Addis Ababa University
School of Graduate Studies

Assessment of knowledge, perception and risk determinants of the HIV/AIDS among a pastoralist Community in Borena Zone

By

Godana Arero (Bsc)

A thesis submitted to the School of Graduate Studies
Addis Ababa University
In partial fulfillment of the requirements for the Degree in
Public Health

May 2011
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Acronomy:
AAU – Addis Ababa University
AIDS-Acquired Immunodeficiency Syndrome
AOR- Adjusted Odd Ratio
BSS - Behavioural Surveillance Survey
CI- Confidence Interval
CSWs – Commercial Sex Workers
EDHS-Ethiopia Demographic Health Survey
EPI-INFO-Epidemiological Information
Eth birr- Ethiopia birr
FGD – Focus Group Discussion
FMOH-Federal Ministry of Health
GGA – Gumi Gayo Assembly
HC- Health canter
HIV – Human Immunodeficiency Virus/
-IDI-In-depth-interview
IEC-Information Education Communication
IRB-Institute of Review Board
MARP - Most-At-Risk Population MOH- Ministry of health
NGOs – Non-Governmental Organizations
NSS - National Sentinel Surveillance
OR-Odd ratio
PI – Principal Investigator
PPS- Probability proportional to size
SNNPR- Southern Nations and Nationalities Peoples Region
STIs – Sexually Transmitted Infections
SPSS-Statistical Package for Social Science
UN-United Nations
UNAIDS-United Nations Program on HIV/AIDS
VCT – Voluntary Counseling and Testing
WHO-World Health Organization
**Abstract:**

**Background:** Knowledge factors and the practice of safe sex behaviors are important to contribute to perceptions of lower risk of being infected with HIV. However, currently, knowledge and practice of pastoral community about HIV prevention is quite low. Identify factors influencing the perceptions of Gada leaders and community about HIV/AIDS prevention is crucial to alleviate HIV/AIDS pandemic.

**Objectives:** To assess knowledge, practice and perception of the pastoral community about HIV/AIDS prevention and Cultural Risk behaviors among voluntary counseling and testing (VCT) clients in Borena Zone of Oromia Regional State.

**Methods:** A cross-sectional community-based study design was conducted among 423 randomly selected pastoral communities from four kebeles of the four Woredas in Borena Zone. The quantitative data were collected using a pre-tested structured and anonymous questionnaire, which were entered, cleaned and analyzed using Epi-Info 3.1.1 and SPSS 17 statistical software programs. To complement the quantitative data, qualitative data were obtained from the focus group discussion.

**Results:** Four hundred twelve, 154(37.4%) male and 258(62.6% female) respondents from a total 423 proposed study targets with 50% from community and 50% during exit interview from Government health Hc with a response rate 97.4% were involved in the study. The mean and median age of respondents was 31.7 and 30.5 years respectively. About 30.9% respondents had poor knowledge on HIV/AIDS prevention, 20.4% respondents have had misconception that HIV is disease of urban and cultural health risk behaviors (wife sharing, polygamy and widow inheritance) are not pave way for HIV/AIDS transmissions. Among respondents, 78.2% had sexual experienced before study period, out of these, 51.2% were perceived risk of more than two or more life time sexual partners (HIV/AIDS) because of unsafe sex, from 51.2%, 27.0% were polygamy, 17.1% were wife sharing, 5.7% were widow inheritance and remaining 8.4% were from other multiple sexual partners which accompanying with low VCT (40.3%) up take, low condom (14.1%) utilization, and low involvement of Gada leaders (6.1%) to prevent HIV/AIDS transmissions. The main reasons for poor knowledge, poor practice and misperception were low IEC/BCC, low media coverage and cultural taboo. Logistic regression analysis showed that being in an age group of 15-24, male, married, educational status, one life time sexual partners, not perceived risk of HIV and those who VCT is available in their vicinity were more likely knowledgeable to denounce cultural health risk behaviors, while age group 45-49 were less likely to denounce cultural sexual behaviors.

**Conclusions:** Based on findings, discouraging cultural health risk practice which paves way for HIV transmission through Gada assemble at place like “Gumi Gayo and Gumi Eldelu”, improving knowledge, perception and practice of community so as to denounce and outlaw cultural health risk practice along with Gada leaders, expand VCT site services, and address barrier to up take, encourage at least pre-widow HIV test, sustain behavioral change communication and condom utilization in pastoral community.
1. INTRODUCTION

1.1 Background:

HIV/AIDS is a major threat to the world’s population to it’s over all social, economic and political well being as well as to the individual health of hundreds of millions of people making it the most destructive epidemic in recorded history. Global summary of epidemic in 2008 showed 33.4 million people (31.3 million adults) were living with HIV/AIDS. Out of these, Sub-Saharan Africa is a home to 22.4 million people living with HIV/AIDS (1). Ethiopia is one of the countries hard hit by the HIV/AIDS pandemic. Moreover, in 2005, based on the national sentinel surveillance (NSS), the national HIV prevalence was estimated to be 3.5% (10.5% urban and 1.9% rural) (2). The same year, it was estimated that 1,320,000 people were living with HIV/AIDS. In addition to these, AIDS accounted for an estimated 34% of all deaths in 15-49 years age group in Ethiopia and about 66.3% in urban area (3). Results from the 2005 DHS in Ethiopia indicated that 1.4% (which is similar with that of the Oromia region) of adults aged 18-49 are infected with HIV and women age 15-49 who had sexual intercourse in the past 12 months, the percentage that had intercourse with more than one partner and the percentage that had higher-risk sexual intercourse were 0.2% and 2.8% respectively for Oromia regional state (4). One study indicated that cultural risky behaviors identified in practice of Gada System in Borena pastoral are: wife sharing (Jala-Jalto), peer group songs often appreciation women, widow inheritance, women folk songs often appreciation men, earring gift to one’s adored mistress during naming ceremony of the first born son, polygamy, explicit approval of one’s wife extra marital sexual partner, and official exchange of gift between the lover (11). A married woman who is separated from her legal husband or widowed and refused being inherited called “divorced”. Men, who want casual sex such as the men in a temporary camp and paramilitary militia, often visit the divorced women. These days, there are a number of divorced women whose livelihood is based on the sale of liquor or retail business in small rural towns (5, 11). The presence of large military garrisons and paramilitary militia in rural towns of Borena pastoral had played the significant role in the early phase of HIV transmission among the community. Intervention approaches, however, do not indicate sufficient evidence that shows the effect of the task shifting on community from old traditional practices to new approach that prevent risky of HIV/AIDS. Now days, one of the indispensable useful approaches to prevent HIV/AIDS is VCT.
VCT is a key intervention approach in HIV/AIDS prevention and benefits to prevent HIV transmission. Therefore there is growing demand for VCT in preventing HIV/AIDS before widow inheritance and others mentioned cultural risky behaviours (5).

1.2: Statement of the problem:
HIV/AIDS is a major threat to the world’s population to it's over all social, economic and political well being as well as to the individual health of hundreds of millions of people making it the most destructive epidemic in recorded history. Global summary of epidemic in 2008 showed 33.4 million people (31.3 million adults) were living with HIV/AIDS. Out of these, Sub-Saharan Africa is a home to 22.4 million people living with HIV/AIDS (1). Ethiopia is one of the countries hard hit by the HIV/AIDS pandemic. Since the first two reported AIDS case in 1986, the disease has spread at an alarming rate throughout the country. Heterosexual sex is the most common mode of HIV transmission in Ethiopia. Unprotected premarital and extramarital sex is common in parts of the country (1). Some widespread traditional and cultural practices are responsible for the spread of HIV/AIDS; the more significant ones are early marriage, marriage by abduction, polygamy, cross-generational sex, and an accepted custom allowing a man to have sex with other women if his wife has not delivered for some years (4, 6, and 10).

The Borena pastoral society alike many others traditional societies in Ethiopia harbor cultural practices that fuel the spread of HIV/AIDS pandemic. As elsewhere argued, some of these practices are deep-rooted and wide-spread nowadays, there is a mounting pressure on traditional leaders such as the Gada councilors to denounce and outlaw cultural practices that aggravate the rise of the disease among the vulnerable portion of the community (5, 9). The current HIV/AIDS situation in Borena is the result of a number of intricate socio-political and economical activities of the past decades (5). Therefore, this study will be expected to produce results which will guide the HIV/AIDS prevention and cultural risk behaviors and help concerned bodies on what is happening to the Gada practice to avert associated risk behaviors as task shifting goes on.

2. Literature Review
The HIV/AIDS epidemic is the most devastating health disaster in human history. The disease continues to ravage families and communities throughout the world. In addition to the 2 million
people who had died of AIDS by the end of 2008, at least 33.4 million people are now living with HIV. An estimated 2.7 million people were newly infected with HIV in 2008—95 percent of them in sub-Saharan Africa, Eastern Europe, or Asia. While some areas have successfully slowed the epidemic, it is surging in others (1). In the most-affected regions, hard-earned improvements in health over the last 50 years have been overwhelmed by death and disability from HIV/AIDS. The disease is crippling progress at the personal, family, community, and national levels. In severely affected nations, economic growth and political stability are also threatened. Sub-Saharan Africa is the hardest hit region in the world. More Africans die of AIDS-related illness than of any other cause. South Africa has the largest number of people living with HIV—between 4.5 million and 6.2 million. Switzerland has the highest adult HIV prevalence rate: more than 38% of adults are infected with HIV (1). Ethiopia is one of the Sub-Saharan countries HIV/AIDS affects heavily. In year 2008, the single-point estimates indicate that the national adult HIV prevalence is 2.2 percent (1.8 percent for males and 2.6 for females) (6). The prevalence in Oromia National Regional State is estimated to be 1.5 percent (1.2 percent for males and 1.8 for females). Previous reports showed a high concentration of HIV in urban and semi-urban areas compared to rural ones. For instance, the single-point estimates for the national, urban and rural prevalence were 7.7% and 0.9% respectively (6, 10). The evidence from urban areas appears to indicate generalized epidemic that is probably stabilizing or even declining in the major urban centers but may be increasing in the smaller towns (11). In Oromia Regional State, transactional and cross-generational sexual practices whereby youths and female sex workers (FSWs) sell sex are common. Cultural practices such as wife-sharing, rape, and abduction are common in Oromia. These sexual practices along with the low utilization of condoms among the most-at-risk population (MARP) groups fuel the spread of HIV/AIDS (5, 9). The Borena pastoral society alike many traditional societies in Ethiopia harbor cultural health risk practices that fuel the spread of HIV/AIDS pandemic. As elsewhere argued, some of these practices are deep-rooted and wide-spread.

Nowadays, there is a mounting pressure on traditional leaders such as the Gada councilors to denounce and outlaw cultural practices that aggravate the rise of the disease among the vulnerable portion of the pastoral community. The current HIV/AIDS situation in Borena
pastoral community is the result of a number of intricate socio-political and economical activities of the past decades. The lucrative contraband business and the presence of huge military in the area since early 1990’s attracted numerous female sex workers FSWs (5, 9). Huge military and paramilitary militias sex workers (FSWs). Huge military and paramilitary militias exist in almost all small rural towns and urban centers. Though traditional Borena men do not visit FSWs in hotels based in the towns, members of the local militia, demobilized soldiers and ex-soldiers are likely to have mistresses in towns or engage in casual sexual intercourse with FSWs. The weakening of the Borena custom and an ever increasing destitution has resulted in alarming increase in the number of divorced and/or separated women in small rural towns who are engaged in retail businesses like “alcohol” sale. Some of these disenfranchised women migrated to towns and engaged in small-scale contraband trade. These people are locally known as – (literally means back eaters). Significant numbers of young people were also engaged in this trade (5). The resultant effect of all the above factors was a significant proportion of the vulnerable groups such as young men and women in the contraband business; vulnerable women (alcohol sellers) in rural areas, and members of the local militia contracted the disease and vanished. Of all the vulnerable groups, the early phase of HIV/AIDS epidemic in Borena pastoral had the highest toll on the vulnerable young people in the towns and the emerging few rural origin but urban affiliated petty traders. The traditional and culturally inaccessible pastoral Borena was not as badly affected during the early phase of the epidemic. But with passage of time following the settlement of huge military and paramilitary militia who had relations with both urban high risk groups and rural women, the AIDS epidemic started to diffuse gradually into the out skirts of the towns and nowadays the epidemic has reached almost all parts of Borena people including the remote pastoral communities (5).

