active, while only less than half, 47% have ever used condom [29]. The same study reported, about 17% of male and female adolescents had two or more sex partners simultaneously.

In Ethiopia, Traditional practices and poor living conditions often lead young people to engage in sex at an early age. According to Godindasamy P. Kidanu A. and Bantayerga H., the median age at which women aged 25-49 first had sexual intercourse is 16 [26]. Three in ten women in this age group have had sex by age 15, two in three by age 18, and more than 80 percent by age 20. However, the 2000 Ethiopia DHS data show that the median age at sexual debut has increased from 15.7 years among women age 45-49 to 18.1 years among women age 20-24 [8]. Several other discrete studies in Ethiopia

* Cote d'Ivoire, Ghana, Kenya, Madagascar, Mali, Mozambique, Senegal, Tanzania, Uganda, Zambia and Zimbabwe

among youths in towns and high schools have found a mean age of first sexual commencement ranging between 15.3 and 17.2 years. Generally, males are reported to have started sexual activity earlier than females [10,11,21,30-31].

The earlier commencement of sexual activity by the males might not be the reality because of so many reasons. The case may be that most girls perhaps do not normally admit pre-marital sexual practices for cultural reasons. Though the mean age at sexual debuts are usually above 15 years in Ethiopia, Some studies have reported unacceptably low ages. Fekadu and Gebre reported sexual initiation as early as 11 and 12 years, respectively [9,30].

A number of Sexual behavior studies conducted in Ethiopia in the years between 1990 and 2001 among various youth groups including out-of-school, high school and College students have reported several other risky sexual practices. Those studies found out that of the sexually active respondents, the percentage of youths who have had contact with multiple sexual partners ranged between 22% (College students) and 53% (high school students) [10,21,30,31,32-33]. Likewise, the percentage of young people who never used or inconsistently used condom varies from 33% to as high as 77%. On the contrary, almost all studies reported that the knowledge of the respondents about HIV/AIDS was very high. The researchers recommended the intensification of targeted IEC using various strategies including the incorporation of sex education in educational curricula to narrow the knowledge score and actual behavior gap to achieve interruption of HIV transmission.

2.4 Evaluation of Intervention Programs for behavior change among youth

The future course of the AIDS epidemic depends on the efforts mounted today to prevent HIV infection among young people [2,13]. According to the 2002 UNAIDS global HIV/AIDS epidemic report, one of the basic strategies of helping young people protect themselves from acquiring HIV/AIDS is through provision of HIV/STI prevention, sexual and reproductive health and life-skills education and information to them, whether they are in school or not.

The challenging question is that: what kind of intervention approach would help achieve the intended goals? What study designs and out-come indicators best address the rigor of the effectiveness evaluation?

Although many questions remain about what works best in effective provision of information, it is clear that efforts should be made to exploit the various ways of reaching young people, especially by involving them directly. Using large-scale media approaches to disseminate important health information that can be imparted through interpersonal means is important in maximizing the chances of reaching young people [22]. Besides, the success stories of Cambodia, Senegal, Thailand, Uganda and urban Zambia, as well as those of a number of high-income countries, show that comprehensive prevention approaches are effective. Experiences show that knowledge alone is not enough to achieve behavioral change [2]. It requires locally appropriate, targeted information, training negotiating and decision making skills, social and legal support for safer behavior, access to the means of prevention (e.g., condoms or clean needles) and motivation to change behavior. Further, to effectively produce and sustain

behavioral change, on a national scale, focused prevention programs will involve multiple components developed with the close input of each targeted population to address the specific needs of vulnerable groups and the many factors influencing behavioral change.

Based on the above general principles, only few institutions/organizations all over the world have tried to implement a targeted, participatory and comprehensive intervention programs and assessed the impact using a credible evaluation research design and valid out-come measures [34]. The same paper indicated that program effectiveness/Impact (often used interchangeably with regard to evaluation research) refers to "whether and to what extent a Program causes changes in the desired direction among target population".

In terms of the research design, the "true" experimental design where the intended audience is randomly assigned to either the intervention group or the control group is often thought of as the most rigorous as it eliminates confounders, while for HIV related out come measure, HIV incidence is the most rigorous out-come measures because of its ability to predict the ultimate desired out come (reduction of HIV) [34].

Population Service International (PSI) is the first NGO that tried to use the above method in SSA. In 1994, PSI envisaged a research and program interventions in four African Countries (Botswana, Guinea, Cameroon and South Africa) through a project called Social Marketing for Adolescent Sexual Health (SMASH). The project targeted

the urban youths and aimed at improving adolescent understanding of sexual health issues and access to reproductive health products and services. Mass media, peer education and other promotional activities were used to provide information for a period ranging from 8 months to 13 months in the four study sites [35].

Quasi-experimental design was used to measure the effectiveness of the program whether the interventions have brought about a positive impact on the youth. The result showed that, overall, the four country programs were most successful in the improving awareness of the benefits of taking protective action - such as condom use and abstaining from sex - and in reducing barriers to using condoms. The programs had less impact on young people's perceptions about their susceptibility to reproductive health problems and on actual behavior - sexual activity and condom use.

From the result, they recommended that intervention periods of less than two to three years are not likely to bring about changes in adolescent behavior although they can improve the knowledge and attitudes that lead to behavior change. Further, they suggested that youth activities should include a carefully designed mix of mass media and interpersonal communication to achieve behavior change.

AIDS awareness campaigns under different themes through various IEC methods to reduce HIV transmission in England in the early and mid 1980s (1983/84 by and directed at, members of the gay, 1986/87 for the whole population) had major impacts in reducing indigenous homosexual transmission of HIV and heterosexual transmission of

other STIs, in the general population [36]. There was, however, evidence of substantial on going transmission of HIV among homosexual and bisexual men in the 1990s. Similarly, attendances at genitourinary medicine clinics with STDs have increased substantially since 1990. This impact assessment using time series data has strongly indicated the need for vigorous new sexual health and HIV/AIDS strategies that would help depress the resurgence of the diseases [36].

A quasi-experimental design was employed to evaluate the effectiveness of a multi-media campaign implemented for 6 months in Zimbabwe that has an intention of promoting sexual responsibility and gaining support from the community [37]. At the end of the campaign (1997/98), awareness of contraceptive methods increased significantly, but general reproductive health knowledge changed little in the campaign areas compared to comparison sites. On the other hand, there were statistically significant differences in the improvement of attitude and approval of information disseminated between the campaign and comparison sites. Young people in campaign areas were 2.5 times as likely as those in comparison sites to report saying no to sex, 4.7 times as likely to visit a health center and 14.0 times as likely to visit a youth center. This study underlined the importance of community (Significant others) support for behavior change, to ensure that young people find approval for their actions and have access to services. Unlike the other studies, there was no mention of the time factor (duration of campaign) to influence the behavior change.

Of all promotion intervention programs, peer education has been popularly accepted as an important component of most sexual health promotion programs for a wide range of audiences [38]. This is because peers in any given setting seem more convincing than outsiders, are more open to discussing sensitive issues such as sexuality and the education relies on existing human resources rather than technology or extensive use of specialists making it a relatively affordable and sustainable intervention.

In Zimbabwe, AIDS prevention project has taken an initiative to undertake a randomized trial of peer education on factory workers in Harare, HIV infection rate being the measure of the out-come [39]. Comparing the cohort in the intervention factories to those of the control revealed that the peer education factories had fewer new HIV infections than the control factories, the difference being statistically significant. From this the project concluded that peer-led health education with condom distribution and aggressive treatment of STDs should form the foundation of HIV prevention policy in developing countries.

In Ethiopia, no experimental design was utilized to evaluate effectiveness of promotional intervention programs so far. Nevertheless very recently, an assessment of prevalence, risk behavior and incidence of syphilis among a cohort of factory workers in Addis Ababa had been under taken by a group of researchers [40]. Voluntary counseling and testing for HIV-1 was offered to the enrolled cohorts that have been repeated every 6 months for a period of February 1997 to March 1999. At the end of the study, the researches have found a marked reduction in practice of risky behaviors and a low

(zero) incidence rate for syphilis. They concluded that the continuous voluntary HIV counseling and testing must have attributed to such an encouraging out-come. They added, other on going HIV prevention efforts in Ethiopia might have also contributed to the result. In their discussion they have cited the effectiveness of VCT in reducing risky sexual behaviors from the randomized trial in Kenya, Tanzania and Trinidad that have been conducted recently [41].

As it is true for other African countries, evaluation researches in general and randomized trial design in particular are rarely practiced in Ethiopia. Thus, expert groups in WHO-county office and others have underscored the necessity of evaluation of prevention strategies against HIV and other STIs in the country in order to yield information on what works best [14,40].

3. OBJECTIVES

3.1 General objective

The general objective of this study was to examine the difference in the sexual risk behavior for HIV infection between out of school anti-AIDS club member and non-member youths of Jimma and Agaro towns.

3.2 Specific objectives

- Assess knowledge, perception, attitude and actual behaviors pertaining to HIV infection and AIDS in the out of school anti-AIDS club member and non-member youth.
- Compare proportions of major risk behavior indicators and practices for HIV infection between the two groups.

4. METHODOLOGY

4.1 Study areas and period

The study was carried out in Jimma Town (intervention site) and Agaro Town (comparison site), both found in Oromiya Regional State, south west Ethiopia. The data collection processes took two months, January and February 2003. Jimma Town, located at 335 kms south west of Addis Ababa, is the capital of Jimma Zone, which is one of the twelve Zones of the Oromiya Regional State. It is one of the major urban centers of the region as well as the country with the projected total population of 119,018 of which 50.6% are females [42]. According to the National Housing and Population Census of 1994, the proportion of youth (15-24 years) in the town constituted about 24.4% of the total residents. The same source indicated that, the estimate of total fertility rate for the urban Oromiya population was calculated at 3.5 [43].

Administratively, Jimma Town is divided in to three woredas (higher) and 21 urban dwellers associations (kebeles). Concerning major infrastructures and social facilities, about 75% of the total population has access to piped water supply; there is a 24 hours hydroelectric power supply, good land and air transportation services and modern digital microwave telephone system. Other communication facilities available for the town include radio, television and government and private newspapers. In the town there are one referral teaching hospital, one primary health care unit and one MCH clinic both of which are also used as field attachments for health professions students of Jimma University. In addition, there are two higher and five medium clinics and 10 retailing pharmacies owned privately.

Like any other parts of the country, communicable diseases, including STIs / HIV AIDS, are the major health problems. The fact that Jimma Zone is one of the main cash crop (coffee) producers, there is a very high influx of sexually active population from different corners of the country, putting this urban center at risk of the spread of HIV/ AIDS. Besides, it is an important trade center and a transit for the passengers from the whole southwestern part of the country traveling to and from Addis Ababa. All of these are potential risk and facilitate the steady increase of the prevalence of HIV/ AIDS, reported from the local health offices.

Out of school anti-AIDS clubs were organized in eleven kebeles of Woreda 1and 2 in Jimma Town between January 2000 and March 2001 through the assistance of Family Guidance Association of Ethiopia, South West Branch. At the initial stage, overall, about 1254 youths were enrolled as members ranging from 73 to 141 in each kebele. With time, however, some withdrew and some being new entrants, at the time of the study only 819 (419males and 400females) eligible members were actively participating in the club activities.

Agaro, the other study site, is located at 45 kms west of Jimma Town. It is on the high way that stretches from Addis to Gambella Town. It has similar social and economic back ground with that of Jimma Town. It is the capital of Gomma woreda, one of the largest coffee producing woredas in the zone. It has an estimated population of 50,000 and administratively sub divided in to five urban dwellers associations. There are one primary health care unit, one clinic and a couple of private clinics. It has also one senior

and two joiner high schools. There is only one functioning anti AIDS club organized by self-initiated youths and supported by local NGOS.

4.2 A brief description of intervention project

As part of prevention and control efforts of HIV/AIDS epidemics, youth centered intervention program has been set out by the Family Guidance Association of Ethiopia (FGAE) Jimma Branch, in woredas (higher) 1 and 2 of Jimma Town since January 2000. Actual implementation of each of the envisaged components of intervention program began in March 2001.The project is named Youth Driven Initiative on HIV/AIDS/ STIs prevention and funded by European Union – IPPF through FGAE of Ethiopia. It had an objective of reducing the incidence of HIV/AIDS/STIs amongst young people through promotion of behavior change and increasing accessibility and utilization of information and health care services. The program is run with full participation of the youths starting from its planning, implementation and monitoring of the activities. At the initial stage, various functional structures established that include central youth group under which entertainment, IEC, and health care services sub clubs formed. Anti AIDS clubs were established at each of 11 kebeles of the two woredas, the members of which run the activities. To complement youth efforts, project steering committee and kebele support committees were established to ensure involvement of families [44]. The main project components include:

a) EDUCATION

Club members share information amongst themselves through peer educators and disseminate to other youths through shows, poem, music etc. Launch events are also organized on AIDS days and other public events such as sport festivals. Information on HIV/AIDS are also conveyed though specific training. Among the prominent ones is puppetry training for 29 youths for a period of one month and assertiveness training for 40 girls for five days in a single round.

b) ADIVOCACY

This targets parliamentarians, local community leaders, parents and village community members. According to the annual report, workshop has been conducted in a year.

c) DISTRIBUTION OF PRODUCTS

The project staffs and member of anti AIDS clubs produce readable materials and distribute them to the general youth. The clubs distribute also condoms at each kebele youth office.

d) STIs TREATMENT SERVICES

Skilled staffs and youth members provide this service at the branch office.

4.3 Study design

4.3.1 Quantitative

The study applied a quasi-experimental design in which the behavior difference between the intervened (club members) and comparison (non-club members) groups examined based on self-reported actions.

4.3.2 Qualitative

Focus group discussion was designed to triangulate responses on some of the major knowledge, attitude, and practice of risk or preventive behaviors by the study subjects. Among the major variables thought to affect the harmony of the discussion, sex and age were taken as categorizing criteria. Accordingly, four focus groups were formed for each of the study sites, that is, male aged 15 - 19 and 20 – 24years, and female of similar

age groups. All of the participants reported to have attained a minimum of grade nine. Each of the group consisted of 6 to 8 members as recommended by WHO [45].

4.4 Study population and sampling

4.4.1. Population

The source population for the study was all youths in the two towns, while the study population included randomly selected members of out of school anti-AIDS club youths residing in woreda 1 and 2 of Jimma Town and non-club members in kebele 1 and 3 of Agaro Town.

4.4.2 Sample size determination

The sample size for the quantitative survey was determined using a formula for comparison of two population proportions. Ninety percent power and 95% precision to approximate an acceptable population parameter was taken. Number of non-regular sexual partners, which is assumed to be the most important risk factor in Ethiopia, is taken as a high risk behavior indicator. Since no study was conducted recently in Jimma and Agaro towns revealing this proportion, the finding of a recent study carried out in a similar town in the southern part of the country was taken to represent the comparison group. This study has found out that 36% of the youths admitted to have multiple sexual partners in the preceding 6 months [10]. Assuming at least a 10% reduction in the risk behavior among the intervened group, 26% was taken for the anti AIDS club members.

Further, considering a 1:1 ratio for the two groups and 20% allowance for missing or non-response rate, the minimum sample size was calculated to be 560 for each group using the formula:

$$n = \left[\frac{Z_{\alpha/2}\sqrt{(1+1/r)p(1-p)} + Z_{\beta}\sqrt{p_1(1-p_1)+[P_2(1-P_2)]/r}}{(P_1-P_2)^2} \right]^2$$

Where, P (pooled proportion) $= \frac{P_1+rP_2}{1+r}$

n_1 = study population of the comparison group

n_2 = study population of the intervened group

P_1 = proportion of risk behavior in the comparison group, 36%

P_2 = proportion of risk behavior in the intervened group, 26%

$r = n_2/n_1=1$

$Z_{\propto/2}$ = value of the standard normal distribution corresponding to a significance level of 5%, 1.96.

Z_{β} = one-sided value of the standard normal distribution corresponding to a power of 90%, 1.28.

4.4.3 Sampling technique

For the club members, first list of youths who were active members for at least one year was prepared from the registration book of each kebele and used as a sampling frame. The members were listed in an ascending order. Following this a random numbers list of 560 sets was generated using the EPI info version 6.01 statistical package. The name of youths corresponding to the selected random numbers was included in the

study. Two of the four kebeles of Agaro Town, which don't have an out of school anti AIDS club, were selected using lottery method. From the two kebeles, the representative sample of comparison group was selected. The study subjects from the identified kebeles were recruited using probability proportionate to the number of households, which corresponds to the study unit. Using systematic random sampling, every third of the pre-numbered doors were selected and approached accordingly until the representative sample size was obtained.

For the qualitative design non-probabilistic stratified sampling technique was used to obtain homogenous strata for specific categories. Interviewers of the quantitative survey were used to identify eligible discussants from the respective kebeles for the comparison, and youth leaders for the club members.

4.5 Questionnaire development and data collection

4.5.1 Questionnaire development

For the quantitative survey, structured questionnaire to be administered through trained interviewers was prepared in English. Most of the questions were adapted from the standard questionnaire developed by Family Health International for BSS conducted in Ethiopia two years back. The final version of the English questionnaire, consisting of eight parts, translated in to Amharic (widely spoken language) by a person who is pretty capable of both languages. This was back translated in to English to keep its consistency. Peer review as well as pre-test at the field was carried out following which significant modifications as to sequencing of the questions, re-wording of some ambiguous terms, and correction of skip patterns were made. The pre-test was

conducted among a total of 50 (24 females and 26 males) non-randomly selected youths residing in woreda 3 kebele 7 of Jimma Town using similar sex interviewers. The respondents had some difficulty in understanding few questions related to sexual activity as sequencing and skip pattern was a bit complex. The average time taken to finish a questionnaire was 37.5minutes (32-57minutes).

For the qualitative study, a semi structured FGD guide having six sections was prepared. This helped sequencing of the discussion points as well as maintaining uniformity between the categories.

4.5.2 Data collection

a) Quantitative

Male and female twelve grade completed interviewers who had previous experience were recruited and extensive training given for three consecutive days. The structured questionnaire was discussed in detail going through every question and clarification given on each doubt. Practical exercise was made through peer interview. Supervisors, minimum of diploma holder, were also recruited from Jimma University, Jimma Zonal Health Department and Agaro Health Center. Data collectors and supervisors were oriented on the objective of the study and their specific responsibly. Following that, data on socio-demography, knowledge, attitude and perception about HIV/AIDS, risk or preventive behaviors and actions taken as a result of intervention programs were collected from the study subjects. For the club members, this was done at the respective youth centers in the eleven kebeles, while homestead used for non-club members. Supervisors were around every day to control as well as support data

collectors. Visual check was regularly done as much as possible on each questionnaire every day and necessary feedbacks offered to the interviewers in the next morning. Random counter check was also made by the supervisors to insure reliability of data collected. Wherever two eligible respondents were identified during door-to-door visit at the comparison site, one of the respondents was selected by lottery method for interview. Missing respondents, mostly males, were traced at current address or revisit paid on the next day.

b) Qualitative

Experienced BSc nurse (female) and health officer (male) moderators with their respective note takers were identified. A two-day orientation and practical exercise carried out at Jimma University. Group discussion with club members was conducted in a quiet kebele hall, while that of the non-club members conducted in high school classrooms as it was done on the weekends. Every discussion was tape recorded not to miss all issues discussed and finally transcribed.

4.6 Data entry and analysis

Data were coded using woreda and house numbers as an identity for each questionnaire. Then they were entered, cleaned, and analyzed using SPSS version 11.0. Frequencies, proportions, and summary statistics (mean, standard deviation and range) were used to describe the study population in relation to relevant variables. The chi square test was used to measure differences in proportions of indicator variables between the two study groups. Odds ratios were used to measure strength of

associations for some variables and 95%CI and P values were used to indicate level of significance.

Logistic regression analysis was also employed to see the effect of selected independent variables, including club membership, on the practice of two important out come variables – monogamy and consistent use of condom.

4.7 Ethical consideration

Ethical clearance for the study proposal was obtained from the Research and Publication Committees of the Department of Community Health and Faculty of Medicine of the Addis Ababa University. In addition, written consent was secured from Oromiya Health Bureau, Jimma Zonal Health Department and Gomma Woreda Health Office. The survey was totally anonymous and a letter about the objective, the benefit of study, method of questioning and time it would take as well as confidentiality was attached to the cover page of the questionnaire. Before administering the interview this letter was read for each interviewee and informed consent was obtained.

4.8 Operational definitions

Youths: WHO definition of 15 to 24years population sub groups.

Adolescent: population sub groups between the ages of 15-19years

Out of school anti AIDS club: clubs organized at community level in which both in and out of school youths are members.

Club members: those youths registered in the out of school anti-AIDS club and actively involved for at least one year.

Non-club members: youths who have never been registered and became active member of any anti-AIDS club.

Commercial sexual partner: any sexual relation that involves exchange of money.

Non-commercial sexual partner: sexual relation between non-marriage, non-cohabiting, couples that involves no payment.

STDs: sexually transmitted diseases other than HIV/AIDS.

Risk behaviors for HIV/AIDS: includes past history of having more than one partner, contact with commercial partners, history of STDs, early commencement of sexual activity and non use or inconsistent use of condoms.

5. RESULTS

5.1 Socio-demographic characteristics of the study subjects.

Of the targeted 560 samples for each study groups, 100% response was obtained for the club members, while the response rate for non-club members was 97.3%, making 545 participants to which the interview administered.

As far as the composition of the two study groups is concerned, sex, age and current schooling status (in-school & out of school) is evenly distributed with no statistically significant difference. However, there was statistically significant difference in the distribution of subjects in the two groups with respect to educational level, religion and ethnicity (Table 1). The majority of respondents, in both club members and non-club members (80.5% Vs 82.1%, respectively), have joined or completed high school. Concerning religion, the majority of club members, 346(63%) were Christian orthodox followed by Muslim, 153(27.8%), while the reverse was true for non-club members, 325(60.1%) & 185(34.2%), respectively.

Oromo & ethnic groups from Southern Nation & Nationalities predominate in the club members, while Oromo & the Gurage ethnic groups represented more in the non-club member group in the same order.

Table 1 Percentage distribution of general characteristics of respondents by study sites, Jimma and Agaro Towns, 2003.

Characteristics	Club members n=550(%)	Non-club members n=541(%)	X^2	P-value
Sex				
Male	300(54.5)	296(54.7)	0	0.99
Female	250(45.5)	245(45.3)		
Age				
15 – 19	398(72.4)	401(74.1)	0.35	0.55
20 –24	152(27.6)	140(25.9)		
Mean age (±SD) Total	18.1(±2.3)	17.9(±2.4)		
Male	18.5(±2.4)	18.4(±2.5)		
Female	17.7(±2.2)	17.1(±2.2)		
Schooling Status				
In – school	316(57.5)	330(61)	1.6	0.205
Out of school	234(42.5)	211(39)		
Educational Status				
None	3(0.5)	8(1.5)	35.8	<0.0001
Primary	36(6.5)	67(12.4)		
Secondary	442(80.5)	444(82.1)		
12 +	69(12.5)	22(9.0)		
Religion				
Muslim	153(27.8)	325(60.1)	118.9	<0.0001
Christian Orthodox	346(63)	185(34.2)		
Christian Protestant	47(8.5)	24(4.4)		
Other	4(0.7)	7(1.3)		
Ethnicity				
Oromo	205(37.3)	252(46.6)	36.6	<0.0001
Amhara	130(23.6)	84(15.5)		
Gurage	76(13.8)	119(22.0)		
Other	139 (25.3)	86 (15.9)		

5.2 Sexual characteristics of the study population

5.2.1 Sexual History

In this study, it was found out that more than one third of the club members, 188(34.2%) & about a quarter of the non-club members, 131(24.2) reported to have practiced sexual activity in the past; the difference is statistically highly significant at P<0.001. Such difference is also observed considering sex within the respective study groups. About 2.36 times males than females gave history of sexual activity among the club members (95%CI, 1.6,3.47,), while it is 3.52 times (95%CI, 2.2,5.65) higher among the non-club members.

The majority of both study subjects, 163(86.7%) Vs 105(80.2) experienced the first sexual act in the adolescent age range (15-19years), the mean age at sexual debut for club members and non-club members, respectively being 16.8(±1.9) & 16.8(±2.1). The mean age of sexual commencement for males & females with in the respective study groups are also almost similar, 16.9 (±1.8) Vs 16.6(±2.2), respectively for club members and 16.9(±2.1) Vs 17.2 (±1.8) for non-club members (Tables 2-4).

Table 2 Percentage distributions of Sexual Characteristics by sex among club members, Jimma Town, 2003.

Characteristics	Male n (%)	Female n (%)	OR (95%CI)
Ever Practice Sex			
Yes	128(42.7)	60(24)	2.36(1.6,3.47)
No	172(57.3)	190(76)	1.00
Age at first intercourse			
< 15	9(7)	6(10)	0.17(0.01,2.03)
15 – 19	110(85.9)	53(88.3)	0.23(0.01,1.86)
20 –24	9(7)	1(1.7)	1.00
Mean age	16.9(±1.8)	16.6(2.2)	
Range	10-21	11-20	
Condom use during first intercourse			
Yes	62(48.8)	21(35)	1.77(0.9,3.51)
No	65(51.2)	39(65)	1.00
Intercourse in the last one year			
Yes	71(55.9)	22(36.7)	2.19(1.11,433)
No	56(44.1)	38(63.3)	1.00
Type of partners in the past 1year			
Commercial	3(4.2)	1(4.5)	0.93(0.08,24.41)
Non - Commercial	68(95.8)	21(95.5)	1.00
No. of non-commercial partners in the past 1year			
One	46(67.6)	16(76.2)	0.65(0.18,2.24)
≥ Two	22(32.4)	5(23.8)	1.00
Condom use with commercial partner(s)			
Always	3(100)	1(100)	
Sometimes	-	-	-
Never	-	-	-
Condom use with non-commercial partner(s)			
Always	34(51.5)	6(28.6)	3.12(0.88,11.38)
Sometimes	12(18.2)	4(19.0)	1.65(0.36,7.92)
Never	20(30.3)	11(52.4)	1.00

Table 3 Percentage distributions of Sexual Characteristics by sex among non-club members, Agaro Town, 2003.