Cultural risky behaviors identified in Gada practice are: wife-sharing (Jala-Jalto), peer group songs often appreciation of women, widow inheritance, women folk songs often appreciation of men, earring gift to one’s adored mistress during naming ceremony of the first born son,
polygamy, explicit approval of one's wife extra marital sexual partner, official exchange of gift between the lover (5, 9). Widow Inheritance – in Borena pastoral a married woman immediately up on marriage joins the clan of the husband the or generation class of her husband. The brother of the deceased should inherit a widow with her willingness. This is primarily to protect the children of the deceased and keep the woman in the family circle and in the clan. Personal observations in Borena pastoral indicate that widow inheritance is still widely practiced. There is no a growing demand for voluntary counseling and testing for HIV before widow inheritance. Naming ceremony of the first born son; second, third and son so on. During of ceremony, the mother of the son to be named is expected to get precious gifts from her extramarital sexual partner (lover), observations showed that explicitly gift-giving overdo is becoming rare. The implicit practice could be lingering. The gift giving practice during naming ceremony can also in its own way contribute to the vulnerability of women in particular and the host community in general. Earring gift to the most adored mistress: earring gifts are put on and displaced as a sign of “I am loved and admired.” It negatively motivated other women toward keeping secret lovers and hence enhances the rise of the disease. Unmatched age marriage in Borena tradition, a wealthy man, a man with too many heads of cattle, is expected to remarry immediately after the death of his wife without VCT check up. An old person who fails to get a baby boy out of wedlock tends to marry another girl to try his chance. These are reasons for an old man marrying a young girl. The old man who cannot satisfy the sexual need of his young wife could implicitly or explicitly agree to his wife’s establishing extramarital sexual partnership with a virile young man. This practice, therefore, necessitates the existence of Jala-Jalto relationship, often, for the sake of the women who might demand extramarital sexual partner to gratify her sexual desires (5, 9). Polygamy: wealthy men and Gada Councilors tend to practice polygamy for the sake of having many children or possibly for some other reasons. An aged but wealthy Borena could marry a young girl if he believes that he is still virile.

Polygamy can also be practiced if the person in wedlock fails to get a son. For a Borena pastoral community what is important is to get a son from wedlock. It does not matter even if the biological father is an extramarital male lover. This is shown in a popular saying, “God, give me a legitimate son even if it is from a different biological father.” The polygamous elderly man
could explicitly or implicitly approve his wife’s extramarital sexual relationship. In the era of HIV/AIDS, the young lady could contract HIV infection from the virile young man. Such might be the risk of HIV infection and STDs of an aged man and his old first wife. Girl’s arranged marriage in Borena pastoral community forced marriage out of the consent of the bride is not permissible. All girls have the right to decline marriage to the person whom she does not want. But, the norm is that marriage negotiation between the bride’s family and the family of the bride-groom starts with the consent of the families involved. Asking her will is for the sake of conformity. The family persuades the girl (bride) to accept marriage proposal even though the man is not her choice. In Borena marriage between a man and a girl based on mutual interest is not uncommon. A girl married to a man who is not her choice could be compelled to establish extra sexual relationship. All the afore-mentioned beliefs and elements of the cultural practices encourage wife-sharing relationships (5).

To date there are no studies that have followed youth in the developing world to determine whether they reduce their HIV risk behaviors as a result of undergoing voluntary HIV testing and counseling. There are, however, such impact studies among adults in developing countries and among youth in industrialized countries. Taken together, information from these sources suggests that VCT may be an appropriate and effective strategy for young people. Studies among adults in developing countries report behavioral change after VCT on a range of indicators, including condom use, reduction in number of partners, and reduction in STI incidence (6). Results elsewhere showed that there was a significantly greater decline in the proportion of individuals who had unprotected sex with non-primary partners, among the group that received VCT as compared with the group that received a health education intervention.

Also, HIV-infected individuals were likely to reduce sexual risk behaviors with primary partners and HIV-infected men were likely to reduce risk behaviors with non-primary partners as well.
For couples, those who participated in VCT were significantly more likely to reduce unprotected intercourse with their enrolment partner when compared to those who received health education only. The study concludes that VCT is efficacious in promoting behavior change. The high proportion of young people in many of the programs that have been successful in reducing risk behavior suggests that the youth in the VCT efficacy trial may be among those who changed behavior. Unfortunately the researchers who worked on the VCT impact study have not disaggregated their data by age, so it is not possible to see how VCT affected those in the study who were younger than 25 years old. This study of adult programs in developing countries does not tell us how effective VCT may be for young people. Studies of VCT impact among youth in the United States do provide evidence that some youth adopt safe behaviors after testing. Although the U.S. studies often focus on high-risk individuals such as drug-users, runaways, and those in high-prevalence areas, they do look at the behavior of young people. Among these groups, several studies indicate behavior change.

3. Conceptual framework
The possible risk factors from literature are: Socio-cultural health risk factors, socio-economic factors, behavioral factors (individuals such as Gada leaders and community), personal factors (education and occupation).
The framing factors in a conceptual model are proxy factors, intermediate and distant factors to the outcome variable. The identified relationships as follow:

Fig.1. The Frame work for the cultural health risk practices that aggravate the transmission of HIV/AIDS. Should be presented at the bottom.

Research question: Why Gada councilors not denounce and outlaw cultural health risk practices that aggravate the transmission of HIV/AIDS?

4. Objectives

4.1 General objective
To assess the knowledge and perception of the community about HIV/AIDS prevention and cultural risky behaviours among reproductive age group in Borena Zone.
Specific objective

1. To identify predisposing cultural risky behaviours for HIV/AIDS transmission.
2. To assess knowledge and perception of the study population about HIV prevention.
3. To identify factors influencing the role of Gada practice in HIV/AIDS prevention.

5. Subjects and methods

5.1 Study area and population

The study was conducted in Borena pastoralist zone of Oromia Regional State. Borena Zone is one of the 18 Zonal administrative divisions of Oromia regional state. It's located south Ethiopia covering an area of 47,846 square kilometers with vast majority of land classified as semi arid.

The Zone is located 574 km away from the capital city and zonal centre is Yabelo. The rest of the districts are located at 100-200km radius from the centre. It has 13 Districts and 263 Rural and 12 urban kebels. In this zone, there are 9 VCT centers. These are Bule Hora Hospital, Bule Hora Health centre, Gelana, Dugdawa, Telltale, Yabelo, Dire, Moyale and Arero Health centers.
Among mentioned health facilities, Arero Hc, Yabelo Hc, Dire Hc, and Moyale Hc will be selected to conduct study. Selection of study centers will be based on availability of services, availability of adequate clients, nearby and services utilization of rural community and Gada settlement.

5.2 Study design

The study design was descriptive community based cross-sectional quantitative supplemented by qualitative methods.

5.3 Source population

The source population was all individuals in age group 15-49 years in Borena Zone both in rural and urban dwellers including male and female respondents.

5.4 Study subjects

The study subjects was all individuals in age group 15-49 years in four selected Districts health centers (Arero, Yabelo, Dire and Moyale) who will be voluntaries to participate in study.

5.5 Inclusion and exclusion criteria

The eligible study subjects were all individuals in age group 15-49 years, both male and female. Below and above mentioned age groups were excluded from study.

5.6 Sample size determination

Sample size was determined using the sample size formula for single proportion with the following assumption that, expected population proportion of 50% (0.5) denouncing cultural health risk practice that aggravates the transmission of HIV/AIDS.

\[ n = \left(\frac{Z_{\alpha/2}}{d}\right)^2 p \cdot q = \left(\frac{1.96}{0.05}\right)^2 \times 0.25 = 384.16 \] 

10% of non-response rate =423- included in the study

- \( n \) = the minimum required sample size
- \( d = \) tolerable of error /degree of precision = 5%

Assuming that, \( q = p = 0.5 \)

- \( Z_{\alpha/2} = \) the value of standard deviation corresponding to 95% CI =1.96
- CI= 95% and 10% non response rate was used in the calculation.
5.6 Sampling procedures

5.6.1 Community-based household survey was conducted. Proportionate sampling method was used to allocate sample population among the 16 kebeles based on distant (proxy, intermediate, and farness vicinity of the kebeles). Then, systematic sampling method was taken place to select household from 16 kebels. The sampling interval was calculated dividing the total number of households in each kebele by the corresponding number of households to be interviewed in each kebele. The first household to be interviewed in each kebeles was identified from kebeles house number using random sampling. When there is more than one eligible in a household, one individual was selected randomly. In case of no eligible subjects were identified in the selected household, the interviewer was taken the next household.

5.6.2 Qualitative data:

The qualitative method was designed to complete the quantitative data. A Focused group discussion was conducted among purposely selected Gada leaders and community members. A total of five FGD was conducted and range of six to eight discussants were participated in FGD each.

5.7 Data collection procedure:

5.7.1 Quantitative data: were collected using structured questionnaire adopted from EDHS 2005. The questionnaire was first prepared in English, and then translated to Afan Oromo version and back to English to attest comparability and it was pre-tested and modified before the commence of the study. The questionnaire contains questions related to information, socio-demographic characteristics, sexual history, knowledge and practices of Gada leaders about HIV prevention, VCT services, condom uses, and cultural health risk behavior for HIV transmissions.

Two supervisors who were diploma nurses and four 10th grades completed interviewers were recruited and trained on data collection for two days. Supervision of the data collection process was maintained by supervisors. Incomplete and inconsistent data was checked and the necessary corrections were made on the field between study periods. (See Annex: 1).

Based on knowledge category, perception and practice were assessed using coding system from total score of 40 variables. Study participants with score of mean 5 and above were considered as
having good knowledge and practices while those who were obtain lower than mean score were considered as having poor knowledge, perception and practice. (See annex: 1).

5.7.2. **Qualitative data:**

In order to supplement the quantitative, qualitative data was collected through focus group discussions (FGDs). A total of five focused group discussions were conducted among purposively selected and community elders. A total of seven discussants were participated in each FGD. A semi-structured open ended discussion guide was used to facilitate the discussion was used and all discussions were moderated by the principal investigator. Every discussion was recorded by Tape recorded and Camera also used to take the picture.

6. **Data quality management and analysis:**

6.1 Data quality management:

To ensure data quality, the principal investigator was trained all data collectors and supervisors for a day on the tools, over all objectives of the study and data collection procedures. During the data collection close up supervision was done to check for data completeness, consistency and to ensure the respect of ethical aspects. EPI-Info version 3.5.1 based templates, which are designed based on the coding done by the principal investigator, was used for quantitative data entry.

The collected and checked data was entered into computer by the principal investigator and 10% of the entered data were randomly selected and cross checked for reliability with respective original data. The entered data was cleaned through the phase by phase screening.

6.2 **Data analysis:** Pre-coded data were entered and cleaned using Epi-info Version 3.5.1 software and exported in to SPSS Version 17 for analysis.
Frequency, proportion, summary statistics were used to describe the study population. Odds ratio and 95% CI were computed to see the presence and degree of association between independent and dependent variables, p<0.05 considered as statistically significant and logistic regression was employed to control possible confounding factors.

7. Operational definitions

Gada system: refers to the generational class system that integrates age, generation and time among the Oromo community. They have full right, responsibility and accountability to lead the community, and do mobilization for HIV/AIDS prevention and control.

Community: refers to the people and their institutions working on HIV/AIDS prevention, care and support activities in Borena Zone. It includes Gada leaders, Key informant, and religious institution.

Prevention: It refers to reducing the risk of HIV/AIDS transmission. Preventive measures include awareness creation on HIV/AIDS through IEC, mainly focusing on changing people's practices, and behaviors, making VCT services accessible and available and fighting harmful cultural practices.

Cross-generational sex: When a woman age 15 to 24 has non-marital intercourse with a man who is 10 years older than her or greater

Tella: Locally brewed beer with an alcohol content of 5 to 10 percent

Consistent condom use: Utilization of a condom during every sexual encounter
Substances: For the purposes of this study, stimulants other than alcohol. These include *khate* (*Catha edulis*), *Shisha*, and *hashish* (marijuana).

Transactional sex: The exchange of sex for money or goods.

Araqe: Strong alcohol (about 75 percent) made by a local distillation system

Kebeles: are important political and administrative units with legal recognition and authority; responsible for the collection of rent and local taxes and registration house, residents, births, deaths and marriages. The establishment of local judicial tribunals, and provision of basic health, education and others social services in their neighborhoods

Woredas: are important political and administrative units with legal recognition and authority, including the delivery of services such as education and health, budget allocation, and management.