Characteristics	Male n (%)	Female n (%)	OR (95%CI)
Ever Practice Sex			
Yes	100(33.8)	31(12.7)	3.52(2.2,5.65)
No	196(66.2)	214(87.3)	1.00
Age at first intercourse			
< 15	13(13)	1(3.2)	4.33(0.30,128.42)
15 – 19	78(78)	27(87.1)	0.96(0.19,4.31)
20 –24	9(9)	3(9.6)	1.00
Mean age	16.6(2.1)	17.2(1.8)	
Range	10-22	14-23	
Condom use during first intercourse			
Yes	42(42)	16(51.6)	0.68(0.28,1.64)
No	58(58)	15(48.4)	1.00
Intercourse in the last one year			
Yes	51(51)	18(58.1)	0.75(0.31,1.82)
No	49(49)	13(41.9)	1.00
Type of partners in the past 1year			
Commercial	5(9.8)	2(11.1)	0.87(0.13,7.24)
Non - Commercial	46(90.2)	16(88.9)	1.00
No. Of non-commercial partners in the past 1 year			
One	37(82.2)	14(87.5)	0.66(0.08,4.08)
≥ Two	8(17.8)	2(12.5)	1.00
Condom use with commercial partner(s)			
Always	4(80)	1(50)	
Sometimes	1(20)	1(50)	
Never	-	-	-
Condom use with non-commercial partner(s)			
Always	21(46.7)	3(18.7)	3.27(0.61,19.43)
Sometimes	9(2.0)	6(37.5)	0.70(0.14,3.38)
Never	15(33.3)	7(43.8)	1.00

5.2.2. Sexual risk practice

Among the sexually active respondents, equal proportions (44.4% Vs 44.3%) of the two study groups reported to have used condom during their first sexual act. As indicated in table 4, only about half of the sexually active respondent (49.7% Vs 52.7%) among the club members and non-club members, respectively have admitted to get involved in sexual intercourse in the past one year. The difference is not statistically significant. However, more number of male, 71(55.9%) than female youths, 22(36.7%) among the club members (OR=2.19, & 95% CI: 1.11, 4.33) were engaged in sexual activity in the past 1 year. This difference was not observed among non-club members (Table 2& 3).

Comparison of the two groups as to the types of partners with whom they practiced sex revealed that, though statistically not significant, more proportion (10.1%) of non-club members had visited commercial sex workers than club members (4.3%). Similarly, while all club- members 4(100%), admitted to have sexual contact with commercial partners used protective measure (condom), two of the seven non-club members having similar contact didn't use condom consistently.

Table 4 Comparison of percentages of some of the HIV/AIDS risk factors between club member & non-club member study groups, Jimma and Agaro Towns, 2003.

Variables	Club Members n (%)	Non-club members n (%)	OR (95%CI)
Ever Practice Sex			
Yes	188(34.2)	131(24.2)	1.63(1.24,2.14)
No	362(65.5)	410(75.8)	1.00
Age at first intercourse			
< 15	15(8.0)	14(10.7)	1.029(0.37,4.54)
15 – 19	163(86.7)	105(80.2)	1.86(0.78,4.85)
20 –24	10(5.3)	12(9.1)	1.00
Mean age	16.8(±1.9)	16.8(±2.1)	
Range	10-24	10-23	
Condom use during first sexual intercourse			
Yes	83(44.4)	58(44.3)	1.00(0.62,1.61)
No	104(55.6)	73(55.7)	1.00
Intercourse in the last one year			
Yes	93(49.7)	69(52.7)	0.89(0.55,1.42)
No	94(50.3)	62(47.3)	1.00
Type of partners in the past 1year			
Commercial	4(4.3)	7(10.1)	0.4(0.09,1.6)
Non - Commercial	89(95.7)	62(47.3)	1.00
No. Of non-commercial partners in the past 1year			
One	62(69.7)	51(83.6)	0.45(0.18,1.09)
≥ Two	27(30.3)	10(16.4)	1.00
Condom use with the non-commercial partner(s)			
Always	40(46.0)	24(39.3)	2.08(0.64,6.83)
Sometimes	8(9.2)	5(8.2)	2.00(0.37,11.13)
Never	31(35.6)	22(36.1)	1.76(0.56,5.93)
I don't know	8(9.2)	10(16.4)	1.00
Condom use with the commercial partner(s)			
Always	4(100)	5(71.4)	
Sometimes	-	2(28.6)	
Never	-	-	

As depicted on table 4, there was no statistically significant difference between the two groups with respect to the number of sexual partners they had in the proceeding one-year. Rather, to the contrary, higher proportion (30.3%) of the sexually active club-members had more than one partners as compared to that of non-club members (16.4%). There was also no statistically significant difference, with respect to multiple sexual partnerships, between males and females of the corresponding study samples. Likewise, only 40(46.0%) of the sexually active club members and 24(39.3%) of the non-club members had reported to use condom regularly with their non-commercial partners. The differences between the two were not statistically significant, (OR=2.08,95%CI=0.64,6.83). The differences in the frequency of condom use were not statistically significant between males and females within the respective study groups, (table 2&3).

5.3 Knowledge, attitude and risk perception of study groups on matters related HIV/AIDS

5.3.1 Knowledge of sources of information, mode of transmission, preventive measures and sources of condom by the study participant

Knowledge, of study groups on matters related to HIV/AIDS was also assessed using various parameters where the respondents were asked to answer spontaneously to open-ended questions. Accordingly, significant variations were observed between club members' and non-club members' ability to mention some of the modes of transmission of HIV and the preventive measures. The differences were statistically highly significant for both variables ($X^2_{c=}$81.96, P<0.0001 & $X^2_{c=}$46.91, P<0001), respectively in the two study groups. Sexual intercourse, 548(99.6%); sharp materials, 457(83.4%); share of tooth brush, 405(73.6%); Blood transfusions, 216(39.3%); & mother to child, 210(38.2%) were the most commonly mentioned modes of transmission by the club-members, while sexual intercourse, 522(96.5%); share of tooth brush, 448(82.8%) followed by exposure to sharp materials, 300(55.5%) were the once most frequently replied by the non-club members. For the preventive measures, abstinence, 458(83.3%); monogamy, 444(80.7%) and regular condom use, 399(72.5) were mentioned by the club members and the same items in the same order but lesser

percentage (82.6%, 74.9% and 52.9%, respectively) were listed by the non-club members (Table 5). Though not high in number, mosquito bites 12(2.2%) and passionate kissing 10(1.8%) were misconceived and mentioned as routes of transmission by the non-club members.

Similarly, about 3.4 times club members than non-club members were able to cite three or more sources of information on HIV/AIDS (95%CI: 2.6,4.54). The most commonly cited source by the two groups was mass media. However, the club members mentions diverse sources such as various publications, peer educators, dramas, puppetry show and the like while the non-club members are essentially limited to news papers and schools second to mass media (radio and TV).

Table 5 Percentage distributions of knowledge of mode of transmission, source of information, and preventive measures of HIV/AIDS by the types of study groups, Jimma and Agaro Towns, 2003.

Parameters	Club members N=550(%)	Non-club members N=541(%)	X^2	P-Value
Mode of transmissions mentioned				
Sexual intercourse	548(99.6)	522(96.5)	81.96	<0.0001
Unsafe injection	457(83.1)	300(55.5)		
Blood transfusion	216(39.3)	140(25.9)		
Perinatal transmission	210(38.2)	90(16.6)		
Breast feeding	79(14.2)	86(15.9)		
Share of tooth brush	405(73.6)	448(82.8)		
Mosquito bite	6(1.1)	12(2.2)		
Passionate kissing	0(0)	10(1.8)		
Preventive measures				
Abstain from sex	458(83.3)	447(82.6)	46.91	<0.0001
Limiting partner to one	444(80.7)	405(74.9)		
Regular condom use	399(72.5)	286(52.9)		
Avoid needle sharing	171(31.1)	234(43.3)		
Avoid commercial sex	49(8.9)	48(8.9)		
Avoid pregnancy while living with HIV	33(6)	6(1.2)		
Others	42(7.6)	56(10.4)		
Source of information mentioned				
≥ 3 types	440(80)	291(53.8)	83.57	<0.0001
< 3types	110(20)	250(46.2)		

Table 6 also indicates relatively major misconception among the non-club members as to the curability of AIDS and possibility of healthy looking person to carry HIV in his/her body. But the variation between the two study groups is statistically not significant. Sixty-one (11.3%) of the non-club members claim that healthy looking persons do not carry HIV and 20(3.7%) were unable to answer altogether. Some 32(5.9%) of the non-club members argued AIDS is curable compared to 22(4%) by the club members.

The same table depict also that almost all (99.8%) of the club members knew where condom is found while some 27(5%) of the non-club members were found to be

ignorant to the where from of condoms. The differences were statistically significant (OR=28.8,95% CI: 4.18-572.7). Further, club members were able to cite diverse sources of condom including shops, 489(88.9%), family planning service centers, 467(84.9%), Youth centers, 35(63.8%) and so on, while the non-club members mainly mention shops, 514(93.2%) and pharmacy, 345(63.8%) followed by clinics, 126(23.3%) top on the list. The difference here is also statistically significant ($X^2_{c=}$749.5, P<0.0001) between the two groups.

Table 6 Percentage distribution of knowledge about HIV/AIDS & source of condom, by the types of study groups, Jimma and Agaro Towns, 2003.

Knowledge/Source	Club members N=550(%)	Non-club members N=541(%)	X^2	P-Value
Can a healthy looking person carry HIV?				
Yes	481(87.5)	460(85.0)	3.76	0.15
No	59(10.7)	61(11.3)		
I do not know	10(1.8)	20(3.7)		
Is there a cure for aids?				
Yes	22(4.0)	32(5.9)	1.74	0.18
No	526(95.6)	501(92.6)		
I do not know	2(0.4)	20(3.7)		
Do you know where you can find condom?				
Yes	599(99.8)	514(95.0)	25.68	<0.0001
No	1(00.2)	27(5.0)		
Place to get condom?				
Shops	489(88.9)	504(93.2)	749.5	<0.0001
Pharmacy	163(29.6)	345(63.8)		
F/P service center	467(84.9)	29(5.4)		
Youth center	351(63.8)	16(2.9)		
Peer educator	75(13.6)	-		
Clinics	120(21.8)	126(23.3)		
Hospitals	111(20.2)	26(4.8)		
Bars/Hotels	88(16.0)	83(15.3)		
Market places	15(2.7)	16(2.9)		
Others	31(5.6)	75(13.9)		

5.3.2 Attitudes towards HIV victims by the study groups

Taking certain parameters, attitude difference between club members and non-club member youths was also assessed in this study. In this regard, the club members were found to show a better-perceived attitude towards HIV/AIDS victims as compared to non-club members, the differences were statistically significant in all, but one.

For instance, as indicated in table 7, for the opinion asked whether people with AIDS should be legally separated from the public and whether the HIV/AIDS victims should be blamed for bringing the disease in to the community, only less than one fourth of the club members, 112(20.4%) replied an agreement while about one-third of the non-club members, 181(33.5%) showed agreement with the idea. The odds ratio indicates an inverse relationship of club members' thought and the bad attitude to wards HIV/AIDS victims (OR=0.51, 95% CI: 0.38,0.67).

In addition, club members are 4 times as likely to agree with the opinion that people with HIV/AIDS can remain productive members of the society as non-club members (95% CI: 2.08,7.90). With regard to AIDS patients' treatment and care, both groups had positive attitude with no statistically significant difference, though the proportion of club members still out-members the non-club members.

Table 7 Comparison of Attitudes Between club members and non-club members towards AIDS patients, Jimma and Agaro Towns, 2003.

Parameters		Club members n=550(%)	Non-club members n=541(%)	OR (95%CI)
People with AIDS should be legally separated from others to protect the public				
	Agree	112 (20.4)	181(33.5)	0.51(0.38,0.67)
	Disagree	438 (79.6)	360(99.5)	1.00
For most people with HIV, it is their own fault that they got the virus				
	Agree	286(52.0)	331(61.2)	0.69(0.54,0.88)
	Disagree	264(48.0)	210(38.8)	1.00
People with HIV/AIDS are blamed for bringing the disease in to the community				
	Agree	89(15.8)	158(29.2)	0.47(0.34,0.63)
	Disagree	461(84.2)	383(70.8)	1.00
People with HIV/AIDS are promiscuous				
	Agree	99(18.0)	142(26.2)	0.6(0.44,0.80)
	Disagree	451(82.0)	399(73.8)	1.00
People with HIV/AIDS can remain productive members of society				
	Agree	537(97.6)	493(96.1)	4.02(2.08,7.9)
	Disagree	13(2.4)	48(8.9)	1.00
Our society doesn't do enough to help people with HIV/AIDS		318(58.0)	239(44.2)	1.74(1.36,2.23)
	Agree	231(42.0)	302(55.8)	1.00
	Disagree			
People with AIDS deserve treatment & care				
	Agree	542(98.5)	527(97.4)	1.8(0.7,4.72)
	Disagree	8(1.5)	14(2.6)	1.00

5.3.3 Risk perception and feeling about HIV testing by the study groups

The two study groups were also assessed for their own risk perception and feeling about HIV testing. Though greater proportion (64.7% of valid respondents) of club members perceived that they are at risk or may be at risk of acquiring the disease than the non-club members (58.9%) the differences are not statically significant. As to the actions to take if they suspect that they have the virus in their body, the majority (88.5%) of the 339 valid club member respondents replied they would get tested and confirms their status while the statistically significantly lesser proportion (61%, x^2=104.18, P<0.001) of the non-club members agreed the same. About a third of the later study participants reported to fill worry and depressed if they think they are HIV positive, (Table 8). Further, this table depicts that the club members are 2.27 and 1.66 times likely to show an interest for voluntary HIV testing and counseling and to disclose the test result to others, respectively than the non-club member respondents, (p<0.001 for both variables).

Table 8 Comparison of own risk perception & matters related to HIV testing between club members and non-club members, Jimma and Agaro Towns, 2003.

Parameters	Club members N=550(%)	Non-club members N=541(%)	OR (95%CI)	X^2	P-Value
Do you think you can get AIDS?					
Yes	245(44.9)	259(47.4)		16.11	0.0003
Maybe	108(19.8)	60(11.0)			
No	193(35.3)	222(40.6)			
What would you do if you think you have HIV/AIDS					
Get tested	339(88.5)	278(61.2)		104.18	<0.0001
Worry	13(3.4)	137(30.2)			
Other	31(8.1)	39(8.6)			
Know where HIV test available					
Yes	549	524	12.5(1.85,538)		
No	1	12	1.00		
Want to get tested HIV/AIDS					
Yes	477(87)	40(74.8)	2.27(1.63,3.15)		
No	71(13)	136(25.2)	1.00		
Share the test result with anyone?					
Yes					
No	443(83.4)	380(75.2)	1.66(1.21,2.27)		
	88(16.6)	125(24.8)	1.00		

5.4 Actions taken by the study groups as a result of intervention exposures

The commonly reported actions taken as a result of various educational intervention programs by the two groups were obtained from an open-ended questions forwarded by the interviewers. The stratified Chi-square test of the frequency of specific actions mentioned that corresponds to the pre-listed possible answers has revealed a statistically significant difference between the two groups (X^2_{MH}=11.21, P=0.001). Such differences were observed between both sexually active and non-active respondents in the two groups. As indicated on table 9, 70.7% and 42% of the sexually active club members have reported to limit their sexual partners to one and to using condom consistently, respectively, while the corresponding figures for non-club members were 59.5% and 31.4%. Similarly, more proportions (95.5%) of the sexually non-active club members decided to continue to abstain while lesser proportion (89%) did the same by the non-club members

Table 9 Comparison of percentages of reported actions taken by the study groups as a result of intervention exposures, Jimma and Agaro Towns, 2003

Actions	Club members	Non-club members	X^2_{MH}	P-value
Sexually Active	**n= 188(100%)**	**n=131(100%)**		
Limit partner to one	133(70.7)	78(59.5)	**11.21**	**0.001**
Use condom consistently	79(42)	45(31.4)		
Discuss on HIV/AIDS with others	53(28.2)	29(22.1)		
Decided to abstain	29(15.4)	31(23.7)		
Sexually non-active	**N=362(100%)**	**410(100%)**		
Continued to abstain	347(95.8)	365(89)	**10.31**	**0.001**
Take care of sharp materials	210(58)	308(75.1)		
Discuss on HIV/AIDS with Others	46(12.7)	43(10.5)		
Decide to support AIDS patients	20(5.5)	10(2.4)		

5.5 Regression Analysis of Socio-demographic, Substance use and club membership on the number of sexual partners possessed and pattern of condom use

A logistic regression analysis was carried out to see the effect of some of the possible explanatory variables, while controlling the effect of confounders, over the pattern of condom use and possession of number of sexual partners. Accordingly, age categories, schooling status, alcohol consumption and chewing "Khat" has shown to have statistically significant association with limiting sexual partners to one.

Younger age group (OR=1.85, 95%CI=1.15,2.98) and in school respondents (OR=1.59, 95%CI=1.04,2.44) were independently and positively associated with the limitation of self to one partner. But alcohol consumption (OR=0.30, 95% CI=0.18, 0.48) and use of "Khat" as a stimulant (OR=0.45, 95% CI=0.28, 0.75) were independently and negatively associated with monogamy (table 10). The same table indicated that the rest of the variables including club membership revealed no significant associations.

Table 10 Logistic regression analyses of possible explanatory variables over the number of sexual partners, Jimma and Agaro Towns, 2003.

Variables		Monogamy n(%)	≥2 partners n(%)	Crude OR (95%CI)	Exp (B)/ Adjusted OR (95% CI)
Sex					
	Male	83	30	0.65(0.23,1.75)	0.67(0.42, 1.10)
	Female	30	7	1.00	1.00
Age					
	15-19	60	15	1.66(0.73,3.78)	**1.83(1.14, 2.97)**
	20-24	53	22	1.00	**1.00**
Educational level					
	<6	12	3	1.60(0.33,8.67)	0.64(0.29, 1.45)
	7-10	71	22	1.29(0.52,3.17)	0.82(0.48, 1.40)
	≥11	30	12	1.00	1.00
School status					
	In-school	50	21	0.60(0.27,1.36)	**1.58(1.02, 2.43)**
	Out-of-school	63	16	1.00	**1.00**
Religion					
	Muslim	48	14	1.20(0.52,2.77)	1.10(0.69, 1.77)
	Christian	63	22	1.00	1.00
Alcohol consumption					
	Yes	41	16	0.76(0.33,1.73)	**0.30(0.18, 0.48)**
	No	71	21	1.00	**1.00**
Chewing khat					
	Yes	66	24	0.76(0.33,1.75)	**0.50(0.30, 0.82)**
	No	47	13	1.00	**1.00**
Study group					
	Club members	62	27	0.45(0.18,1.09)	0.78(0.49, 1.22)
	Non-club members	51	10	1.00	1.00

Regressing the same explanatory variable over a consistent use of condom by the respondents has shown different relationship. From all the variables indicated on table 11, only alcohol consumption was found to be independently and negatively associated with the consistent use of condom during sexual intercourse (OR=0.39, 95% CI=0.17, 0.90).

The rest, including club membership showed no statistically significant associations with the outcome variable.

Table 11 Logistic regression analyses of possible explanatory variables over consistent use of condom, Jimma and Agaro Towns, 2003.

Variables		Consistently Use condom n(%)	Inconsistently Use condom n(%)	Crude OR (95%CI)	Exp (B)/ Adjusted OR (95% CI)
Sex					
	Male	55	45	3.26(1.28,8.47)	0.50(0.18, 1.37)
	Female	9	24	1.00	1.00
Age					
	15-19	27	35	0.71(0.34,1.49)	1.82(0.33, 2.02)
	20-24	37	34	1.00	1.00
Educational level					
	<6	3	10	0.28(0.05,1.42)	2.19(0.37, 13.11)
	7-10	43	42	0.97(0.67,2.29)	0.83(0.48, 1.40)
	≥11	18	17	1.00	1.00
School status					
	In-school	24	37	0.52(0.24,1.10)	2.19(0.97, 4.93)
	Out-of-school	40	32	1.00	1.00
Religion					
	Muslim	25	32	0.76(0.36,1.62)	1.39(0.70, 4.07)
	Christian	37	36	1.00	1.00
Alcohol consumption					
	Yes	28	52	**0.26(0.12,0.58)**	**0.39(0.17, 0.90)**
	No	35	17	**1.00**	**1.00**
Chewing khat					
	Yes	19	35	0.41(0.19,0.89)	0.66(0.27, 1.63)
	No	45	34	1.00	1.00
No. Of sexual partners					
	One	42	56	0.44(0.19,1.05)	2.19(0.88, 5.46)
	Two & above	22	13	1.00	1.00
Study group					
	Club members	40	42	1.07(0.50,2.29)	1.18(0.49, 2.84)
	Non-club members	24	27	1.00	1.00

5.6 Focus group discussion summary result

In this study 24 specific research questions were prepared under six major headings. The major headings included knowledge about HIV/AIDS, attitudes and misconceptions about the disease, matters related to HIV testing and its disclosures, sexuality and sexual practices, sources of information, and condom use and attitudes towards it.

The group discussion started with the general question whether they perceive HIV/AIDS as a major health problem or not. All categories in both club members and non-club members agreed that it is the most serious health problem of the time. This is because it is just a killer disease with no cure or vaccine. Similarly they all had common understanding on how to identify a person with a virus. They discussed that youths can suspect with the sign and symptoms but confirmation is only through blood test as some who does look healthy might carry the virus and vise versa.

Club members irrespective of age and sex group, listed a wide range of risk groups including youth themselves and the poor ignorant, while the non-club members emphasized substance users (alcohol and khat) and commercial sex workers and contact with them. As to the route of transmission, all categories mentioned the major route – sexual – but the club members know the details including the importance of perinatal transmission while never mentioned the commonly misconceived issues. On the other hand the non-club members tend to over emphasize injury from a contaminated sharp materials second to sex. Amazingly, misconceptions are rampant. The commonly mentioned include kissing, shaking ulcerated hands, eating food

contaminated with blood of a carrier kitchen worker, especially “Kitfo” (minced raw meet) and condom it self. The non-club members had a difficulty in differentiating risky groups from risk factors that facilitates HIV transmission.

Most discussants in the club members had a feeling that their fellow youths tend to approach and help the HIV victims while some ignorant and uneducated part of the community still tend to ostracize them. The non-club members on the other hand, reflected the attitude of the youths in Agaro area to be unhealthy that they even tend to avoid shaking such suspected people. One respondent from the male, adolescent, non-club member shared his opinion with the group that there are local terms used to indicate HIV suspected persons and warn others to take care of; these are, in Amharic, “kelebetaw or kobraw or Abba yizotal tekeyesew” which nearly means “the person is caught of the ring, or the cobra, or the father, and thus escape him”. As a result of this and gossip, people who are suspecting self or prove to have acquired the virus commonly disappear from their usual residence to live in some other areas particularly in Addis Ababa. Irrespective of the age and sex difference, all participants in the club members know where HIV test center is found, while the non-club members reported that there are youths who do not know the site. However, as far as test and disclosure is concerned, both members and non-club members are not ready to get tested or disclose to others if found HIV positive. The entire group justified the reason to be fear of death, suffering and stigma. However, an interesting yet dangerous miss understanding was surfaced by the male non-club member discussants. They reported that considerable proportion of youths have fear that one could be infected by cross contamination at the test center, as the same

instruments are used for every one to draw a blood sample. Respondents of both group reported the absence of discussion about sexuality between families and children, except in some educated people.

Another interesting point came out during the discussion is facts related to sexual debut. Most survey result in Ethiopia indicates that males tend to report to commence sex at an earlier age, which was the case in the quantitative part of this study for the non-club members. To the contrary in all the eight focus groups it was agreed unanimously that females commence sex much earlier than males. The common age range at sexual debut, as reported by the non-club member groups, for females is between 12 to 15 years and that of male is 15 years and above. The corresponding age range reflected by the club members are 10 to 14 years for females and 16 and above for males. The latter group suggested for the youth to delay sexual practice until marriage or economic independence, while some of the discussants in the non-club members suggested age range, minimum of 17 years for females and 18 for males. By then, according to them, the youth are mature enough to know most reproductive health related problems as well as how to avoid them.

The groups were also invited to discuss the most feasible method of preventive measures for HIV infection. Both sexes of the younger age group of the club members reported monogamy, while the older groups preferred condom, as faithful partnership cannot be perfect as far as youth are concerned. Mix of opinions were reflected from the non-club members with no clear preference by a specific group.

Attitudes towards condoms by the club members generally seem very good, though they admitted some barriers to exist. The major barriers discussed were reduced pleasure (by both groups), forget to put on the condom at the time of extreme arousal, alcohol consumption and doubt of effectiveness. Opposing to this, the reflections from the non-club members was worrying one. Every group has raised the rumors that diffuse among youths about the possibility of inoculation of HIV into condoms. One older male respondent justified this rumor by the fact that HIV infection continued to expand despite wide spread condom use since years back. The younger male and female groups also rose that most youths feel shy to buy condoms from shops. One young adolescent tell how some youths ask for condom from shops. Rather than mentioning the name directly, youths say " ቀዩን ነገር ስጠኝ " that is to mean" give me that red thing". If the shopkeeper does not understand the " the red thing", the client goes back with out purchasing the condom just due to fear of calling the name.

6. DISCUSSIONS

In its short years of emergence to the present world, HIV/AIDS has become health as well as other social and economic challenge to many countries, particularly to that of the Sub-Saharan African Region. Currently, it is spreading fast even in some countries such as Eastern Europe and Central Asia, who were complacent of the low incidence so far.

The explanation for the disease's fastest spread and also posing difficulty in preventing and controlling is its extreme adherence, notably in SSA, to sexual activities. It has also been pretty well documented that behaviors in general and sexual behavior in particular is not an easy thing to be addressed. Therefore, a continuous effort to seek information about risk-related behavior, their determinants and the context within which they occur are highly relevant to designing effective and innovative approaches that would in turn help slow down the AIDS pandemic. At the same time, one should not undermine the necessity of an inbuilt and/or independent regular evaluation and monitoring of those targeted intervention programs.

In Sub Saharan Africa, and perhaps in some of the rest of the world, early sexual activity by the young people is one of the specific sexual risk behaviors predisposing to HIV infection. In many countries, unmarried girls and boys are sexually active before the age of 15. Recent surveys in Brazil, Hungary and Kenya have found that more than a quarter of the boys aged 15 to 19 reported having sex before they were 15 [7]. A more alarming report came out from analysis of studies of adolescent's sexual risk taking in developing countries is the one that identified sexual debut as early as nine years in Zimbabwe [13].

Several focal studies targeting various groups of in- and out- of school youths conducted in Ethiopia also indicated similar findings. A study that examined the sexual behavior and level of knowledge of AIDS and other STDs among senior high school students in Addis Ababa has reported age range of 12 to 18 for the first sexual activity. Similar study conducted in 1994 among rural high school students in the Northwestern

part of the country identified a mean age at sexual debut of 16.4 (± 2.3 SD). Fisseha and others also reported mean age of 15.3 (±5.39 SD) for girls and 16.45 (± 4.02 SD) years for males to commence sex. Still another study in the eastern part of the country reported the mean age at first intercourse among youths to be 16.9 years [9,11,21,31].

In this study we also computed a similar reported mean age of first sexual practice at 16.8 (±1.9 SD) and 16.8(±2.1 SD) years, respectively for the two study groups. The minimum age reported is 10 years for both sites. Logically no variation of commencement of sexual act is expected in the two groups as this might have happened before the initiation of the project in most of the youth organized under anti-AIDS clubs as well.