Regular sexual partner: includes a spouse or sex partner who has cohabited (lived-in) for twelve months or longer.

Risky sex: any unprotected sex (condom non-use) with any partner other than a regular partner.

Shisha: a mixture of ingredients that is smoked though a water-filled pipe. In this study Shisha included as a drug with the assumption that Shisha is smoked mixed with hashish.

8. Variables:
8.1 Dependent variables: The main dependant variables are knowledge and perception towards denounce and outlaw cultural health risk behavior to prevent HIV/AIDS

8.2 Independent variables: The major socio-demographic factors were age, sex, marital status, education and residence.

8.3 Ethical considerations
Ethical clearance for the study was obtained from the Institutional Review Board of the College of Health Sciences at Addis Ababa University. Permission was also secured from Oromia regional Health Bureau, and authorities from the respective of the study area. Verbal consent of
the study participants was obtained after explained about the purpose of the study. All the interviews with study subjects were made with strict privacy, confidentiality and anonymously. (See annex: 3)

8.4 Dissemination and Utilization of Results

Results of this study were disseminated to key informants (Gada leaders), District Health Office and District Administration, Zonal Health Department, Zone administration and Oromia regional health Bureau. The results were submitted to Addis Ababa University and efforts were made to publish the paper. The paper was presented in different workshops and conferences to inform the health program leaders on the field.

Study results were utilized by program managers and researchers. Health program managers were utilized the findings as per the recommendations to ensure the practice of Gada leader and cultural risky behaviors while researchers use the findings both as base line and as reference
9. Results

9.1 Socio-demographic characteristics of the study participants

Total 412, individuals, 154(37.4%) male and 258(62.6% female) respondents were included in the study with 206(50%) from community and the remaining 206(50%) during exit interview from Government health centers. Response rate was 97.4%. The remaining 11(2.7%) were missed. Age ranged from 15 – 49 years and 211(51.2%) were between 25 – 34 years old, with mean and median age of 31.7 and 30.5 years, respectively. More than half 61.2% (23.4 male, 46.8 female), rural pastoral respondents had no education. Out of the respondents 32.9% (18.3 male and 14.7 female) were attending primary school, 30.6% (20.6 male, 9.9 female) were attending secondary and above. 73.1% respondents (30.9 male and 50.5 female) have ever been married. Age at first marriage ranged 12 – 28 years with mean and median age of 18.9 and 18.0 years, respectively. Age at first marriage was below 20 years in 7.1% of male and 17.6% of rural pastoral girls were married by the age of 15 years. Out of those who had ever been married, 52.2% were currently married and have one life time sexual partners, whereas, the remaining 41.2% had more than two and above partners. About 36.9% respondents were not married, of
these 6.9% of students who were living in town have boy/girl friends and 29.9% were living without sexual partners. Wife sharing (Jala-Jalto), and others multiple sexual partners were perceived in 17.1% of traditional believers and polygamy marriage was reported by 31.9% of respondents in rural pastoral including both Muslim and traditional believers with some few Christian; 3.4% and 1.6% of respondent were divorced and widowed respectively.

14.3% of currently married women were reported that their husbands had been away from home for more than three months in past 12 months. Majority (45.9%) of respondents were traditional believers by religion followed by Muslim (42.5%), 8.5% Orthodox Christian, 3.9% from Catholic Church and 4.1% were protestants. The majority 96.4% of the respondents were Oromo, more than 50.5% respondents were pure pastoralist and Cattle breeding is a their dominating economy, only 5.8 % of respondents earned monthly income and affirmed median income was 385.75 Eth birr, There are limited agricultural and trade activities 4.6%.
Table 1: Socio-demographic characteristics of the study participants, (15-49 age groups) in Borena Zone, 2011

<table>
<thead>
<tr>
<th>Variables</th>
<th>Male No (%)</th>
<th>Female No (%)</th>
<th>Total No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>No (%)</td>
<td>No (%)</td>
<td>No (%)</td>
</tr>
<tr>
<td>Sex</td>
<td>Male and Female</td>
<td>154(37.4)</td>
<td>258(62.6)</td>
</tr>
<tr>
<td>Age ( in year)</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>15-24</td>
<td>34(8.3)</td>
<td>49(11.9)</td>
<td>83(21.1)</td>
</tr>
<tr>
<td>25-34</td>
<td>79(19.3)</td>
<td>132(32.3)</td>
<td>211(51.2)</td>
</tr>
<tr>
<td>35-44</td>
<td>23(5.6)</td>
<td>45(10.9)</td>
<td>68(16.5)</td>
</tr>
<tr>
<td>45-54</td>
<td>18(4.4)</td>
<td>32(7.6)</td>
<td>50(12.1)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>Oromo</td>
<td>78(18.9)</td>
<td>319(77.4)</td>
<td>397(96.6)</td>
</tr>
<tr>
<td>Tigre</td>
<td>1(0.2)</td>
<td>4(0.9)</td>
<td>6(1.5)</td>
</tr>
<tr>
<td>Amhara</td>
<td>2(0.4)</td>
<td>5(1.2)</td>
<td>8(1.9)</td>
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<tr>
<td>Others</td>
<td>3(0.9)</td>
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<td></td>
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<td>Religious</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
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<tr>
<td>Orthodox</td>
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<td>23(5.6)</td>
<td>35(8.5)</td>
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<td>Catholic</td>
<td>7(1.7)</td>
<td>9(2.2)</td>
<td>16(3.9)</td>
</tr>
<tr>
<td>Protestant</td>
<td>5(1.2)</td>
<td>12(2.9)</td>
<td>17(4.1)</td>
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<td>Muslim</td>
<td>63(15.3)</td>
<td>91(22.1)</td>
<td>154(37.4)</td>
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<tr>
<td>Traditional</td>
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<td>140(33.9)</td>
<td>190(46.1)</td>
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<td>Educational status</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
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<td>Illiterate</td>
<td>59(14.3)</td>
<td>193(46.8)</td>
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<td>Primary</td>
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<td>83(20.1)</td>
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<tr>
<td>Secondary and above</td>
<td>52 (12.6)</td>
<td>25 (6.1)</td>
<td>77(18.7)</td>
</tr>
<tr>
<td></td>
<td></td>
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### Occupation

<table>
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<tr>
<th>Occupation</th>
<th>Employed</th>
<th>Merchant</th>
<th>Student</th>
<th>Total</th>
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<td></td>
<td>18(4.4)</td>
<td>79(19.2)</td>
<td>12(2.9)</td>
<td>98(23.8)</td>
</tr>
<tr>
<td></td>
<td>79(19.2)</td>
<td>12(2.9)</td>
<td>98(23.8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12(2.9)</td>
<td>98(23.8)</td>
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<td></td>
<td>98(23.8)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Marital status

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<thead>
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<th>Marital status</th>
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<th>Married</th>
<th>Widowed</th>
<th>Divorced</th>
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<tr>
<td></td>
<td>51(12.4)</td>
<td>87(21.1)</td>
<td>2(0.4)</td>
<td>4(0.9)</td>
</tr>
<tr>
<td></td>
<td>87(21.1)</td>
<td>2(0.4)</td>
<td>4(0.9)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2(0.4)</td>
<td>4(0.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4(0.9)</td>
<td></td>
<td></td>
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</tbody>
</table>

### Income issues

<table>
<thead>
<tr>
<th>Income issues</th>
<th>211 – 900</th>
<th>1000 – 1500</th>
<th>No regular monthly income</th>
</tr>
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<tr>
<td></td>
<td>10(2.4)</td>
<td>8(1.9)</td>
<td>136(33.0)</td>
</tr>
<tr>
<td></td>
<td>6(1.5)</td>
<td>2(0.4)</td>
<td>250(60.7)</td>
</tr>
</tbody>
</table>

### Knowledge and perception of pastoral community to prevent HIV/AIDS and cultural health risky behavior with VCT up-take of respondents in Borena Zone

Almost all the respondents 97.4% (37.4 male, and 62.6 female) respondents have heard of HIV/AIDS and VCT service. Also, all the community perceptions towards testing are positive for self know status. Nearly, half 40.3% (15.3 male and 25.0 female) respondents noted that it is good to know one's sero-status. The most important reason given for wanting to be tested (49.5%) is that they would like to be sure of their doubts. However, only small proportion 40.3% (25.2% male and 15.0% female) respondents had undergone VCT services. Those, 40.3% respondents who had tested and have comprehensive knowledge stated that one could check his/her HIV status. The main mentioned reasons for low practice here 24.4% respondents were reported that VCT services are not available in their area and the knowledge they have and the information they receive is not enough to protect them. Many respondents identified as a source of information are unlikely (48.0% from health institution, 46.0% from mass media and 6.1% from Gada leaders) to provide them with right knowledge. Access to information varies by sex and residence. Rural residents 50.5% have less access to information than their urban 49.5% counterparts. Women 19.4% have less access to information than men 0.9%. There are high
61.2% illiteracy rate and low access to media; these people had not able to obtained correct and timely information. *While a number of information sources were mentioned, none of them are comprehensive and effective enough to reach all community members.* The majority of respondents, 50.5%, however, mentioned that people needed more information on HIV/AIDS. Asked about their sources of information for VCT services, it was clear that there is no systematic source of information on HIV/AIDS, which reaches most of the people in the community. For instance, proportions reporting any source of information ranged from, health institutions 48.0%) followed by media 46%, and Gada leaders 6.1%.

Regarding the availability of VCT only 49.5% (31.1 male and 18.9 female) were reported VCT services are the available in their areas. Overall, 40.3 % (25.2% male and 15.0% female) of study participants had comprehensive knowledge about VCT and 59.7 had poor knowledge and practices about VCT services. (See table 2).

Tab.2. *Knowledge, perception and practices of pastoral community to prevent HIV/AIDS and cultural health risky behavior with VCT up-take of respondents in Borena Zone, 2011*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Male No (%)</th>
<th>Female No (%)</th>
<th>Total No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heard of HIV/VCT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>412(97.4)</td>
<td>258(62.6)</td>
<td>412(97.4)</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>154(37.4)</td>
<td></td>
</tr>
<tr>
<td>Source of inform</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gada leaders</td>
<td>25(6.1)</td>
<td>10(2.4)</td>
<td>15(3.6)</td>
</tr>
<tr>
<td>Health providers</td>
<td>197(47.8)</td>
<td>164(39.8)</td>
<td>33(8.0)</td>
</tr>
<tr>
<td>Mass media</td>
<td>190(46.1)</td>
<td>84(20.4)</td>
<td>106(25.7)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>160(38.8)</td>
<td>62(15.0)</td>
<td>98(23.8)</td>
</tr>
<tr>
<td>No</td>
<td>252(61.2)</td>
<td>193(46.8)</td>
<td>59 (14.3)</td>
</tr>
<tr>
<td>Importance VCT</td>
<td>328</td>
<td>150(36.4)</td>
<td>178(43.2)</td>
</tr>
<tr>
<td>----------------</td>
<td>-----</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Yes</td>
<td>84</td>
<td>4 (0.9)</td>
<td>80 (19.4)</td>
</tr>
<tr>
<td>No</td>
<td>84</td>
<td>4 (0.9)</td>
<td>80 (19.4)</td>
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<table>
<thead>
<tr>
<th>VCT available</th>
<th>328</th>
<th>150(36.4)</th>
<th>178(43.2)</th>
<th>327(79.6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>84</td>
<td>4 (0.9)</td>
<td>80 (19.4)</td>
<td>84 (24.4)</td>
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<tr>
<td>No</td>
<td>84</td>
<td>4 (0.9)</td>
<td>80 (19.4)</td>
<td>84 (24.4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VCT practice</th>
<th>166</th>
<th>103 (25.0)</th>
<th>63 (15.3)</th>
<th>166 (40.3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>246</td>
<td>91 (22.1)</td>
<td>155 (37.6)</td>
<td>246 (59.7)</td>
</tr>
<tr>
<td>No</td>
<td>246</td>
<td>91 (22.1)</td>
<td>155 (37.6)</td>
<td>246 (59.7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Life style</th>
<th>208</th>
<th>79(19.2)</th>
<th>129(31.3)</th>
<th>208(50.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile pastoral</td>
<td>204</td>
<td>128(31.1)</td>
<td>78(18.9)</td>
<td>204(49.5)</td>
</tr>
<tr>
<td>Non-mobile Pasto</td>
<td>204</td>
<td>128(31.1)</td>
<td>78(18.9)</td>
<td>204(49.5)</td>
</tr>
</tbody>
</table>

### 9.4 Knowledge and perception of pastoral community to prevent HIV/AIDS and cultural health risky behavior with condom utilization, Borena Zone

As mentioned earlier 97.4% of the study participants have heard about condom utilization, of these 78.2% had sexual experienced, only 9.5% had comprehensive knowledge, 4.6 had poor knowledge, but had use condom while doing unfaithful sex. 13.1% had both poor knowledge and practices about condom uses. 29.4% of respondents had showed good knowledge but poor utilization about condom use. Totally, as respondents were reported higher proportion of male (14.1%) were practice condom than female (0%) counterpart. (See table-4).

There are different sources that people use to get information of condom. These include; health providers, family planning agents, anti-AIDS clubs, kebeles and woreda administration, schools, media (particularly the radio), religious institutions such as churches and mosques, NGOs, community meetings and social gatherings such as weddings and coffee ceremonies. Among these, the three most common sources used by pastoral area during study period were government health institutions 56.6%, private health institutions 35.2% and shops 8.3%. Regarding the availability of condom only 49.5% (31.1 male and 18.9 female) reported that condom is the available to their area. The main mentioned reason for knowledge and perception gap which were hindered condom utilization among community were mainly of cultural taboo or
misperception 26.1% (1.2 male and 24.8 female) had reported. In addition, lack of attitudinal change (lack of self confidence) 65.3%, inconsistence and inadequate of supply (unavailability) 55.5% (19.2 Male and 31.3 female) of condom were mentioned.

Table 3: Knowledge and perception of pastoral community to prevent HIV/AIDS and cultural health risky behavior with *condom utilization*, Borena Zone, 2011

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Male No (%)</th>
<th>Female No (%)</th>
<th>Total No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preven. Method</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi partners</td>
<td>84 (1.2)</td>
<td>150 (36.4)</td>
<td>178 (43.2)</td>
</tr>
<tr>
<td>VCT and condom</td>
<td>328</td>
<td>150 (36.4)</td>
<td>468 (11.2)</td>
</tr>
<tr>
<td>Condom available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>204</td>
<td>128 (31.1)</td>
<td>332 (84.1)</td>
</tr>
<tr>
<td>No</td>
<td>208</td>
<td>79 (19.2)</td>
<td>287 (75.9)</td>
</tr>
<tr>
<td>Source of condom</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>G.H. institute</td>
<td>233</td>
<td>46 (11.2)</td>
<td>279 (70.8)</td>
</tr>
<tr>
<td>P.H. institute</td>
<td>145</td>
<td>120 (29.1)</td>
<td>265 (66.2)</td>
</tr>
<tr>
<td>Shops</td>
<td>34</td>
<td>34 (8.3)</td>
<td>68 (17.0)</td>
</tr>
</tbody>
</table>
### 9.5 Association of cultural health risk sexual variables and perceived risk for HIV Borena Zone

Out of the 78.2% (25.2% male and 52.9% female) who ever had sexual intercourse prior to the study period, 27.0% was polygamy, 17.1% wife sharing, 18.9 boy/girl friends, 4.6% widow, 1.9% divorced. Of those who had multiple sexual partners 44.4%, only 18.9 % had VCT services, 14.1% had condom use and 4.8% respondents had VCT services more than one. Out of total study respondents, who have reported they ever had sex 11.5% were female and had their first sex before age of 15 years with elder men (unrelated age marriage). The age of women at first sex ranged 12 to 34 years making the mean and median age 19.9 and 18.6 years, respectively. Female respondents were younger than male respondents at their first sexual entry. 29.5% of male respondents had initiated sex by the age of 18; whereas, majority 63.9% of female respondents had nearly started at 15 years. Women were asked the age of their sexual partner during the first time they had married 52.2% of the study participants were reported that their sexual partners’ age was more than 10 to 40 years, only 20.9% respondents including divorced and widow inheritance were reported even if their sexual partners’ age marriage exceeding by 3
to 5 years they believed that they had no any complained yet regarding age equilibrium considering as they were peer. Still, the respondents were strongly argued that the age of marriage for women needs to less than her sexual male partners, but there is no logical reason for this. The main reasons for the first sexual initiation among women were the influence by religion and believe. The primarily traditional in this community was heavily in favors polygamy 27.0%, early unrelated age marriage 46.6% and others cultural taboos as opposed to other methods 21.1% especially condom use. This may be because traditional believers are support sex inside marriage for sake of getting many children, and at the same time, we must take into account that traditional believers allows for up to four or as maximum of his richness wives in polygamous marriage. The problem is that, it’s very doubtful to the point of certainty that all traditional believers are innocent save for within marriage. By the same measure, it is also Gada leader and his Cabinets to rely on all the five partner in a four wives polygamous marriage were not remain faithful to each other especially when as noted above, some partners live in the urban areas, leaving the spouse alone for significant periods of time. (See fig. 3).

Regarding the risk perceptions to HIV the majority of the respondents 40.0%were considering themselves to be at high risk of acquiring HIV infection.

Fig.3. Reason for adopting cultural health risk behaviors in Borena Pastoral Zone, May 01, 2011
The main reasons given were; their husband's had high sexual behavior that 40.0%, currently sexually active respondents admitted practicing sex with two or more sexual partners during their husbands stayed in the elsewhere with other wives. The proportion of multiple sexual relationships was more among the traditional believers 35.2% as compared to Muslims 23.5%. Of the 35.2% extramarital sex respondents were both from Muslim believers and traditional believers, 17.1% wives sharing were from traditional believers and 5.8% of the respondents who had premarital sex were Muslims and denied to use condoms by assumption that condom contains HIV virus and it's also cultural taboo to use it. Regarding cultural health risk practices 49.5% (33.3 male and 18.2 female) respondents were replied that, cultural health risk behavior such as polygamy, wife sharing, widow inheritance, rape and the like are common problems in our area which aggravated HIV/AIDS transmission and should be denounce and outlaw by Gada leaders and community as a whole. This comment was mainly forwarded by female respondents, whereas male respondents, particularly Gada leaders were not supported as this issues need cabinet’s decision such as large assembles like in “GUMI GAYO.” Yet 20.4%(0.4% male and 19.4% female) respondents were reported that cultural health risk behaviors was not exposed for HIV transmissions because it’s our culture that inherited from our ancestors from long time to now and no harmful. This implied that even if almost all 97.4% of respondents have heard what HIV, VCT and condom are, there were quit low comprehensive knowledge of them.

Fig.4. Association of cultural health risk sexual variables and perceived risk for HIV with VCT services practices, Borena Zone, 2010

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Male No (%)</th>
<th>Female No (%)</th>
<th>Total No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi sexual part.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>144(11.7)</td>
<td>96(23.3)</td>
<td>144(34.9)</td>
</tr>
<tr>
<td>No</td>
<td>178</td>
<td>178(43.2)</td>
<td>356(86.1)</td>
</tr>
<tr>
<td>Perceive risk HIV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>165(40.0)</td>
<td>128(31.1)</td>
<td>293(70.1)</td>
</tr>
<tr>
<td>No</td>
<td>247(59.9)</td>
<td>162(39.9)</td>
<td>409(29.9)</td>
</tr>
</tbody>
</table>
9.6 Socio-demographic determinants of knowledge, perception and practice on HIV/AIDS prevention

From the socio-demographic variables considered to be influenced knowledge and practice of Gada leaders on preventing HIV/AIDS and cultural health risk behaviors, age group 15 to 24 was 1.8 times more likely knowledgeable and practice to denounce cultural health risk behavior in respect to HIV transmission than rest study targets. [AOR (95%CI) = 1.8 (0.24-1.29)]. While those in age group 45-44 years were less likely knowledgeable and practice to condemn cultural health risk behavior than 25-34 years old. [Crude OR (95%CI) = 0.9 (0.55-2.50)]. Educated people were also 1.2 times more likely knowledgeable and practice to criticize cultural sexual behavior that exacerbates HIV/AIDS transmission than non-educated. [Crude OR (95%CI) = 1.2 (0.51 – 1.26)]. Sex and marital status were found to be significant associated with practice of Gada leaders so as to prevent HIV and cultural health risk behaviors in that those male individuals were 1.7 times more likely have more information (exposure) when compared with female counterpart. [AOR= (95%CI) = 1.7 (0.38- 0.98)]. (See table 8). The reason for this, majority of women has no right to attend meeting, workshop and training. Even, they only have right to attend health institution during sick care with her husband or close relative; otherwise she stayed at home for child care or
any other services as command by her husband. She had no reproductive right to get F/P or any other service without her husband good will. In terms of marriage, the married women were 2.2 times more likely knowledgeable and have information regarding HIV prevention and risk of cultural sexual behaviors as compared with unmarried one. [AOR(95%CI) = 2.2(0.28 - 0.86)] (table-8). Occupation, religions, ethnicity and income did not show statically significant difference (P-value >0.05) with perception of community to prevent HIV/AIDS and cultural health risk behavior in cross tabulation analysis and bivariate logistic regression analysis. (See table-5)

Table 5: Socio-demographic determinants of knowledge on HIV/AIDS prevention

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Knowledge on HIV prevention</th>
<th>Crude- OR 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-knowledgeable</td>
<td>Knowledgeable</td>
</tr>
<tr>
<td>1. Age (in year)</td>
<td>Non-knowledgeable</td>
<td>Knowledgeable</td>
</tr>
<tr>
<td>15-24</td>
<td>32</td>
<td>51</td>
</tr>
<tr>
<td>25-34</td>
<td>61</td>
<td>150</td>
</tr>
<tr>
<td>35-44</td>
<td>16</td>
<td>52</td>
</tr>
<tr>
<td>45-54</td>
<td>13</td>
<td>37</td>
</tr>
<tr>
<td>2. Sex</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td>56</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>98</td>
<td>192</td>
</tr>
<tr>
<td>3. Education</td>
<td>Literate</td>
<td>Illiterate</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>108</td>
<td>181</td>
</tr>
<tr>
<td>4. Marital status</td>
<td>Married</td>
<td>Non-married</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>201</td>
<td>89</td>
</tr>
</tbody>
</table>
5. Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Student</th>
<th>Employed</th>
<th>Merchant</th>
<th>Pastoral</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51</td>
<td>5</td>
<td>2</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>109</td>
<td>19</td>
<td>18</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>1.1(0.59 – 1.51)</td>
<td>1.8(0.17 – 1.72)</td>
<td>4.2(0.04 – 1.12)</td>
<td>1.0</td>
</tr>
</tbody>
</table>

6. Religion

<table>
<thead>
<tr>
<th>Religion</th>
<th>Traditional</th>
<th>Non-traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>130</td>
<td>160</td>
</tr>
<tr>
<td></td>
<td>1.2(0.53 – 1.31)</td>
<td>1.0</td>
</tr>
</tbody>
</table>

8. Income

<table>
<thead>
<tr>
<th>Income</th>
<th>[211 – 900]</th>
<th>[1000-1500]</th>
<th>No regular income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>117</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>270</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.58(0.59 – 5.6)</td>
<td>1.0</td>
<td></td>
</tr>
</tbody>
</table>

9.7 Cultural risk behavior towards knowledge and practices of Gada leaders on HIV/AIDS prevention with VCT service

From total respondents 70.1% have knowledge about HIV/AIDS and VCT services and it was found out that rural-pastoralist had 1.1 times more likely knowledgeable than urban-pastoralist. [Crude OR (95%CI) = 1.1(0.58 – 1.42)]. The reason for this might be, in Borena pastoral area the most available VCT service are mobile VCT services as compared with static VCT services and also two health extensions worker are assigned in each kebeles villages. 