Having multiple sexual partners remained one of the most important risk factors for the spread of HIV/AIDS. Because of biological factor and social norm, youth are primarily vulnerable to such risky behavior. According to MOH (2000) of Ethiopia, 87% of new HIV infection in the preceding year is due to the practice of multiple partner sexual contact [6]. Several studies in various parts of Ethiopia and else where have documented a considerable proportion of young people exhibiting this risky behavior. A survey report of sexual behavior among in- and out- of school youth in Guinea found out mean lifetime number of sexual partners for males to be 4.0 and 2.1 for females [28].

In a similar study conducted among high school students in one of rural towns of Ethiopia, the mean number of sexual partners was 2.2 for males and 1.1 for females [31]. Another study from about the same area (1994) reported an average number of sexual partners to be 3.9 (±2.8) while from the study conducted in Awassa 36.4% of (mean number 2.9±2) sexually active youth admitted to have had more than one sexual partner in the preceding six months [10,46]. A recent study carried out in Jimma town (2000,unpublished) reported a 19.3% of high school students to have had multiple sexual partners over the past one year [47].

Sexual risk behavior of the present study groups in this regard, is in agreement with the other studies conducted else where in the country, though the mean number of partners in the two groups (1.76 61.75SD Vs 1.31 60.76SD, respectively) was relatively lower than the aforementioned ones. As in the other studies, males tend to have multiple partners compared of females.

Condom non-use is also another major risk factor for the transmission and spread of HIV/AIDS and other STDs. As a result of several barriers significant proportion of peoples to date are reluctant to the use of condoms consistently. Among the commonly sited barriers are lack of adequate knowledge about its importance, carelessness and fear of reduced sexual pleasure and excitement [10].

In the present study of the sexually active respondents during the last one year, only about 46% of the club-members and 39.3% of the non-club members reported to use condom every time. This is one of the major areas where knowledge about preventive measures and actual behavior is discrepant. Several other studies documented similar findings. Condom use survey report among students of Gondar College of Medical Sciences indicated condom use rate of 36.6% with non-commercial partner [48]. Fisseha et al, (1993) reported consistent condom use rate of 27.7% among a sample of ten high school students in Addis Ababa. The same condom use rate was reported from Awassa survey [10]. Survey of risk sexual behavior among students of high school in a rural town reported regular condom use rate of 39.3% [21].

In this study though not statistically significant, more males reported to use condom compared to the female youths. Similarly, older youths reported to use condom more than the younger once (15-19 years). Other studies on Gondar College students (1993), from Awassa-out of school youth (1995), from Harar-general youth (1997) and from Jimma high school students (2000) revealed similar findings. The possible explanations, respectively, might be that because of traditional norm, the use or non-use of condom is primarily determined by the male partners; and younger youth are commonly shy and/or do not have money to buy condoms.

Taking these two major risk factors for HIV infection, no significant difference was observed between the two study groups (club-members and non-club members) as to the proportion of risk practices. About one-third of the club members and a fifth of non-club members, though the difference was not significant, had reported to have contact with multiple sexual partners in the past one-year. Similarly, only about half of the club members and a little bit over one-third of non-club members admitted to use condom regularly during the same period. Though it might seem strange, such findings are not uncommon. Even though we do not have such a quasi-experimental evaluative research conducted in our country so far, few are reported in some of the African countries. More or less similar evaluation study conducted in four African countries by PSI and population Reference Bureau USA, reported that the envisaged program implementation brought about less impact on young people's perceptions about their susceptibility to reproductive health problems and on actual behavior- sexual activity and condom youth [35]. This reluctance could be explained by the theory of social scientists about communication and behavior change that involves five steps through which people pass as they change their behavior: Knowledge, approval, intension, practice and advocacy. Just transmission of information, example through media, might increase knowledge but not behavior change. Some other environmental factors are detrimental in addition to acquiring basic information and skills to achieve behavior change.

Among other things effective interventions must have addressed gender roles, sexual norms, peer pressures, public polices and other social and economic implications in addition to conveying appropriate messages [37]. In addition, social marketing for Adolescent sexual Health (SMASH) project functioning in SSA, suggested that youth activities should include a carefully designed mix of mass media and interpersonal communication based on an assessment of the local situations and the program's behavior change objectives [35]. Therefore youth organized under anti-AIDS clubs in Jimma Town have lacked some of the basic pre-requisite for behavior change. Though they had diverse knowledge and better attitude as compared to the non-club members,

according to the project's annual activity report, the intervention components are mainly restricted to peer education, youth group sessions, launch events, distribution of information products and condoms. It lacks the other essential components like intensive participation of families and vigorous activities to empower young girls for self-assertiveness - that might improve gender role. As behavior change is also said to have a dose-response relationship with intensity of exposures, such experience was also seems lacking in this group.

A study conducted in Zimbabwe that evaluated a multi-media campaign approach to boost youth's knowledge and attitude reported to confirm that the more materials and activities young people were exposed to, the more actions they took in response [37]. Further, although peer education has received marked credit worldwide for its effectiveness [36,39,40] in behavior change, FGD conducted in this study among male and female club members undermined its role. One out-of-school young girl expressed her view on peer education as: "Youths give little attention to peer educators... most do not acknowledge their capacity and are reluctant to attend to the sessions. Rather it is better we regularly given teaching forum by knowledgeable persons such as health personals". This indicates that peer educators were equipped with little knowledge and skill and therefore failed to influence the fellow peers.

On the other hand, club members were found to achieve superior when the two groups asked for specific actions they look as a result of exposure to various intervention components of different sources. Stratified analysis of the four most frequently reported actions (limit sexual partners, use of condom, tendency to discuss with others and abstinence) showed a significant difference between the two groups.

According to the report, club members were more motivated to take preventive measures. In here the discrepancy between the actual reported behavior (particularly proportion of multiple sexual partnership) and the intension approved as a result of knowledge gained from various sources by the club members could be explained by the possible tendency of non-club members essentially the female respondents to hide their actual behavior. An objective evidence for such a conclusion is that during focus group

discussion it was reported by the moderator that non-club member females felt shy when asked about sexual matters and only few of the participants tend to react to such questions. Opposed to this, the club-member females were relatively quite free and discuss everything asked. For instance during a discussion on the use of condom, one of the female club member respondents said: "Some youth both male and female dislike condom... I my self do not prefer because I usually enjoy contact with the seminal fluid during orgasm". In addition, the fact that non-club members were interviewed around home environment might also make them shy and therefore tried to comply with the social desirability as far as sexual matters are concerned.

The proportion of condom use by the non-club members was lower than the club members at both questions i.e. pattern of actual use and the tendency to use it as a result of promotional activities going on in their locality. The FGD also extracted similar findings. The non-club members, particularly the males, showed negative attitude towards the use of condoms. Both age groups discussed that youth in Agaro area do have suspicion on condoms, thinking that the jelly fluid in it may contain the HIV itself. Two of the respondents tried to justify that "despite the wide spread use of condom since some years back, the prevalence of HIV infection continued to climb up, and therefore, condom rather is fuelling the AIDS epidemic." Such an attitude is worrying, deserves attention and requires an urgent action.

Result from this study also indicated that almost all (99.8%) of the two groups were aware of HIV/AIDS. This finding does go with the recent report of preliminary BSS result by the MOH that indicated 98% of the study population knows about HIV/AIDS and almost all groups know at least one prevention method [6].

Greater proportions of club members were able to mention the commonest routes of transmission of HIV and its prevention methods when compared to the non-club members. Sexual contact (99.6%), unsafe injections (83.1%), Blood transfusions (39.3%) and perinatal transmission (38.2%) were the main mode of transmissions mentioned by the club members, while the corresponding percentage for non-club members were 96.6%, 55.5%, 25.9% and 16.6%. MOH report (2000) indicated sexual

contact, perinatal transmission, blood transfusion and unsafe injections in that orders are the main routes of transmission for HIV in Ethiopia.

Though almost all members of both study groups know at least one route of transmission and preventive measures, still the scope of their knowledge is limited. In addition, misconception is also common among the non-club members. In this study, 12 (2.2%) believe that mosquito bite could transmit HIV and another 10(1.8%) claim that passionate kissing do the same. FGD result also depicted the presence of such misconceptions in which the non-club members additionally mentioned air droplets to transmit HIV.

Similar findings were reported from Addis Ababa college students (1993) and Awassa survey (1995), and the recent preliminary BSS out put indicated the presence of widespread misconceptions in almost all study groups and regions [6,11,33].

Risk perception, volunteer ness for HIV screening test and attitude towards HIV victims are another important parameters that have relevance to the prevention and control of HIV/AIDS epidemic. In this regard, the current study also found out a better-expected behavior among the club members. The differences were statically significant in all the cases. About two-thirds of the club members admitted that they are at risk or might be at risk of acquiring HIV. Similarly nearly 9 in 10 of the club members reported they would get tested for HIV if they suspect that they might have had it in their blood. On the contrary only about two-third of the non-club members reported that they are at risk and a third of them replied that they would get worry about it. The FGD finding is also in line with this, where, all club members identified youth as one of the important risk groups while the male non-club member respondents alleged mainly sex workers, merchants and substance abusers.

The intervention evaluation carried out in four SSA (Botswana, South Africa, Cameroon and Guinea) after a multimedia Campaign of 8 to 13 months revealed less success in

improving young people's perceptions about their susceptibility to reproductive health problems [35].

Other non-comparative, solitary risk assessment survey reports from various developing countries also found low perception as to own risk to HIV infection. Analysis of series of DHS (1994-2000) sample countries from Africa, Asia and Latin America have indicated that, in all countries at least two-third of female residents and 8 of 10 male respondents said that either they are at no risk or at small risk of getting AIDS [1]. Similar analysis in eight African countries reported that more than half of sexually experienced adolescents believe that they are in a little or no risk of getting AIDS [5].

Relatively higher proportion (39%) of college students in Addis Ababa (1993) admitted that they are at risk of acquiring the disease, while only 18.6% of the high school respondents of rural town in Gondar (1994) perceived own risk [31,33]. The recent 2002 BSS report concluded the level of own risk perception to be very low in all the groups [6].

With respect to attitude, about one third of the non-club members agreed with the opinion that people with HIV/AIDS should be blamed for bringing the disease and should be legally separated from the community; while one-fifth and less than that of club members, respectively supported the idea. Similarly almost all (98.5%) of the club members were in agreement with the idea that people with AIDS deserve treatment and care, while only two-third of the non-club members agreed so.

Generally, this study revealed that knowledge, perception and attitude of the club members are better off. This is probably the result of repetitive and multiple information sources they had compared to the non-club members as indicated in this paper itself. This is an encouraging part of the intervention group. Because increased knowledge

and heightened approval lead people to recognize that new behaviors can meet a personal need, to decide to take action and eventually do adopt new practices [37].

Logistic regression analysis was also employed to see the effect of intervention through anti AIDS club over the tendency of youth to limit non regular partners to one in the past one year after controlling some selected explanatory variables thought to confound the real difference ought to come up. The result showed still the absence of association between club membership and the tendency of monogamy. On the other hand younger use (15-19years) and in school students were more likely to be limited to a single partner. This finding is consistent with the study conducted in Guinea (1995) on sexual behaviors and attitudes of urban youths [28].

Similar analysis was also made for condom use. Here again the effect of having organized under anti-AIDS club member didn't show an expected regular condom use; and number of sexual partners, sex, school status, educational level and religion, either. In both cases the result indicates that alcohol consumption and chewing khat were negatively associated with tendency for monogamy and consistent condom use. Similar findings were obtained in the 2002 BSS report [6].

7. STRENGTHS AND LIMITATIONS OF THE STUDY

Strengths: This study, tried to evaluate one of the important intervention mechanisms for the control and prevention of HIV/AIDS among youths. It employed a quasi-experimental design where by comparison group of similar character, except the intervention program offered to the club members, was used to up-hold the rigor of the methodology. This design is rarely used in Ethiopia and assessment of the effectiveness of anti-AIDS club in bringing behavior change using this design has never been tried so far. The comparison group was taken from different town other than the intervention area to avoid contamination. Probability sampling technique was employed and similar sex interviewers were used to minimize bias. To improve the validity and reliability of the study, appropriate tests were employed and findings were compared with other related observations locally and internationally. Further more, qualitative design was used to complement / triangulate the findings.

Limitations: The main limitation of this study is that measurement indicators are retrospective self-reported behaviors and actions that might run risk of information bias. The assessment was focused only to the outcome measurement excluding the process part of evaluation. Both of these would reduce the validity and the reliability of the results. Time span for intervention is also relatively short to expect major behavior changes. However, the respondents were persuaded as much as possible to tell real things, as the information obtained was kept confidential and anonymous. In addition, the quantitative method was complemented with qualitative data collection approach for triangulation.

The low number of youths that reported sexual intercourse in the past one year may account for the absence of significant difference in the sexual risk behaviors between the two groups. The absence of similar evaluative research in the country also limited comparison of findings. At any rate the current study can indicate something about the program and serve as an input for future similar endeavors.

8. CONCLUSIONS

Bearing in mind the limitations of the study, it is possible to conclude the followings:

- Considerable proportion of youth in both groups exhibited relatively high-risk behavior that predisposes them for HIV infection with no difference between the two. The risk behaviors include having multiple sexual partners, inconsistent or non-use of condom and early sexual debut.
- Males are relatively more at risk of HIV infection than females; and substance uses, essentially drinking alcohol and chewing khat played significant role in predisposing the youth to risky behaviors.
- The scope of the knowledge, own risk perception and attitude by the club members are fairly better than the comparison groups. This implies that youths organized under anti-AIDS clubs are at a better position to practice and adopt good behavior if they had adequate policy and significant other's support.
- Though knowledge of mode of transmission and means of prevention of HIV/AIDS by the non-club members is fairly high, still worrying misconceptions prevail pertaining to the route of transmissions and condom use.
- Intervention programs that lack comprehensiveness in approach do not seem to bring about behavior change as intended.