Regarding the availability of VCT services 85.6% of respondents knew that VCT services were in their vicinity; those who knew VCT services were in their area were 2.3 times more likely tested than those who had not. [AOR= (95%CI) = 2.3(0.02 -0.93)]. Almost all respondents 97.4% respondents had heard of HIV/AIDS and VCT services. However, only40.2%, almost below the half of study participants had undergone VCT service and knew that one could be checks his/her HIV status; those individual who had tested were 1.2 times more likely knowledgeable than those who had not. [Crude OR= (95%CI) =1.2 (0.521.29]. It also was found out that, those individuals who had known cultural sexual risk practice paves away to HIV/AIDS transmission were 2.8 times more likely knowledgeable than those who had not. [AOR (95CI) = 2.8 (0.16 – 0.74)]. (Table 5). The study showed that some respondents (20.3%) still have had misconception about HIV route of transmissions, reporting that HIV is disease of urban and it’s not our culture to catch up with it. Of the total respondents, 58.7% perceived being at risk of getting infected with HIV, while 41.3% did not know about their risk of infection. On cross tabulation analysis, individuals
who had one lifetime sexual partners were 1.6 times more likely knowledgeable than those who had two or above. [AOR = (95%CI) = 1.6(0.36 – 1.13)]. Partners who had experienced wife sharing were less likely to know risk of HIV than those who had not had such experiences, [COR (95%CI) = 0.68(0.68 – 3.22)].

Table 6: Selected cultural sexual risk behavior towards knowledge and practices of Gada leaders on HIV/AIDS prevention with VCT service, Borena Pastoralist, 2010

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Knowledge on HIV prevention</th>
<th>Crude- OR 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-knowledgeable</td>
<td>Knowledgeable</td>
</tr>
<tr>
<td>Cultural sexual practice paves away for HIV transmission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>98</td>
<td>230</td>
</tr>
<tr>
<td>No</td>
<td>24</td>
<td>60</td>
</tr>
<tr>
<td>Life time sexual partners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>75</td>
<td>130</td>
</tr>
<tr>
<td>2 and &gt;</td>
<td>26</td>
<td>70</td>
</tr>
<tr>
<td>Single</td>
<td>21</td>
<td>90</td>
</tr>
<tr>
<td>Perceived risk of HIV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>37</td>
<td>128</td>
</tr>
<tr>
<td>No</td>
<td>85</td>
<td>162</td>
</tr>
<tr>
<td>Relationship with partners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse</td>
<td>85</td>
<td>194</td>
</tr>
<tr>
<td>Wife sharing</td>
<td>11</td>
<td>37</td>
</tr>
</tbody>
</table>
9.8 Selected knowledge and practices of Gada leaders towards Condom utilization in Borena Pastoral

Regarding cultural sexual risk behavior and condom utilization, out of the sexually experienced respondents nobody reported that they had used condom at the time they had sexual intercourse and only 18.0% of those have had multiple sexual intercourse during last time used condom. From those 31.9% polygamous and 17.1% wife shared (cultural sexual health practices), nobody were aware of themselves of being engaged in high risk practices for HIV infection. Therefore, it was found out that number of sexual partners and condom utilization had no significantly associated with self risk perception.

Table 7: Selected knowledge and practices of Gada leaders towards Condom utilization in Borena Pastoral, 2010

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Knowledge and practice on HIV prevention</th>
<th>Crude OR (95CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Knowledgeable</td>
<td>Knowledgeable</td>
</tr>
<tr>
<td>Knowledge about HIV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile-pastoral</td>
<td>64</td>
<td>144</td>
</tr>
<tr>
<td>Non-mobile pastoral</td>
<td>59</td>
<td>145</td>
</tr>
</tbody>
</table>

Knowledge about VCT

<table>
<thead>
<tr>
<th>VCT available</th>
<th>Yes</th>
<th>No</th>
<th>Crude OR (95CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>108</td>
<td>14</td>
<td>2.5(0.21 – 0.78)*</td>
</tr>
<tr>
<td></td>
<td>220</td>
<td>70</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Practice of VCT

<table>
<thead>
<tr>
<th>Practice of VCT</th>
<th>Yes</th>
<th>No</th>
<th>Crude OR (95CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>54</td>
<td>70</td>
<td>1.2(0.52 – 1.29)</td>
</tr>
<tr>
<td></td>
<td>112</td>
<td>176</td>
<td>1.0</td>
</tr>
<tr>
<td>Characteristics</td>
<td>Crude OR (95%CI)</td>
<td>Adjusted OR (95%CI)</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Model 1</td>
<td>Final model</td>
<td></td>
</tr>
</tbody>
</table>

### Model 1 (Socio-demographic variables)

1. Age: (15-24 Vs 45-54+)
   - Crude OR: 1.8(0.24 – 1.29)*
   - Adjusted OR: 1.2(0.63-1.02)*

2. Sex: (Male Vs Female +)
   - Crude OR: 1.7(0.38-0.98)*
   - Adjusted OR: 4.9(3.0-7.7)*

3. Marital status: (Married Vs non-married +)
   - Crude OR: 2.2(0.28-0.86)
   - Adjusted OR: 1.4(0.96-2.0)*

4. Perceived risk of HIV (No Vs Yes+)
   - Crude OR: 1.8(0.34 – 0.88)*
   - Adjusted OR: 1.8(1.2-2.8)*

5. VCT available (Yes Vs no+)
   - Crude OR: 2.5(0.21 – 0.78)*
   - Adjusted OR: 2.4(1.32-4.5)*

### Model 2 (Socio-demographic + cultural risk sexual history)

1. Life time sexual partner (Once Vs 2 and > +)
   - Crude OR: 1.6(0.36 – 1.13)*
   - Adjusted OR: 1.4(1.14-1.9)*

2. Relation with sex partners (Spouse Vs wife sharing+)
   - Crude OR: 1.5(0.30 – 1.47)*
   - Adjusted OR: 1.2(0.9-1.50)*

**N.B:**

Table 8: Summary of the reciprocal logistic regression analysis of the relative effect of socio-demographic and cultural risk sexual history factors on knowledge and practice of HIV/AIDS prevention.
- Only variables matched P-value < 0.3 were kept in the subsequent analysis
- Significant of P-value <0.05
- + is reference group

10. Summary of qualitative result:
A total of 5 focus group discussion FGDS and 48 individual in-depth interviews (IDI) were conducted in Gada villages and in the community with each discussion group having between 6 and 8 participants. Both within the community and Gada leader’s homogeneity of participants were kept assuming that diversity could inhibits free discussion and gender, age and position in respective community was used as selection factors. FGD with Gada leaders were excluded females and influential members of the community. The discussions lasted on average for 1 and half an hour’s in each sites. One moderator/recorder or note taker was used to collect full information from participants. Discussions were mainly focusing on each of the following points:

- Knowledge, perception and practice about HIV prevention in views of cultural health risk behavior
- Types of identified cultural sexual risk practice in the community that aggravate HIV/AIDS transmission
- Factors that influence role and perception of Gada leaders to denounce and outlaw of the cultural sexual behaviors so as to mitigate HIV/AIDS epidemic in the pastoral community

Knowledge, perception and practices about HIV/AIDS preventions and Cultural health risk behaviors written below:

All FGDs discussants and individuals interviewees have heard what HIV was, how it could be transmitted and how it could be prevented, however, majority of pastoral community have
problems with putting into practice what they know and as a result the desired attitudinal and behavioral change communications are yet not reached.

Results from FGD indicates that knowledge and perception of pastoral community about HIV/AIDS prevention looks to have improved over time; but, still many significant cultural sexual risk practices and misperception that HIV is disease of urban are remain widespread in the pastoral community with low VCT service up take and condom utilization both in Gada leaders and community as a whole.

Majority of respondents stated that, in Borena community wife-sharing, polygamy and widow inheritance had been considered as better cultural activities.

Most discussants indicated that there is quit poor knowledge and practices of condom utilization in pastoral villages and the main mentioned reason for this was socio-cultural factors such as polygamy, wife sharing, widow inheritance and others which were hindered condom uses and VCT up-take among community. Majority of the Gada leaders and cabinets indicated that they never used the condom because it is not their culture and also there is suspicion that “condoms prevent reproduction or make barrenness and also have HIV virus and HIV has increased since their introduction” rather they have actively replied that one to one sexual partners relationships and abstain are best methods than condom use.

FGD showed that majority of Gada leaders does not perceive that their traditional practices are creating vulnerabilities to HIV transmission. There is thus limited perception of risk within extra-marital relationships (jala jalto), widow inheritance or other practices that are endorsed. They stated that unmatched age marriage or early marriage and widow inheritance without VCT check up and condom use are common adopted culture.

Let us hear from their words that most of FGDs both Gada leaders and community said during discussions:

As most of them stated, in Borena society for long time lover-mistress (wife-sharing) and widow inheritance (diseased brother) had been considered as better cultural activities. For instance; in case of wife-sharing, if the social father is weak (lafà) and the biological father strong (brave), Son would have get the chance of being strong to inherit behavior of biological father (Abera).
In addition to this, previously, widow inheritance (diseased brother) is common in Borena culture but recently its reduced from time to time and this change might be occur due to continuous provision of training. According to respondents the mainly reason for they practices widow-inheritance to protect lineage of already died her husband in his own family. Otherwise, she will be escaped from this blood connected decent. In other words in order to continuous the relationship between their respective groups that was initiated in the original marriage (dara-dabarsu). They believed that VCT services are necessary before widow inheritance system was carried out because the status of diseased husband is unknown.

Similarly, their perspective to polygamy marriage is very important especially, when they first married wife had been sterile (barren) or when she has same weakness (not muyaten yā) and also if there is disagreement between them due to dispute because sent to initial wife’s side family were cultural prohibited.

The other respondent said that widow is a cultural adopted activity and has its own advantage such as:

For preventing the disconnection between linkages in case of original decent systems that may be affect the order of the inheritance of economy. In case of negative side this inheritance plays great role in rapidly prevalence of HIV/AIDS and making sexual relationship with brother’s wife is ashamed or new encounter act for many persons. Wife-sharing (Jala-jalto) is not a Borena culture but the romantic feeling (act) that is people voluntary directed by their own interest so that no cultural imposed or enforcement on the condition that determine whether you have lover or not. He said, I have not taken the VCT services and also will not have interest to take it rather I prefer to be faithful (one-to-one) life. Although I have not wanted, the VCT services have its own advantages; for example, unless you don’t know yourself it’s impossible to find solution of the problem (disease) if any. I was not used to the condom and I would have not used it. Until I was married I have not the lover because my attitude was already changed due to provision of continuous training program which have been undertaking in different social setting.

The other respondent also stated that having a lover-mistress is not cultural defined as a formal action but its practices have been ongoing activity through throughout Borena society. Moreover, the main dangerous of lover-mistress it’s open the ways for the rapidly transmission of the HIV.
Widow-inheritance is also another harmful traditional practice that facilitates the condition for the prevalence of the HIV/AIDS because the VCT is not cultural adopted. Therefore, VCT should be involved as the alternative before inheritance occurs. He underlined that I am not appreciate the goodness of using condom but the suffer effect of the illness that I informed, enforced me to use it in the future. Polygamy marriage produced many numbers of families that usually considered as economical value as for instance if the persons have many cattle's, there are need for many wife and children so as to take care after his richness.

The other respondents said that I have a lover-mistress and also my wife has another lover. One wife is not enough for my sexual interests so I prefer to have another additional person with my husband. He also supports me economically, besides my wife. However, such chains of sexual activity are aggravating situation for the transmission of HIV/AIDS. Teaching and training about HIV/AIDS has been scored many years but still no more change has been observed. VCT is better in order to prove the doubt which worse our mind. Although the widow- inheritance has been deeply rooted in the community social setting it has severe problems for the transmission of HIV/AIDS. Other respondent explains that HIV can be transmitted in many ways such as sharing of Sharpe material like blade, practices of wife-sharing, widow- inheritance. Those individuals who do not leave (stop) the practices of lover-misters; which does not bring any benefit for them but negative effect. VCT services were not more likely available in our area and also the culture of using condom has been rarely assimilated. Polygamy marriage had been added the variety thing to the people such as risk of HIV/AIDS, economic instability. I think unless providing continuous education and training about effect of HIV, our community would be exposed to the high risk like that occurs in previous Ruanda society.

The other respondent also explain that, previously we were very interested to have wife-sharing but after we gain knowledge and variety of knowledge and variety of training about HIV/AIDS we are afraid and it created feeling of fear in our mind. However, it's difficult to say we are completely stopped to practices the cohabitation of wife-sharing. It is not our culture and it's bringing the risk rather than merit. Using condoms should be taken as another option in order to protect HIV, but regarding VCT service I was not get the services but it should be made in future. Widow-inheritance is important for the maintenance of the linkage with initial family of husband and passes the name of died husband by making him as a social father of children born
after his death and also protect the inheritance right of the family. Marriages of two or more women are not cultural oriented habit but its romantic act like that of wife-sharing but in case of polygamy richest people are used to married many women as they will be taken care for their animals which are always unrelated age marriage of that 60 years and above aged men used to married 15 and even below that age groups without VCT services that contribute to the prevalence of HIV/AIDS.

The other respondents also describes that still, majority of the Borena society has not sense of feeling afraid for the suffer effects of HIV/AIDS and presence of wife-sharing are also facilitate for transmission of the such disease. I was took VCT services but I am not want to use condoms because it is prevent the fecundity (birth) of women. Polygamy marriage is unnecessary cultural activity although it is still practice by variety party of the society.

In contrast, other respondents explains some party of society were already given-up to practices cohabitation of wife-sharing (Jala-jalto) even though the activity can be continued by another segement of the community. Generally, the action is not relevant for era of HIV/AIDS. I am familiar using condom, now I have it in my home. VCT services are very important but unfortunately, I was not did blood test. Widow-inheritance is one of the harmful traditional practices that imposed frustration in the society due to fear of HIV/AIDS because VCT services which take place during pre-marriage were hardly available in the area. Polygamy marriage is not necessary unless it’s balanced with economy of that individual.

The other respondent finalized that having sex with one another's wife is culturally adopted by Borena (Borena aada wara wali dhaqa), but they are apologize the husband for death penalty after act were committed. Why?

This indicates that socially, the act has been considered as deviant. Beginning from Boru Madha, Gada system, the provision of different teaching and training programs has been continuous but it does not were likely change has been observed. Widow-inheritance is not good cultural activity is more likely difficult, if they give up of the activity. So, takining VCT is necessary.
10.1- In-depth interview (IDI)

In-depth interviews were undergone with local community leaders at different levels, Key informants and ordinary community members. The in-depth interviews were guided by semi-structured open-ended (7 questions) with 48 people and each interviewer was assumed to be last within 40—60 minutes. A total of 48 in-depth interviews were conducted. 26 interviewees were selected from, woreda and kebeles administration and women's affairs offices of Woredas.

12 informants came from Gada villages and 10 from religious leaders and influential community elders and leaders of community associations.

To summarize, the findings of FGDs and IDIs clearly indicates that almost all respondents of study target both Gada leaders and community members heard what HIV was, how it could be transmitted and how it could be prevented, however, most of the Gada leaders and community have problems with putting into practice what they know and as a result the desired attitudinal and behavioral change communications are yet not reached. This point was consistently raised and discussed in almost all FGDs and IDIs. The respondents described that there were good social mobilization, discussion and active community conversion (CC) and support from government side and due to this the knowledge and practice of HIV prevention has been increased from time to time, but the intervention activities is collapsed nowadays in pastoralist area. Because of this reasons and others sexual risk behavior in the community, there is a gap between knowledge and behavioral change and as a result there is continuing spread of HIV/AIDS epidemic in rural pastoral community and also still many significant cultural sexual risk practices remain widespread in the pastoral community. When the adequacy and comprehensiveness of knowledge of HIV transmission compared with the widespread cultural health risk practice about HIV/AIDS it is hard to summarize that the existing knowledge and practice is adequate to bring out the desired behavioral change. Even though, knowledge on HIV/AIDS transmission and prevention looks to have improved over time among Gada leaders and general community. The mentioned common incorrect believes regarding cultural sexual health risk practice existed among the targeted Gada leaders and community as a whole written below: majority of respondents stated that, in Borena community wife-sharing, polygamy and widow inheritance had been considered as better cultural activities. For instance; in case of wife-
sharing, if the social father is weak and the biological father strong, Son would have get the chance of being strong to inherit behavior of biological father. So, this must be continuing as it, so far there no risk for us. Widow inheritance must be continuing mainly because, it has benefit culturally to protect lineage (his children and wealth) of already died her husband in his own family. Otherwise, she will be escaped from this blood connected decent. Similarly, their perspective to polygamy marriage is very important especially, when they first married wife had been sterile (barren) or when she has same weakness (not muyatenya) and also if there is disagreement between them chasing first wife without property sharing is culturally supportable. Also, most of Gada leaders stated that they didn’t use the condom and have no interest to use too because it prevent pregnancy (create barrenness) which is culturally bad, and also most them didn’t undergo VCT services because of fear of shame and cultural taboo.

10.2 Discussions

The study has tried to assess the knowledge and perception of community on preventing HIV transmission and cultural sexual behavior among VCT clients of age group 15 to 49 years in Borena pastoralist. The study indicated that 26.9% of women age 15-49 have never been married of this 12.4% and 14.6% were male and female respectively. Also 68.2% respondents were married of these, 21.1% male, 47.0% respondents were female. 3.4% divorced, and 1.6% was widowed. Comparing with men the proportion of women have been married is considerably high (47.0%). The main reason here is due to polygamy that man can be married as many as his richness (cultural taboo). This finding is almost similar with when compared the DHS 2005 report in Ethiopia (4).

The average age of marriage for men when they are age 20 or old whereas for women 15 and mean and median age of marriage is 18.9 and 18.0 respectively. Almost all currently married women 55.4% respondents reported that, they had no experienced sexual intercourse before marriage. This implied that, theoretically, Borena girl who had experienced sex before marriage will socially, be discouraged from society and chased. This also supported by results from FGDs. As this study showed, unmatched age marriage or early marriage in Borena community, a wealthy man, a man with too many heads of cattle, is expected to re-marry immediately after the
death of his wife or if she is barren or incase of quarrel without VCT check up and condom use. An old person who fails to get a baby boy out of wedlock tends to re-marry another girl to try his chance gratify her sexual desires. This finding is similar from other study (5, 11).

The study revealed that 78.2% respondents had sexual experienced before study periods and only 14.1% had used condom while doing unfaithful sexual intercourse with multiple partners.

The three most common sources of condoms were government health institutions 233(56.6%), private health institutions 145(35.2%) and shops 34(8.3%). The main mentioned reason for this was knowledge and practice gap on cultural taboo which was hindered condom uses among community. It indicated that there is quit poor knowledge and practices of condom utilization in pastoral villages. It also found out that 242(58.7%) of respondents were received risk of HIV because of these cultural taboo. Among respondents who perceive risk of HIV infection only 14.6% was used condom. This is different with other studies in Ethiopia (4) and elsewhere pastoral in Africa like Kenya and Tanzania. It identified that cultural sexual practices among the pastoral has been cited as the leading fuel in accelerating HIV infection in pastoral area. In particular, the wife sharing 17.1%, others like widow inheritance 7.1%) and polygamy 27.0% are common. The study showed that, there are limited knowledge and practice gaps about the cultural sexual behavior and their contribution on spread of HIV/AIDS, particularly for rural pastoral community. This finding is similar to the study conducted in Oromia and SNNPR that showed, most people have only limited knowledge and sometimes wrong ideas about HIV/AIDS. It showed that knowledge on cultural sexual practices that enhance the spread of HIV/AIDS, wife sharing %, 17.1% polygamy 28.5%, and widow inheritance 7.1% (5, 9).

In this study, it was found that 62.6% of women 15 to 49 years and 37.4% of men 15 to 49 years have heard about HIV, which against the national average of 90% of women 15 to 49 years and 97% of men 15 to 49 year have heard about HIV/AIDS as year 2005(4, 5, 9). As we see, this figure is substantial low when compared to DHS 2005 report in Ethiopia and BSS Ethiopia 2005, study among pastoralist 87.3 of male and 78.0% of female participants had heard of HIV/AIDS(9). However, as DHS 5005 reported, comprehensive knowledge of HIV/AIDS in Ethiopia is low. It indicates that women and men aged 15 – 49 years have comprehensive knowledge of 15.8% and 28.7% respectively (6). The reason for Gada leaders in general and pastoral community in particular standing at low level of knowledge and more vulnerable to the
HIV/AIDS infections are due to cultural taboos and mobility. Their access to social services and information is very limited. Furthermore, in pastoral community, multiple sexual relationships are more institutionalised compared with sedentary communities.

Community does not perceive that their traditional practices are creating vulnerabilities to HIV transmission. There is thus limited perception of risk within extra-marital relationships (*jala jalto*), widow inheritance or other practices that are endorsed. In this study the majority of the respondents (14.3%) was male and found to be in the age 20 to 29 years and 30.8% respondents were female in same age groups. The reason for this, the majority of rural women respondents were spent their life time in home than male because all activities in home like cooking, child care and others undertaken by female and also men do not want their wives to work outside of their homes. This finding is also similar with study conducted in pastoral community which stated; about 58% women reported that most men tell their wives that they would cover all the family needs, which renders their work unnecessary and also results from qualitative study was highly support it. 38% maintained that women are expected to take care of the home and children. As women are part and parcel of the culture, they too, hold similar views with men. For instance, about 55% of the respondents reported that the women would not do anything, if their husbands prohibited them from working. Most women are not allowed by their husband, or cultural, to take up any job outside their households, which could make them economically independent (5, 9, 11). This study also showed that the information center for HIV preventions such as health institutions 48.0%, media channels 46.0% and Gada leaders 6.1% which are markedly different. HIV awareness creation by Gada leaders about transmission route and prevention ways and information through it quit low. This figures is considerable high when compare with similar study in Oromia and SNNPR pastoral –HIV/AIDS and Gender in Ethiopia, 2004” Gada leader(0%), health providers30.0%, mass media 36.0%(9). This might be due to access improvement like a health post per each kebeles with assigned 2 health extension of rural community and increment of health infrastructure as a whole. However, the proportion % of Gada leaders (6.1%) and mass media in Mobil-pastoral community needs to be improved. Because in Borena community any decisions which decided by Gada leader must accepted by community members without question. In Borena the –*Aba Gada*” is the head of the Gada system, which is the elaborate and democratic social system that Ethiopia offers. Gada leaders are elected every eight years and they make major decisions in a congress called –*Gumi-Eldelu*”
and “Gumi-Gayo”. The community automatically accepts what is decided in the both “Gumi-Eldelu” and” Gumi- Gayo”.

Anybody who refuses to accept the decisions will be punished by one vote, so working with this institutionalized body on HIV prevention is very crucial.

Regarding mass media majority of respondents, 86.4%, still needs to be cover by it to be alleviated HIV/AIDS pandamicity. Therefore, this study indicated that access to information varies by institutions, sectors, sex and residence. Rural residents have less access to information than their urban counterpart. Women have less access to information than men and mass media needs to improve so as to mitigate HIV transmission. The study showed that more than half (62.1%) of respondents were illiterate among this 46.8% were female, primary education 20.1% of this 11.2% male, 8.9 female, secondary education and above 18.7% of those 12.6 male and 6.1% female. From finding one can easily understand that, the educational attainment of the respondents particularly of female 8.9% of primary and 6.1% of secondary are quite low. This has great influence on HIV/AIDS prevention. The finding is also similar with study conducted in Oromia and SNNPR pastoral area in 2004, Gender and HIV/AIDS in Ethiopia that about 66% of the respondents reported that they had no formal education, while 25% had primary education and the illiterate was highest in Hamer (96.5%) and Yabelo (91.2%). There was no respondent with education above secondary school in both Woredas in 2004. The average number of school years completed for the sample is 2.3. Males report higher levels of education than females. For instance, while about 56% of males reported no education, about 75% of the females reported the same. Similarly, while about 14% of the males reported having secondary education or higher, only 6% of the females reported the same (9). As revealed in this study, the influence of religious beliefs is seen, the predominantly traditional in this community was heavily in favors polygamy 18.4%, wife sharing 6.3% and others cultural taboos as opposed to other methods, especially condom use. One of reasons were for an old man marrying a young girl, because old man who cannot satisfy the sexual need of his young wife could implicitly or explicitly agree to his wife's establishing extramarital sexual partnership with a virile young man. This practice, therefore, necessitates the existence of Jala-Jalto relationship, often, for the sake of the women who might demand extramarital sexual partner to gratify her sexual desires. Wealthy men and Gada Councilors also tend to practice polygamy for the sake of having many children or possibly for
some other reasons. An aged but wealthy Borena could marry a young girl if he believes that he is still virile. Polygamy can also be practiced if the person in wedlock fails to get a son.