9. RECOMMENDATIONS

This study has found out that being organized under anti-AIDS club did not bring about significant difference in risk behavior status compared to the non-club members. This implies that there are some deficiencies in the project implementation requiring gaps to fill up in order to achieve the desired goals set out in the project planning. Based on this fact the following recommendations were forwarded.

- First of all it is worth mentioning that careful selection as well as provision of intensive training for peer educators would build on the success of behavior change.
- Heightened efforts are required to ensure self-assertiveness by the girls so that they will have equal power to say no to sex as well as negotiate for condom use with that of male counterparts.
- Equally important is building strong social support for the youth from the general community, particularly families, religious leaders, schoolteachers, and health providers. Orienting these groups on specific reproductive problems of youths and persuading them to actively participate in the intervention programs and approve the sexual needs and services as a social norm rather than limiting to individual youth calls for special attention. This also helps overcome the stereotyping of adolescents on sexual matters and biases against offering reproductive health information and services by the service providers.
- In addition to imparting knowledge on how to avoid risky behaviors and adopt protective actions, organizations should be able to win the confidence of youth through creating a hospitable recreational centers and facilitating ways of creating job opportunity. This signifies that policy support is indispensable.

10. REFERENCES

0. The population division of the department of economic and social affairs of the United Nations Secretariat. HIV/AIDS awareness and behaviors; United Nations 2002.
1. Joint United Nations Program on HIV/AIDS. Report on the Global HIV/AIDS epidemic; July 2002. Geneva, UNAIDS.
2. Joint United Nations Program on HIV/AIDS and World Health Organization. AIDS epidemic update. December 2002; UNAIDS-0246E Geneva,.
3. UNECA. African Development Forum 2002; AIDS: The Greatest Leadership challenge. Roles and approach for an effective response, December 2000, Addis Ababa. Ethiopia.
4. Population Reference Bureau. Youth in Sub-Saharan Africa: A chart book on sexual experience and Reproductive health, April 2001.
5. Ministry of Health. AIDS in Ethiopia, Disease prevention and Control Department; 4th ed. October 2002.
6. Young People and HIV/AIDS: Opportunity in Crisis. A paper released jointly by United Nations Children's Fund, UNAIDS/WHO, Geneva 2002.
7. Central Statistical Authority- Ethiopia and ORC Macro USA. Ethiopia Demographic and Health Survey- 2000, Addis Ababa Ethiopia and Calvertom, Marry land, USA. May 2001.
8. Solomon Gebre. Sexual behavior and knowledge of AIDS and other STD's: A survey of senior High school students, Ethiop. J. Health Dev. 4(2); 1990.
9. Tafa N. Sexual Activity of out of school youth, and their knowledge and attitude about STD's and HIV/AIDS in Southern Ethiopia. Ethiop. J. Health Dev. 1998: 12(1): 17-22.
10. Kora A. Haile M. Sexual behavior and level of awareness on reproductive health among youths: evidence from Harar, Eastern Ethiopia, Ethiop. J. Health Dev. 1999; 13(2): 107-113.
11. Eshete H. and Sahaly T. The Progress of HIV/AIDS in Ethiopia. Review Article, Ethiop. J. Health Dev. 1996; 10(3): 179-190.

12. Net Work. Adolescent Reproductive Health, Family health International. 2000; 20(3): 4-9
13. UNAIDS-Ethiopia. Summary Report of visits to Regioanl HIV/AIDS /STD activities, Addis Ababa Ethiopia. September 1997.
14. Monitoring of AIDS Pandemic. The Status and Trends of The HIV/AIDS Epidemics in the World, Provisional Report. July 2002.
15. Edemariam Tsega, Biru Mengesha, Norden Felt.E, Hanson B. and Lind Berg J. Serological Survey of Human Immunodeficiency Virus Infection in Ethiopia, Ethiop. Med. J. 1988; 26, 179-184.
16. Ministry of Health. AIDS in Ethiopia, Disease prevention and Control Department; 3rd ed. October 2000.
17. Debrework Z., Getachew G., Khodakevich L., Girma D., and Warnette M. Development and management of the AIDS control program in Ethiopia. Ethiop. J. Health Dev. 1990; 4(2): 91-96.
18. Federal Democratic Republic of Ethiopia. Policy on HIV/AIDS of the Federal Democratic Republic of Ethiopia. Addis Ababa, 1998.
19. M. Meheret, T.E. Martins, M. Carael and et-al. Base line for the Evaluation of an AIDS program using prevention Indicators: A case study in Ethiopia. Bull. Of WHO, 1996; 74(5): 509-516.
20. Ismail S., Betsuamlak H. Alemu K. High risk behavior for STD/HIV, pregnancies and contraception among high school students in Rural Ethiopia, North West Ethiopia, Ethiop. J. Health Dev. 1997; 11(1): 29-36.
21. Programming for Adolescent Health and Development: Report of WHO/ UNFPA/ UNICEF/ study group on programming for Adolescent health. (WHO Technical Report Series 886), Geneva, 1999.
22. Ministry of Health, 2002a. Five year Action Plan for Adolescent Reproductive Health in Ethiopia, Family Health Department. Addis Ababa. Ethiopia.(Mimeograph)
23. Children and Youth Affairs Organization. Ethiopian Youth- Basic Challenges and Prospects, Addis Ababa. June 1995.

24. Joost Hoppenbrouwer. Sexual and Reproductive health Promotion by, with and for Youths, Sexual health exchange, KIT SAFAIDS; 2001.
25. Pav Govindasamy, Aklilu Kidanu Hailom Bantayerga. Youth Reproductive Health in Ethiopia. Addis Ababa Ethiopia. November 2002.
26. Mburano Rwenge. Sexual Risk Behaviors among Young people in Bamenda, Cameroon, International Family Planning perspectives. 2000; 26(3): 118-123.
27. M. Regina Gorgen, Mohammed L. Yansane, Michael Marx and Dominique Millimounou. Sexual behavior and Attitudes among unmarried Urban Youths in Guinea, International Family Planning perspectives. 1998; 24(2): 65-71.
28. Douglas A. Feldman and et-al. HIV prevention among Zambian Adolescents-Developing a value utilization/ Norm change Model, Soc. Sci. Med. 1997: 44(4): 455-468.
29. Fekadu Z. Casual Sex debuts Among female Adolescents in Addis Ababa. Ethiop.J. Health Dev. 2001; 15(2): 109-116.
30. Eshetu F. Zakus D. and Kebede D. The attitude of students, Parents and Teachers towards the promotion and provision of condoms for adolescents in Addis Ababa, Ethiop. J. Health Dev. 1997; 11(1): 7-16.
31. Beyene Petros, Solomon Belayneh and Yared Mekonen. AIDS and College students in Addis Ababa: A study of Knowledge, Attitude and Behavior. Ethiop. J. Health Dev. 1997; 11(2): 115-123.
32. Tilahun Teka. AIDS related Knowledge and Behavior among College students, Gondar, Ethiopia: A comparative Study. Ethiop. J. Health Dev. 1997; 35(3): 185-190.
33. UNAIDS Best Practice Collection. Pear Education and HIV/AIDS: Concepts and uses and Challenges, UNAIDS. Geneva, Switzerland. 1999.
34. Social Marketing for Adolescent Sexual Health. PSI- Population Reference Bureau: Results of Operations research Projects in Botswana, Cameroon, Guinea, and South Africa, June 2000.
35. Angus Nicoll, Gwenda Hughes, Marry Donnelly, et-al. Assessing the Impact of National anti HIV sexual health campaigns: Trends in the Transmission of HIV

and Other sexually transmitted Infections in England, Sex. Transm. Inf. 2001; 77: 242-247.

36. Young MI Kim and et-al. Promoting Sexual Responsibility among Young People in Zembabwe, International Family Planning Perspectives 2001; 27(1): 11-19.
37. Mariella Baldo. Peer education: A successful strategy with some constraints, Sexual health exchange. 1998; (4): 1-3.
38. Marry Bassett. Impact of Peer education on HIV infection in Zimbabwe. Sexual Health Exchange. 1998; (4): 14-15.
39. T. Sahlu, T. Rinke de wit, A. Tsegaye, et-al. Low Incidence of Syphilis among factory workers in Ethiopia: Effect of an intervention based on education and Counseling, Sex. Transm. Inf. 2002; 78: 123-126.
40. The voluntary HIV-1 Counselling and Testing Efficacy Study Group. Efficacy of voluntary HIV-1 counselling and testing in individuals and couples in Kenya, Tanzania, and Trinidad: a randomized trial. Lancet 2000; 356:103-112.
41. Jimma Zonal Health Department. Annual Health Service Report, September 1995 E.C. Jimma. Oromiya.
42. Central Statistical Authority. The 1994 population and Housing Census of Ethiopia, Results for Oromiya Region. Vol. 1: part VI. Statistical Report on Population Size of Kebeles. Addis Ababa 1996.
43. Family Guidance Association of Ethiopia. EU/IPPF Funded project, Jimma Youth Driven Initiatives on HIV/AIDS/STI Prevention Project. Annual Report, FGAE, South West Branch, march 2002.
44. Patricia M. Hudelson. Qualitative Research for Health programs, Division of mental Health, World Health Organization, WHO/MNH/PSF/94.3. Geneva 1994.
45. Fantahun M. Cala F. Sexual Behavior, Knowledge and Attitude towards HIV/AIDS among out of school Youth in Bahirdar Town, North West Ethiopia. Ethiop. J. Health Dev. 1996; 34(4): 233-242.
46. Lemma E. Predictors of HIV/AIDS related Sexual behavior of high school adolescents based on the classical health behavior models, Jimma Town, South West Ethiopia. (Unpublished Thesis), December 2000.

47. Kidane Gebrekidan, and Bereket Azeze. Survey of Condom Youth Among College Students, Ethiop. J. Health Dev. 1995; 9(1): 7-11.

Annex 1: Structured English Questionnaire

Evaluation Survey Questionnaire for the risk of HIV/AIDS Infection, Club member & Non-member Youths (15-24 years)

001 Questionnaire Identification Number /…/…/
002 City – 1. Jimma 2. Agaro
003 Region – Oromiya
004 Site – 1. Jimma H1 2. Jimma H2 3. Agaro K 1 4. Agaro K3.
Hello!
Introduction: My name is……..; I am working as data collector in an evaluation survey project run by the Addis Ababa University Medical Faculty, Department of Community Health in collaboration with Oromiya Health Bureau. We are interviewing youths in Jimma & Agaro Towns to find out the status of high-risk behaviors prevailing related to HIV/AIDS and the role of some prevention & control mechanisms implemented up to now to avoid such behaviors. Have you been interviewed in the past few weeks for such study? If you have it, you will not be interviewed again, but if not, I kindly request you to participate in the survey that will be appreciated & so much useful for the region for future planning.

Confidentiality & consent: I am going to ask you some very personal questions that some people find difficult to answer. Your answers are completely confidential. Your name will not be written on this form, & will never be used in connection with any of the information you tell me. You do not have to answer any question that you do not want to answer, and you may end this interview at any time you want to. However, your honest answers to these questions will help us better understand what people think, say & do about certain kinds of behaviors. We will greatly appreciate your help in responding to this survey. The interview would take about 30-45 minutes. Would you be willing to participate?

_____.
(Signature of interviewer certifying that informed consent has been given verbally by respondent)
Interview Visit.

	Visit 1	Visit 2	Visit 3
Date			
Interviewer			
Result			

Result Codes: Completed =1, Respondent not available = 2, Refused = 3, partially completed = 4, others = 5.
005 Interviewer: code [___/___] Name_____.
006 Date of interview: ___/___/_____.
Checked by supervisor: Name_____Sig._____ Date_____.