For a Borena pastoral community what is important is to get a son from wedlock. It does not matter even if the biological father is an extramarital male lover. This is shown in a popular saying, ‒God, give me a legitimate son even if it is from a different biological father.‖ The polygamous elderly man could explicitly or implicitly approve his wife‘s extramarital sexual relationship. In the era of HIV/AIDS, the young lady could contract HIV infection from the virile young man. Such might be the risk of HIV infection and STDs of an aged man and his old first wife. In addition, traditional believers and Muslim are support sex inside marriage for sake of getting many children, and at the same time, we must take into account that both traditional believers and Muslim allow for up to four or as maximum of his richness wives in polygamous marriage. The problem is that it’s very doubtful to the point of certainty that all traditional believers and Muslims are innocent save for within marriage. By the same measure, are the one partners in a four wife polygamous marriage will remain faithful to each other especially when as noted above, some partners live in the urban areas, leaving the spouse alone for significant periods of time is question? This is not in line with others studies finding (5, 9), that Polygamy 47.6%, wife sharing 9.7% and widow inheritance 41.7%, Muslims in Alaba, Gurage, Fentele (Etu) and Oromo Hararghe practice polygamy explicitly). Islamic communities maintain that their religion allows them to marry up to four wives. In Kereyou, even the youngest man in the community has a minimum of two wives. As soon as his first wife is pregnant, he looks for another wife. A man, as long as he can afford to pay the bride price, can marry as many women as he wants. There are many reasons given for polygamy, including people‘s desire to increase the number of their descendants and making sure that all women have husbands, given that many men die during tribal conflicts. Although the Ethiopian Orthodox Church preaches monogamy, in rural communities Christians also practice polygamous marriage openly (9). One of the practices that enhance polygamous marriage is the marrying of widows. Warsa is exercised widely in Oromia and SNNPR. It is the inheritance of a widow by a younger brother or relative, and sometimes the father of the deceased man.

The aim is mostly to protect the property and children of the deceased man from being misused or abused by the next husband of the widow.
Hiricho and Rege are two forms of wife inheritance in Alaba. Hircho is when a younger brother of the deceased husband inherits the widow of his brother.

Actually a younger brother occasionally makes love to his brother’s wife even when he is alive. The woman does not refuse and the husband does not get angry. Rege is also wife inheritance on the basis of blood relation with the deceased husband, not a brother. In Warsa the woman's consent is not required, as it is taken for granted. If she refuses to marry, she gets kicked out of the house empty-handed. Older women are usually not inherited sexually, but they are not allowed to marry any other man. Extra-marital relationships are practiced in both Christian and Islamic communities, although theoretically sex before marriage and outside marriage is forbidden. Moreover, once married, faithfulness is expected. However, there are deviations from these standards. These deviations are determined by existing cultural norms and values. Muslims practice extramarital sex in hiding, whereas, Christian communities may practice extramarital sex openly or in hiding in the form of washman (lover). In some communities, extramarital relations are widely excised and explicitly or implicitly sanctioned socially. Among the Borena of Yabelo and the Kereyu of Fentele, it is acceptable for a man to ask for sex from another man’s wife, and normally she agrees. In this relationship, the married man is called the jala (man lover) while his partner is called the jalto (woman lover). Both legal spouses of jala and jalto are not only aware of, but also tolerate this relationship (5, 9). In this study, 70.4% of the respondents had good knowledge towards VCT services (positive thinking). However, their attitude’s and practice’s is quite low 29.6% towards HIV test. Among total respondents, 40.3% had tested and knowledge that one could check his/her HIV status. This figure is reasonably high when compare with DHS report in Ethiopia (4), but in line with study conducted in Oromia and SNNPR pastoral, Gender and HIV in Ethiopia which is wanted to be tested 70.6%( 9). The reason may be because of access improvement to VCT services in health facilities. Regarding the availability of VCT, 353(85.7%) knew about the availability of VCT services in their area. Overall, 290(70.4%) of study participants had good knowledge about VCT and 122(29.6%) had poor knowledge about VCT services.
Also, (97.4%) of respondents have heard about the importance of the VCT and the main source of information were health institutions 48.0% followed by Mass media 25 46.0%, and Gada leaders 6.1%. This is consistent with other research findings. However, these high percentages of willingness to take the VCT service by the study participants seem different from actual practice. This might be due to less mobilization activity, less attitudinal change, fear of testing and its consequences. The Majority preferred static voluntary basis test rather than Mobil basis which is not as such confidential. Health workers particularly, health extensions were main source for information. Regarding the knowledge and practice related to VCT, 290 (70.4%) of respondents were knowledgeable and had shown statically significant association with VCT users. This supported by the assumption that VCT users could have more exposure /information regarding HIV before they come to VCT centers. This is also supports the research findings from study in Kenya and in Mersa, Ethiopia. This again indicates the information to be disseminated through health education and continuous mass media activity is important. Regarding cultural risk perception, the study showed statistically significant difference between VCT users and non-users. However, only 42.1% of the study participant had perceived themselves to be at risk and it is much lower than the study finding from Bahir Dar (50.2%). The gap between actual and perceived risk is the major challenge in HIV prevention intervention.

In general, the study finding from Qualitative analysis such from FGDs and IDI were similar with Quantitative results about knowledge and perception of community on HIV/AIDS prevention and cultural health risk behavior.

11. Strength and Limitation of Study:

11.1 Strength:

-The study adopts standard questionnaire EDHS with rational adjustment to convene limited stipulations.

-Using both quantitative and qualitative methods of data collection with contextually adopted standardized tools, high response rate and its possible contribution as baseline information for future studies are some of the strengths and exhaustive preparation and day- to-day direction were conducted for data collectors and supervisors.
11.2 Limitation of Study

- Some respondents were not communicating explicitly to insightful and confidential questions.

- There is also recall bias due to sensitive and personal question related to sexuality, lack of similar study to compare and discuss some of the findings, shortage of reference resources and shortage of budget were identified limitation.

- Distance of villages from one settlement to others were considered as a challenges and there were information bias to get equal proportion of sample size of male and female from framing unit. Because majority of men busy to catch, there are running after their cattle for searching grasses and water to feed them and only women were avail at home.
12. CONCLUSIONS AND RECOMMENDATIONS:

12.1 CONCLUSIONS:
This study has clearly confirmed the tough association between practice and perception of pastoral community on cultural health risk and HIV/AIDS transmission. Based on the findings of this study, the following conclusions were derived.

The study showed that, even if, all respondents of study target both Gada leaders and community members heard what HIV was, how it could be transmitted and how it could be prevented, however, majority of pastoral community have problems with putting into practice what they know and as a result the desired attitudinal and behavioral change communications are yet not reached. It found out that, the knowledge and perception of pastoral community about HIV/AIDS prevention looks to have improved over time, but, still many significant cultural sexual risk practices and misperception that HIV is disease of urban, remain widespread in the pastoral community with low VCT service up take and condom utilization both in Gada leaders and community as a whole. Unmatched age marriage or early marriage and widow inheritance without VCT check up and condom use are common problems.

The study also showed that community perceptions regarding HIV and cultural risk behaviors are relatively low because of low media coverage, low interventions programs and low VCT site expansions. Pastoral community also interested in using VCT services but there was low practice in VCT up-takes.

Young age groups, sex, marital status, perceived risk of HIV, life time sexual partners and VCT availability showed statically significant associations with knowledge to denounce cultural health risk practices; so covering older age groups, females, non-married groups, those who perceived risk, non-available VCT areas, polygamous, wife sharer, widow inheritance and multisexual partners with effective that based on local needs and local language to bring effective prevention. It also found out that reasons for VCT up take among VCT clients were mainly to know self. The majority of pastoral community preferred static HIV testing types of VCT service than mobile HIV testing because of its ad hico nature. Majority of rural women respondents were spent their life time in home than male because all activities in home like cooking, child care and others undertaken by female because men do not allow them to work outside of their homes.
There are still misperceptions about cultural health risk behavior not paving the ways for HIV transmissions and also misperception about VCT uptake and condom utilization thought that condom itself contains HIV virus and also condom makes oneself barren. Therefore, there low VCT uptake and condom utilization.

Low risk perceptions of traditional practices are not exposing susceptibility to HIV transmission, limited perception of risk within polygamy, wife sharing, widow inheritance and others sexual practices found to be the main barriers for VCT uptake and condom utilization.

13. Recommendation

Based on the findings and conclusions of this survey, both short and long-term recommendation has been advanced;

**Short-term recommendations:**

In Borena pastoral community, Gada leaders are highly respected by people and have a responsibility to denounce and outlaw any harmful cultural sexual practices to deciding no on occasion of Gada assemble like —Gumi Gayo and Dibe Eldalu” and to assist community by giving them regular set of messages, regarding HIV, VCT and cultural health risk behavior. Therefore, encouraging these bodies and building their capacity is important for effective interventions.

- Strengthening IEC/BCC and mass media information should influence by providing accurate and consistent information through proper local language on HIV prevention to address barriers to testing and condom utilization.

- Recent information, education and communication activities through local language by Gada leaders, health extension workers and others concerned bodies are needed to address misperceptions regarding cultural health risk behaviors as one of aggravating factors for HIV transmissions.

- IEC/BCC should be strengthened to tackle low knowledge about VCT, and condoms, negative perception about VCT, condoms using Gada leaders, health extensions workers, media through local language and local resources to promote them and also to penetrate cultural taboo. Pre-
widow inheritance, pre-wife sharing and pre-marital HIV test needs to be encouraged through Gada leaders participating all community and all possible stallholders needs to be encouraged.

- Efforts needs to be coordinated from Government side for realizing people to perceive their risk behaviors and to up-take VCT services and condom utilization

- Encourage the existing health institutions and health providers, particularly health extensions to strength VCT services and to give priority to better address the need of community that could motivate for VCT up-take.

- Women empowerment through decreasing the gap in education, providing information and cultural impacts that women only have responsibility to take care of house and staying many time at home so as to enable them to control over their decision on accessing service utilization.

- Fighting cultural health risk behaviors that rich men re-marry as much as his richness without any pre-test.

**ii. Long-term action:**

- Effective and cultural sensitive IEC/BCC interventions on HIV that promote HIV testing and tackling cultural sexual behaviors must be developed.

- Policy package for HIV prevention should be developed for pastoral community at country levels.

- Others research study assessing the implication of socio-cultural perception in the context of HIV testing among pastoral community is needed.
14. Reference


Annex 1: Questionnaires both in English and Afan Oromo versions

Part one- Information

HOUSEHOLD NUMBER _____ REGION ______ Zone ______ Woredas ______ Kebeles ______

Respond..... Not respond........Family Size...........

**Title:** Assessment of the knowledge and perception of the community about HIV/AIDS prevention and cultural risky behaviours among reproductive age group in Borena Zone