Section 1: Background characteristics

This survey only interviews youth aged 15-24 who are non-couples: singles, divorced, separated, or widowed. In other words do not interview partners who are living together.				
No.	**Questions & filters**	**Coding categories**	**Skip to**	**Code**
Q101	Record sex of the respondent	Male……1 Female……2		
Q102	Age of the respondent	In years[____]		
Q103	Have you ever attended school?	Yes ……..1 No ……..……..2 No response ……..……99	**→Q105**	
Q104	What is the highest level of education you completed? **(Circle one)**	Read & write ..……1 Grade 1-6…….……2 Grade 7-10...……3 Grade 11-12…….……4 Above grade 12……...5 No response...……99		
Q105	How long have you lived here?	No. Of years…….. [____] **Record 00 if less than 1 year**		
Q106	Do you work to earn money for your self?	Yes…..……..1 No…..……...2 No response……..……9	**→Q108**	
Q107	What is the type of business you are involved in currently? **(Multiple answers are possible)**	Daily laborer…..…….…..1 Private petty business…...…….2 Temporary employment in private firms……...3 Skills training……4 Other……5 No response…….……...99		
Q108	What religion are you? **(Circle one)**	No religion…….…...0 Muslim……...1 Orthodox Christian……...2 Protestant……..3 Catholic…….……4 Others(specify)……5		
Q109	To which ethnic groups do you belong? **(Circle one)**	Mixed ethnicity ……..……..0 Oromo…….…….……1 Amhara……..……2 Guragie……..……3 Other (specify)……..……4		

Q110	Do you presently live:	Alone……1 With both parents……2 With father only……3 With mother only……..4 With relatives……5 On the street……..……6 Other ……..……96		
Q111	During the last four weeks how often have you had drinks containing alcohol? **Would you say…Read out** **(Circle one)**	Every day……..……1 At least once a week……2 Less than once a week ….…..……...3 Never ……..……4		
Q112	Some people have tried a range of different types of drugs. Which of the following, if any, have you tried? **(Read list)**	**Y N DN NR** Cigarette…….1 2 88 99 Chat……..……..1 2 88 99 Hashish……..……..1 2 88 99 Benzene……..……1 2 88 99 Shisha…….1 2 88 99		
Q113	Family in come per month	Eth Birr…..……..[_____] Dependent on others……..00		
Q114	Marital history	Never married…….……1 Divorced…….……2 Widowed…….……3 Separated…….……4		
Q115	For the divorced/widowed/separated: - When did the marriage take place? - At what age did you marry? - How long is it since you got divorced/ widowed/ separated?	Number of years……... [_____] Number of years……... [_____] Number of years……... [_____]		

Section 2: Sexual History

*Now I am going to ask you some personal questions about sex. Remember we are asking these questions to learn more about how young people like your self feel, in order to help you make your life safer. We know **some young people** have had sexual intercourse & some have sexual intercourse with more than one person. Please answer the following questions honestly. Remember, your name is not written on this questionnaire.*				
No.	**Questions & filter**	**Coding categories**	**Skip to**	**Code**
Q201	Have you ever had sexual intercourse? **[*For the purpose of this survey, "sexual intercourse" is defined as vaginal penetrative sexual intercourse*]**	Yes……..……...……..……..1 No……..…….……...2	**→Q303**	
Q202	At what age did you first have sexual intercourse?	Age in years…….. [_____]		
Q202A	Was a condom used during this first time you had sexual intercourse?	Yes……...……..…1 No……..……...…2 Don't know……...……..88 No response……..…….……99		
Q203	Have you had sexual intercourse in the last 12 months?	Yes…..……..……..……..1 No...……...2 No response……...……...……99	**→303**	
Q204	**For females**: Think about the male sexual partner(s) You have had in the last 12 months. **For males**: Think about the female sexual partner(s) you've had in the last 12 months. How many were: - "Commercial" (partners with whom you had sex in exchange for money) -"Non-commercial" (any partner other than a commercial partner) - No response	In number…….[____] In number……[____]		
Q205	**Filter:** INTERVIEWER GO BACK & CHECK **Q204** If respondent had sexual intercourse with a commercial partner in the last 12 months…continue to Q206 [___]. ↓	If respondent did not have sexual intercourse with a commercial partner in the last 12 months skip…[___] →	**→Q211**	

Q206	Think about your recent commercial sexual partner. How many times did you have sexual intercourse with this person over the last 30 days?	Number of times…….[____]		
Q207	The last time you had sex with this commercial partner, did you & your partner use a condom?	Yes……...……...……...1 No……...……...……2 Don't know…….……..…88 No response…….……99	**→Q209** **→Q210**	
Q208	Who suggested condom use that time? **(Circle one)**	Myself…….……..…….1 My partner…….……..……..2 Joint decision…….……3 Don't know…….……..…88 No response…….……99	**→Q210** **→Q210** **→Q210** **→Q210**	
Q209	Why didn't you & your partner use a condom that time? **Add Other Locally Appropriate Categories After Pre-testing.** **(Circle '1" for all mentioned & "2" for not mentioned).**	**Y N** Too expensive……1 2 Partner objected……..…..……1 2 Do not enjoy...…….…...1 2 Embarrassed to buy or ask for it……..…….1 2 Used other contraceptive..…...1 2 Didn't think of it……..……1 2 Other(specify)……..……1 2		
Q210	With what frequency did you & all of your commercial partner(s) use a condom over the last 12 months?	Every time…...…….……..…1 Some times……...……2 Never……...…….3 Don't know…….……88 No response…….……...99		
Q211	**FILTER: INTERVIEWER GO & CHECK Q204.** If respondent had non-commercial sexual partner during the last 12 months…continue to Q212 ↓	If respondent did not have non-commercial sexual partner during the last 12 months…skip to	**→Q301**	
Q212	Think about your recent non-commercial sexual partner. How many times did you have sexual intercourse with this person over the last 30 days?	No. of times…….…….[____]		
Q213	The last time you had sex with this non-commercial sexual partner, did you & your partner use a condom?	Yes……...……..…1 No……...……..…2 Don't know…...……..88 No response…...…….……....99	**→Q215** **→Q216**	
Q214	Who suggested condom use that time? (Circle one)	Myself……..…….…….1 My partner…...……..……...2 Joint decision……..……..3 Don't know…...……..…88 No response…...…….99	**→Q216** **→Q216** **→Q216** **→Q216**	

Q215	Why didn't you & your partner use a condom that time?	**Y N** Too expensive……1 2 Partner objected……..……..…1 2 Don't enjoy……..……..…1 2 Embarrassed to buy or ask for it……1 2 Used other contraceptive…….....1 2 Didn't think of it……..…1 2 Other(specify)……1 2 …….……1 2 Don't know…..……..……1 2 No response…….…….. 1 2		
Q216	In general how often did you & all of your non-commercial sexual partner(s) use a condom over the last 12 months?	Every time……...…….1 Some times……...……2 Never……...…….3 Don't know……..……...……88 No response……...……...……..99		

Section 3: Condoms: Males'

No.	Questions & filter	Coding categories	Skip to	Code
Q301	**FILTER: INTERVIEWER SEE** Q207, Q210, Q213, Q216 **If condom not used…continue to** Q302 [__] ↓	If condom used [__] →	**→Q304**	
Q302	Have you & a sexual partner ever used a male condom? **(Show picture or sample of one)**	Yes…….……..1 No……...2 Don't know……..…….88 No response……...……99	**→Q304**	
Q303	Have you ever heard of a male condom? **(Show picture or a sample of one)**	Yes…….……..1 No…….……...2 Don't know…...…….88 No response…..……..…99	**→401** **→401**	
Q304	Do you know of any place or person from which you can obtain male condoms?	Yes…….…….1 No…….……..2 No response……...……...99	**→401**	
Q305	Which places or persons do you know where you can obtain male condom? **(Probe & record all answers)** **Any others**	**Y N** Shop……..1 2 Pharmacy……..1 2 Market……...1 2 Clinic ……...……1 2 Hospital…..…….1 2 Family Planning center…1 2 Youth center……..1 2 Bar/hotel……1 2 Peer educator…….1 2 Other……..1 2 No response……...1 2		

Q306	How long would it take you to obtain a male condom close to your house or to where you work?	10-15 minute……..……..1 15-30 minute…..……..2 30-60 minute…..……..3 Don't know……88 No response……..……..99		

Section 4:Sexually Transmitted Diseases

No.	Questions & Filters	Coding categories	Skip to	Code
Q401	Have you ever heard of diseases that can be transmitted through sexual intercourse?	Yes……..……1 No…….……..2 No response……...……...99	**→404**	
Q402	Can you describe any symptoms of STDs in women?… Any others? **Do Not read out the symptoms** **Circle "1" for all mentioned & "2" for all not mentioned.** **More than one answer is possible**	**Y N** Abdominal pain…….……1 2 Genital discharge…….……...1 2 Burning pain on urination……..1 2 Genital ulcers/sores……1 2 Smelling in Groin area ……..1 2 Itching…….……1 2 Other(specify)……...……..1 2 No response…….……...1 2		
Q403	Can you describe any symptoms of STDs in men?… Any others? **Do not read out the symptoms.** **Circle "1" for all mentioned & "2" for all not mentioned.** **More than one answer is possible.**	**Y N** Genital discharge…….……...1 2 Burning pain on urination……..1 2 Genital ulcers/sores……1 2 Smelling in Groin Area……..1 2 Other(specify)……..…..1 2 No response……1 2		
Q404	Have you had a genital discharge during the past 6 months?	Yes…….……1 No…….……..2 Don't know……...88 No response……..99		
Q405	Have you had a genital ulcer/sore during the past 6 months	Yes……..1 No……...2 Don't know……..….88 No response…….……..…99		
Q406	**FILTER:** INTERVIEWER GO AND CHECK **Q404** and **Q405** If respondent had genital discharge and/or genital ulcer in the last 6 months… continue Q407 ↓	If respondent did not have genital discharge and/or genital ulcer in the last 6 months…skip to [___] →	**→501**	

Section 4: STDs…continued

No.	Questions & filter	Coding categories				Skip to	Code
Q407	Did you do any of the following the last time you had a genital ulcer/sore or genital discharge **Read out. More than one answer is possible.** *- Seek advice/medicine from:*	**Y**	**N**	**Dk**	**Nk**		
	d. a Gov'tal clinic or hospital?	1	2	88	99		
	d. a private clinic or hospital?	1	2	88	99		
	d. Youth center?	1	2	88	99		
	d. a private pharmacy?	1	2	88	99		
	d. a traditional healer?	1	2	88	99		
	- Took medicine you had at home?	1	2	88	99		
	- Stop having sex when you had the symptoms?	1	2	88	99		
	- Use a condom when having sex during the time you had the symptoms?	1	2	88	99		

Section 5: HIV/AIDS knowledge & misconceptions

No.	Questions & Filters	Coding categories	Skip to	Code
Q501	Have you ever heard of an illness called HIV/AIDS?	Yes……..1 No……..2 No response……99		
Q502	In what ways is HIV/AIDS transmitted? **Circle "1" for yes & "2" for no.**	**Y N** Mother to child during Pregnancy/delivery…….... 1 2 Breast feeding by infected mother……..……... 1 2 Sex with multiple partners……1 2 Sex with prostitute……..…..1 2 Blood transfusions……..…..1 2 Unsafe injections……..…1 2 Kissing infected person..……...1 2 Mosquito bites……..…1 2 Sharing Razors/Blades/tooth brushes……..……...1 2 Sharing food or drink with infected person……..……..1 2 Sharing public toilet/transport/ Class room……..…..……..1 2 Other(specify)…….……...1 2		

Q503	What are the symptoms of AIDS? **Circle "1" for yes & "2" for no.**	**Y N** Chronic weight loss…..…...1 2 Fever ≥ 1 month……..…….1 2 Diarrhea ≥ 1 month…..……1 2 Skin lesions……..……1 2 Others(specify)…….……1 2		
Q504	Is there a cure for AIDS?	Yes……...…….1 No……..…….……..2 Don't know……....……88		
Q505	Is there anything a person can do to avoid getting HIV/AIDS?	Yes……..…….……1 No……..…….……..2 Don't know……..…...……88		
Q506	How can people avoid getting HIV/AIDS? **Circle "1" for yes & "2" for no.**	**Y N** No sex at all…….…….1 2 No commercial sex…...……1 2 Have single partner…..……1 2 Use condoms……..……..1 2 Avoid unsafe injections...… 1 2 Avoid pregnancy for infected mothers……..1 2 Others(specify)…… 1 2 Don't know……..……1 2		
Q507	Is it possible for a healthy looking person to have the AIDS virus?	Yes……..…….……1 No……..…….……..2 Don't know……..…...……88		

Section 6: Attitudes & Behavior towards HIV/AIDS & PLWHA

No.	Questions & filter	Coding categories	Skip to	Code
Q601	People have many different feelings when they think about people who have AIDS. As I read each of the following feelings, please tell me how you personally feel: . Angry at them	**1** V.much **2** Somewhat **3** A little **4** Not at all ☐ ☐ ☐ ☐		
	. Afraid of persons with AIDS	☐ ☐ ☐ ☐		
	. Disgusted by the person with AIDS	☐ ☐ ☐ ☐		
	. Avoids them	☐ ☐ ☐ ☐		

Q602	I am going to read a couple of statements that people have made. As I read each one, please tell how much you agree or disagree:	**1** *S.agree* **2** *Agree* **3** *Disagree* **4** *S.disagree*		
	. "People with AIDS should be legally separated from others to protect the public health".	☐ ☐ ☐ ☐		
	. "People who got AIDS through sex or drug use have gotten what they deserve".	☐ ☐ ☐ ☐		
Q603	If a member of your family contracted HIV, would you want it to remain a secret?	Yes……..1 No……...2 Don't know……...……88		
Q604	If yes, why would you want it to remain a secret? **Don't Read Out.** **Circle all mentioned. More than one answer is possible.**	Family members would be: -blamed, abused, teased……..1 -neglected, isolated, avoided……...2 Family members would not be allowed to public places (Church, mosque, market, school ..etc) ……..…….……..3 Others (specify)…….96		
Q605	How much do you think that:	**1** *S.agree* **2** *Agree* **3** *Disagree* **4** *S.disagree*		
	. For most people with HIV, it is their own fault that they got HIV?	☐ ☐ ☐ ☐		
	. People with HIV/AIDS can remain productive members of society?	☐ ☐ ☐ ☐		
	. People with HIV/AIDS are blamed for bringing the disease in to the community?	☐ ☐ ☐ ☐		
	. Our society doesn't do enough to help people with HIV/AIDS?	☐ ☐ ☐ ☐		
	. They deserve treatment & care?	☐ ☐ ☐ ☐		
	. People with HIV/AIDS are promiscuous?	☐ ☐ ☐ ☐		

Q606	Do you think that giving care & support would help prevent the spread of HIV/AIDS?	Yes……..…1 No…….……..…2 Don't know……..88		

Section 7: Perception of own risk & HIV testing

No.	Questions & Filters	Coding categories	Skip to	Code
Q701	Do you think you can get AIDS?	Yes…….……1 No…….……..2 May be…….……...3 Don't know……...88	→703 →703	
Q702	If no, why not? **Don't read out.** **Circle "1" for all mentioned "2" for not. More than one answer is possible.** **What are some other reasons?**	**Y N** I am married……...1 2 I am not a drug user……1 2 I am a good moral person……...1 2 I pray regularly……...1 2 I don't have sex with Prostitutes……...1 2 I regularly use condoms…….…1 2 Others(specify)……...1 2		
Q703	What would you do if you think that you have HIV/AIDS?	**Y N** Get tested……...1 2 Blame partner……....1 2 Worry……1 2 Change life style…….……...1 2 Think about suicide……..……..1 2 Isolate myself from family & community…….……1 2 Fearful of other's reaction..…...1 2		
Q704	Do you know that there is a test available for HIV/AIDS?	Yes…….……1 No…….……..2 Don't know……...…88	→706 →706	
Q705	If yes, do you know where to get tested?	Yes……..1 No……...2 Don't know……..….88		
Q706	Would you want to get tested for HIV/AIDS?	Yes……..1 No……...2 No response……..…99	→708	
Q707	If yes, what is the main reason (advantage) for getting tested?	To know for sure…….……1 To adjust future life……..…….....2 Would want to know before Pregnancy…….…3 Would want to know before getting married…...……..……4		

Q708	If no, what is the main reason not to get tested?	Partner would be shattered……..1 Fear of neglect, isolation, abuse..…….2 Can live a better life with out knowing my status……3 There is no point in knowing the status...4 Others (specify)….……96		
Q709	If you got tested, would you share the test results with anyone?	Yes…….1 No……..2	**→Q711**	
Q710	If yes, with whom you share the test results? **Don't read out.** **Circle "1" for all mentioned & "2" for not. More than one answer is possible.**	**Y N** With partner……...1 2 With parents……...1 2 With sibling……1 2 With neighbors……...1 2 With employer……1 2 With friends……1 2 With religious leaders……1 2 Others (specify)….……1 2		
Q711	If no, why wouldn't you share results with others? **Don't read out.** **Circle "1" for all mentioned & "2" for not mentioned. More than one answer possible.** **Any other reasons.**	**Y N** Partner would be shattered……..….1 2 Fear of neglect, isolation abuse……1 2 I would not get any care or support……...1 2 Would be kicked off house/ work……...1 2 People would think that I am bad/ immoral…….……..1 2 People would think that I am promiscuous……..1 2 Others(specify)...……..……1 2		

Section 8: Intervention exposures & actions taken

No.	Questions &Filters	Coding categories	Skip to	Code
Q801	How do you get information about HIV/AIDS? **Don't read out.** **Circle "1" for all mentioned & "2" for not mentioned. More than one answer is possible.**	**Y N** Mass media: radio/TV……...1 2 Newspapers/magazines……..1 2 Pamphlets/posters……..1 2 Launch events……1 2 Dramas……...1 2 Puppetry show……1 2 Peer educators……1 2 Health clinics……1 2 Others (specify)……1 2 No response……...1 2		
Q802	From where do you get the education materials? **Don't read out.** **Circle all mentioned. More than one answer is possible.**	Health institutions……...……...1 Youth centers……..2 Private pharmacies & clinics……..3 NGOs……4 Friends……...5 Work places……...6 Others (specify)……7 No response……..…..99		
Q803	Did these intervention exposures motivate you to change your attitude & behavior to reduce risk of HIV infections?	Yes……..……1 No……..……2 No response……..99		
Q804	**Filter**: INTERVIEWER GO BACK & CHECK Q201 & Q203 If respondent reported practice of sexual intercourse…continue to Q805 ↓	If no history of sexual intercourse, skip to [__]→	**→806**	
Q805	What actions did you take as a result of intervention exposures? **Don't read out.** **Circle "1" for all mentioned & "2" for not mentioned.**	**Y N** Limited to one sexual partner… ….1 2 Avoided casual partners……..…… 1 2 Using condom consistently……..... 1 2 Abstaining from sex……..….. 1 2 Take care of sharp materials…..…...1 2 Not have sex with prostitutes…..….1 2 Stop taking alcohols/drugs……..….1 2 Decided to visit VCT centers ..……1 2 Started to discuss about HIV/AIDS with families/friends……..……...1 2 Decided to support AIDS patients……..….1 2 Others (specify)..……..…….1 2 No response……..……1 2		

Q806	Actions taken by those who didn't practice sex so far?	**Y N** Continued to abstain……..……..1 2 Take care of sharp materials.…...…1 2 Avoid visit to local injectors…….....1 2 Discuss with families/friends……...1 2 Decided to support AIDS patients……...1 2 Others……..……1 2 No response……..……1 2		
Q807	**Filter:** Applicable for Jimma (Club members)	If not club members, end the interview.		
Q808	Rate the following intervention exposures as to their power to influence behavior/attitude.	**1 High** **2 medium** **3 low** **4 poor**		
	. Mass media	☐ ☐ ☐ ☐		
	a. Readable materials	☐ ☐ ☐ ☐		
	b. Dramas	☐ ☐ ☐ ☐		
	c. Launch events	☐ ☐ ☐ ☐		
	d. Puppetry show	☐ ☐ ☐ ☐		
	e. Peer education	☐ ☐ ☐ ☐		

Annex 2: English FGD Guide

Introduction

Good morning! Well come to our group discussion. I am_____ & I work for _____ & come from _____. (Note taker/observer introduces himself/herself). We are here today to discuss about the current major health problem of youth, HIV/AIDS. There are no right or wrong answers. All comments, both positive & negative, are well come. We would like to have many points of view. We want this to be a group discussion, so you need not wait for me to call on you. In order not to miss any points of the discussion, we will be using a tape recorder. Please, speak one at a time so that the tape recorder can pick up everything. We would like to confirm to you that all your comments are confidential & used for research purposes only. Your names will not be recorded to protect your confidentiality. Are you willing to participate in the discussion?
Thank you for your willingness.

Topic 1. General issues about HIV/AIDS

) Currently, do you think HIV/AIDS is a major health problem in this area? Why? And how? Why not?

a) Are there some people in this area who are suffering from AIDS? How do people know that a person has HIV/AIDS?

Probe:

- Rumors? Openly tell status? Health officials/employers…etc disclose? Looking signs?

) Who gets HIV/AIDS?

Probe:

- Who is most likely to become infected? (Age, occupation, or behavior difference)

Topic 2: HIV/AIDS knowledge

) How do people get HIV/AIDS?

Probe:

- For sexual transmission, MTCT, blood contact
- For beliefs about misconceptions (casual contact, mosquito, eating raw meet etc)
- How easy to get HIV/AIDS? Why?
- Gender difference?

) How long after infection with HIV would a person become ill?

Probe:

- Is someone with HIV able to stay healthy for a while? Work?
- What are the common symptoms that people associate with HIV infection?

) What are the important factors related with HIV?

Probe:

- Poverty? STDs? Gender inequalities? Habits? Others?

Topic 3: Attitudes & misconceptions

) What is the youth's around here feeling about people known or suspected to have HIV/AIDS?

Probe:

- Avoid, neglect, and tease? Blame? Acquired it because they are promiscuous?
- Are there things that PLWHA can or can't do? Should or should not do? Why?

Topic 4: Testing & disclosure

) Do young people know if they are HIV positive or not? If they do, how?

Probe:

- Illness symptoms? Testing as part of medical procedure? Through VCT?

a) Do young people around here know that there is a medical test for HIV/AIDS? And where?

b) If yes, do they go for check up? Why?

Probe:

- To be sure? For marriage? For employment?

c) Do they disclose before or after test for friends? Families? Partners?

d) If not, why youth keep secret or refrain from testing?

Probe:

- Stigma? Isolation? Loss job? Family disruption? Fear of death?

) Do you see any advantage or disadvantage of VCT?

Probe:

- Advantages: protect others? Get support? Future plan?

Topic 5: Sexuality & sexual practices

) Do families discuss about sexuality with their children?

Probe:

- About sexual relations? Pregnancy? STDs?
- Care to be taken?

) What is the usual age of commencement of sexual practice?

Probe:

- For women? For men?
- What does the youth supposed to do to delay sexual practice?

) In your opinion, till when should sex practice delayed? Till marriage? Until physical and psychological maturity? For men? For women?

Topic 6: Source of information & behavior change

) What is the common source of information for youth?

Probe:

- Mass media? Publications? Religious leaders? Peer educators? Others?
- Which one do you think are more influential to change behavior?

a) How do you see the role of anti-AIDS clubs? Who tends to be a member? What are the motives behind? Why some youths are not interested to be a member?

b) What are the most important preventive measures being taken by the youth?

Probe:

- Reduce partners? Avoid commercial sex?
- Delay sex? Use condom constantly?

c) Which once are more feasible & acceptable for the youth?

d) How do youths feel about condom & its utilization? What are the barriers?

e) Though knowledge seems high, risk behavior reduction among the youth is said to be low. What do you think are the main reasons?

Probe:

- No vision? Poverty? Unemployment? Substance addict?

) Are the current condom out-lets favorable for the maximal utilization by the youth? Why not? Which other means improve utilization?

Probe:

- Special boxes in the recreation areas? Public latrines? Where else?

) Any other comments or questions!

Thank you.

CURICULUM VITAE UP DATED

Date: *January 2003*
Name: Meseret Yazachew Deressa (MD)
Sex: Male
Date of Birth: February 12,1968
Birth Place: West Showa Province, Gindeberet District
Nationality: Ethiopia
Marital status: Married, with one daughter

I. EDUCATIONAL BACK GROUND

Elementary school	*Gitere Junior Secondary school 1974 /75 –1989/80, Gindeberet District.*
Junior Sec. School	*Gindeberet Junior & Comp. Secondary school, 1980/81 - 1981/82 Showa province, Gindeberet District Kachisi town.*
Senior Sec. School	*Ambo Meskerem Hulet Com. Secondary School, 1982 / 83 - 1985/86 Showa Province, Ambo town.*
Under Graduate studies	*Jimma Institute of Health Sciences 1986 /87 - 1992/93 graduated with Degree of Doctor of Medicine.*
Post Graduate studies, MPH (On progress)	*Addis Ababa University Faculty of Medicine Department of Community Health, October 2001 to the present*

II. WORK EXPERIENCE

1. Health Services

- *District Health Manager, Jimma Zone, Gomma District Health Office for two years (1993/94- 1994-95)*
- *Director of Agaro training Health Center in Gomma District for the same period.*
- *General practitioner service at the same locality and same period.*
- *Secretary of District Health Committee.*
- *Deputy Head, Jimma Zonal Health Department 1995/96-1996/97 June.*
- *Head, Jimma Zonal Health Department 1997 June to 2000 Dec.*

2. Academic Services

- *Head, resident supervisor of team training programme at Agaro Training Health Center, 1993/94 - 1994/95.*

- *Ass. Lecturer, Jimma Institute of Health Sciences Community Based Education Office 1993/94-1994/95.*
- *Lecturer, Jimma Institute of Health Sciences, Community Health Programme since 1994/95 to October 2001.*

III. SHORT SEMINARS / TRAININGS.

- *Workshop on experience exchange with Suez-Cannel University staff Members on Community Based Problem Oriented Learning for 3 days 1994,JIHS, Ethiopia.*
- *Training Workshop on Micronutrient deficiency by ENI, 1994 JIHS, 4 days.*
- *Training Workshop on Breast-feeding promotion, March 1994, 3 days.*
- *Training Workshop on IEC promotion, Jimma Zone, 1995, 3 days.*
- *Training Workshop on Surveillance of meningococcal meningitis, by WHO, 1995 Addis Ababa for 3 days.*
- *Training Workshop on Drug management, Oromiya Health Bureau, Addis Ababa, 1996.*
- *Exposure visit to Uganda, Kampala, on HIV/AIDS prevention & control for one week, Feb. 1998.*
- *Exposure visit & training on Development management course for three weeks at BRAC CENTER, Bangladesh, June 1998.*
- *Experience exchange visit to German Red Cross, Burgdorf branch, Hanover, German for 10 days, Feb 2000.*

IV. Social Services:

- *Member & executive committee chairperson, Agaro sub branch, Ethiopian Red- Cross Society, Jimma 1994/95.*
- *Member & executive committee chairperson, Jimma branch, Ethiopia Red-Cross society: since Oct. 1999 to September 2001, Jimma, Ethiopia.*
- *Member & Executive committee chairperson, Family Guidance Association Of Ethiopia, Southwestern Branch: since May 2000 to September 2001, Jimma, Ethiopia.*
- *Member, Ethiopian Public Health Association since 1996.*

IX. Consultancy Service

- *Contractual consultancy work at Family Health International, FHI, country office at Addis; to conduct Focus Group Discussion with men & women of reproductive age group in a rural community on matters related to Family Planning & Credit services, October - November 2002.*

VI. Additional skills

- *Driving License grade three with perfect driving capacity.*
- *Basic Computer skill.*

VII. Publications/ research

0. Determination of prevalence of Trachoma among children at an Elementary
school and verifying association of factors in the home Environment, June 1993, under graduate thesis research, pending publication.

VIII. Private Business

- *Shareholder, Dr. B-Cossar Higher Clinic at Jimma Town, Oromia Regional State, Southwest Ethiopia.*

IX. Language proficiency:

	Language	Listen	Read	Write	Speak
1	Afan Oromo	V.good	V.good	V.good	V.good
2	Amharic	V.good	V.good	V.good	V.good
3	English	V.good	V.good	Good	Good

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