<table>
<thead>
<tr>
<th>No.</th>
<th>Questions</th>
<th>Coding category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Socio-demographic characteristics of respondents</td>
<td></td>
</tr>
<tr>
<td>01</td>
<td>Age</td>
<td>In years------</td>
</tr>
<tr>
<td>02</td>
<td><strong>Sex</strong></td>
<td>1. Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Female</td>
</tr>
<tr>
<td>03</td>
<td>Religion</td>
<td>1. Orthodox</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Catholic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Protestant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Muslim</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Traditional</td>
</tr>
<tr>
<td>04</td>
<td>Ethnicity</td>
<td>Oromo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tigre</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amhara</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others</td>
</tr>
<tr>
<td>05</td>
<td>Education</td>
<td>Illiterate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secondary and above</td>
</tr>
<tr>
<td>06</td>
<td>Occupation</td>
<td>Employed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pastoral</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Merchant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student</td>
</tr>
<tr>
<td>07</td>
<td>Marital Status</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Married</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Widow</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Divorced</td>
</tr>
<tr>
<td>08</td>
<td>Income</td>
<td>211 – 900</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 – 1500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No regular monthly income</td>
</tr>
<tr>
<td>09</td>
<td>Can reduce HIV having one sex partner</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Don’t Know</td>
</tr>
</tbody>
</table>
| 010 | Life style | Mobile pastoral  
|     |           | Non-mobile Pastoral |
| 011 | Multi sexual partners | Yes  
|     |           | No |
| 012 | Perceive risk of HIV | Yes  
|     |           | No |
| 013 | Life time sex | One  
|     |           | 2 and >  
|     |           | No |
| 014 | Your relationship | Spouse  
|     |           | Living together  
|     |           | Boy/girl friend  
|     |           | Others |
| 015 | Ever practice sex | Yes  
|     |           | No  
|     |           | Boy/girl friend  
|     |           | Others |
| 016 | Living arrangement | Yes  
|     |           | No |
| 017 | Wife sharing | Yes  
|     |           | No |
| 018 | Polygamy | One  
|     |           | 2 and above  
|     |           | Single/no |
| 019 | how long you have had sex with person | Days  
|     |           | Weeks  
|     |           | Months |
| 020 | Apart from this, sex with any other person in the last 12 months | Yes  
|     |           | No |
| 021 | Total, how many different people have you had sexual intercourse the last 12 months? | --------  
|     |           | Don’t know |
| 022 | what month and year did you start living with your husband/partner | --------  
<p>|     |           | Don’t know |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>How old were you when you lived with him?</td>
<td>Don't know</td>
</tr>
<tr>
<td>Year you had sexual for the first time</td>
<td>Don't know</td>
</tr>
<tr>
<td>You had sexual intercourse condom used?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>When was the last time you had sexual intercourse?</td>
<td>Days ago, Weeks ago, Months ago, Years ago</td>
</tr>
<tr>
<td>When was the last time you had sexual intercourse with this other person?</td>
<td>Days ago, Weeks ago, Months ago, No</td>
</tr>
<tr>
<td>Last time had sex with other person condom used</td>
<td>Yes, No</td>
</tr>
<tr>
<td>Heard of HIV?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>Source of information for HIV/AIDS?</td>
<td>Gada leader, Health provider, Media</td>
</tr>
<tr>
<td>How could prevent HIV/AIDS?</td>
<td>Don't know</td>
</tr>
<tr>
<td>Heard about VCT?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>Is VCT good approach in preventing HIV/AIDS?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>VCT available in your area?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>Did you practice VCT?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>If Q 034, yes how often</td>
<td>One, More than one</td>
</tr>
<tr>
<td>037</td>
<td>cultural healthy risk behaviours pave way for acquiring HIV/AIDS</td>
</tr>
<tr>
<td>038</td>
<td>Did you hear of condom?</td>
</tr>
<tr>
<td>039</td>
<td>Where is source of condom?</td>
</tr>
<tr>
<td>040</td>
<td>If wanted could you use condom?</td>
</tr>
<tr>
<td>040</td>
<td>Can HIV reduce by using a condom?</td>
</tr>
</tbody>
</table>

*Kutaa tokko: Odeefannoo Afan Oromo Vaarshiin*
Mataduree Qorannoo: Barmmaatilee Aadaa HIV/AIDS fi saaxilaama baasuuy ittisu irrat beekamsaafl illaachii ummmataalamii fakkataa?

<table>
<thead>
<tr>
<th>Lakk.</th>
<th>Gafiilee</th>
<th>Sireefamma koodii</th>
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</thead>
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<tr>
<td></td>
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<td>1. Haala senaa irmaatoota</td>
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<tr>
<td>01</td>
<td>Umiri--</td>
<td>Wagga dhan------</td>
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<tr>
<td></td>
<td>Sala</td>
<td>Dhira</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dhalaad</td>
</tr>
<tr>
<td>002</td>
<td>Amaantaa ?</td>
<td>Orthodoxi Katoolikaa Proteestaanti Musulimaa Waqeeffata Hin qabuu</td>
</tr>
<tr>
<td>003</td>
<td>Sabaa ?</td>
<td>Oromo Tigree Amaaraa Kan biiroo</td>
</tr>
<tr>
<td>004</td>
<td>Haala eerumaa</td>
<td>Kan hin eerumiin Eerume kan wajjin jiraatn Kan Ikkittee Kan irra du’ee/ Dootee</td>
</tr>
<tr>
<td>005</td>
<td>Haali Hujii ?</td>
<td>Ni qabaa Hin qabuu Qotee bulaa Horsiisee bulaa</td>
</tr>
<tr>
<td>Page</td>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>006</td>
<td>Ulfinaa qabdaa ?</td>
<td>Eeyyen Mit</td>
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<td>007</td>
<td>Haali galii?</td>
<td>211 – 900 1000 – 1500 Galii ja’aa hin qabu</td>
</tr>
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<td>008</td>
<td>Namoon nama dhukuuba hin qabneef jalaaf jalto biroo kan hin qabnee yo qunaamtiis sala godhani caraan dhukuuban qabaman ni</td>
<td>Eeyyeen Miti Hin beeku</td>
</tr>
<tr>
<td>009</td>
<td>Haala jireenyaah</td>
<td>Horsisee bula Kan-biroo</td>
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<td>010</td>
<td>Haala sala namoota biro wajiin qabani</td>
<td>Eeyyen Miti</td>
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<td>011</td>
<td>Eerumtee jirata?</td>
<td>Eeyyan Miti</td>
</tr>
<tr>
<td>012</td>
<td>Atiin dhirsaak ketiif meqaafaan ?</td>
<td>1ffa 2ffa isa olii</td>
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<tr>
<td>013</td>
<td>Qunamiti sala gotee beektaa?</td>
<td>Eeyyan Miti</td>
</tr>
<tr>
<td>014</td>
<td>Nama qunamiti sala wajjin gotan sunin waliti dhiyeenya akkamia</td>
<td>Dhirsaaf niti Wajiin jirana Jalaaf jalto Kan biro</td>
</tr>
<tr>
<td>015</td>
<td>Yaroo duraatif qunamtiis sala yo gotuu umrin ke meeqa?</td>
<td>--------- Godhee hin beeku</td>
</tr>
<tr>
<td>016</td>
<td>Dhirisi/ Nitin ke si wajjin jiraataa</td>
<td>Eeyyan Miti</td>
</tr>
<tr>
<td>017</td>
<td>Jala /jalto ni qabda?</td>
<td>Eeyyan Miti</td>
</tr>
<tr>
<td>018</td>
<td>Dhirisi kee nitii biiroo ni qabaan ykn jalto ni qabaan ?</td>
<td>Eeyyan Miti</td>
</tr>
<tr>
<td>019</td>
<td>Yaroo meqa nama kan wajjin qunaamtii sala gootee?</td>
<td>Guyya muraasa Torbaan tokko Ji’a muraasa Waggotaa muraasa</td>
</tr>
<tr>
<td>020</td>
<td>Nama kana malee ji’oota 12n dabarsinee kana keesa nama biiroo wajjin qunamiti sala gootee beekaa?</td>
<td>Eyyen Miti</td>
</tr>
<tr>
<td>021</td>
<td>Waluumma galati ji’oota 12ni dabarsine kana keesa nama meeqa wajjin qunamti sala gootee?</td>
<td>Godhee hin beeku</td>
</tr>
<tr>
<td>021</td>
<td>Wagga kamii, ji’a meeqa irrat eearumtee dhirsaan ke wajjin jarachu jala qabdee?</td>
<td>Hin beekuu</td>
</tr>
<tr>
<td>022</td>
<td>Dhirsa/jala ke ka qara wajjin yoom jirachu jala qabdee</td>
<td>Hin beekuu</td>
</tr>
<tr>
<td>023</td>
<td>Dhirsa/ jala wajjin jirachuu yo jala qabdee umrin ke meeqa? ........</td>
<td>Hin beekuu</td>
</tr>
<tr>
<td>024</td>
<td>Yaroo duratiif qunamtii sala yo gootu kondoomi fayadamtee?</td>
<td>Eeyyan Miti</td>
</tr>
<tr>
<td>025</td>
<td>Guyyan dhumaa qunamit sala gote yomii?</td>
<td>Guyya mursaan duraa Torbaan kaan dura Ji’a darbeen dura Waggaa darbeen dura</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>026</td>
<td>Nama biro wajjin yoomi qunamiti sala gotee?</td>
<td>Guyya mursaan duraa Torbaan kaan dura Ji’a darbeen dura Godhee hin beeku</td>
</tr>
<tr>
<td>027</td>
<td>Guyya dhumma dhirsa keetin alaa qunamit sala gotee kondoomifayaadamtee?</td>
<td>Eeyyan Miti</td>
</tr>
<tr>
<td>028</td>
<td>Wa’ee dhukkuuba HIV/AIDdhageetee beektaa</td>
<td>Eeyyen Hin beeku</td>
</tr>
<tr>
<td>029</td>
<td>Deebin ke eeyyen yo ta’ee isa baraatee/ dhageetee?</td>
<td>Aboot GADA irra Hogggeeyii fayya irra Media irra</td>
</tr>
<tr>
<td>030</td>
<td>HIV/AIDS akkamin ittisan?</td>
<td>........ Hin beeku</td>
</tr>
<tr>
<td>031</td>
<td>Qoraanoo dhigaa fedhii Irrat hundeedhageetee beektaa</td>
<td>Eeyyan Miti</td>
</tr>
<tr>
<td>032</td>
<td>Qoraanoo dhigaa fedhii Irrat hunda’ee (VCT) dhukkuuba HIV/AIDSii ittisu Irrat malaa garii jetanii ni yaadani?</td>
<td>Eeyyen Miti Hin yaadadhuu</td>
</tr>
<tr>
<td>033</td>
<td>dhigaa fedhii Irrat hunda’ee (VCT) nanoo (Aanaa ykn Ganda) keesan keesat argaamaa?</td>
<td>Yes No</td>
</tr>
<tr>
<td>034</td>
<td>Namoon qoraanoo dhigaa fedhii irrat hunda’ee (VCT) godhuudhan dhukkuuba HIV/AIDSii tin saaxilamuun ni hirdhiisaa?</td>
<td>Eeyyen Miti Hin beeku</td>
</tr>
<tr>
<td>035</td>
<td>Qoraataamtee beektaa?</td>
<td>Yes No</td>
</tr>
<tr>
<td>036</td>
<td>G. 034 eeyyan yo ta’e yaroo meeqaa?</td>
<td>One More than one</td>
</tr>
<tr>
<td>037</td>
<td>27. Aadaaleen duubat afoo ta’an dhukkuuba HIV/AIDSii tif nama ni saxiiluu?</td>
<td>Yes No</td>
</tr>
<tr>
<td></td>
<td>A. Eeyyen</td>
<td></td>
</tr>
<tr>
<td>038</td>
<td>Wa’ee Kondomi dhageetan?</td>
<td>Yes No</td>
</tr>
<tr>
<td>039</td>
<td>Eechaa dhageetan?</td>
<td>Dhabile fayya kan mootuumma Dhabile fayya kan dhunfa Suuqi</td>
</tr>
<tr>
<td>040</td>
<td>Yaroo barbaadanit argachuu ni dandeetan?</td>
<td>Eeyyan Miti</td>
</tr>
<tr>
<td>040</td>
<td>Kondomii fayadhamuun dhukkuba Eedisii ni ittisa jeetee yadaa?</td>
<td>Eeyyan Miti</td>
</tr>
</tbody>
</table>

**Annex 2: Focused group discussions guide (FGDs)**

Good morning? Well come to our discussion. My name is Godana Arero and I came from Addis Ababa University, college of health Science, School of Public Health. I am here today to discuss about HIV/AIDS/ prevention and Cultural health risk behavior. On this discussion I will not be expected this right and this wrong ideas. Every piece of information that you will be provided for study is very, very important. In order to not to miss any points of discussion, we will be used a
Tape recorder. I would like to confirm to you that all your comments are confidential and used for research purpose only. Your names will not be recorded to protect your confidentiality.

Thank you for your patience and willingness.

Topic: To assess knowledge and perception of community about HIV/AIDS prevention and cultural risk behaviors among reproductive age groups in Borena Zone, Oromia Region State, 2010, Ethiopia

Name of data collector's: …Date: …

Question:

1. Do you think that having wife-sharing is important? If yes, why? If not, why not?

2. Is widow-inheritance common in your area? If yes, explain the reason for practicing widow-inheritance? Advantage and disadvantage?

3. If you suggest that having widow-inheritance is common in your area, is it practiced after VCT?

4. What do you think about importance of VCT?

5. How often do you practicing and teaching community to prevent HIV/AIDS and cultural healthy risk behaviors?

6. Explain the relation between cultural healthy risk behaviors and HIV/AIDS?

7. Is polygamy practice in your area for last two, three years? Explain advantage and disadvantage

Uunkaa 2: Yaadaa marii Afan Oromo varshin


Galatooma!

Mata duree: DHukkuuba HIV/AIDSii tif barmaatilee Aadaa dhukkuuba kanaf nama saxiiluu ittisuu irrat ga’ee Ummata

• Maqa nama odeefanoo guuruu_____Guyyaa___________

Gaffi

1. Jalaaf jalto qabachuun wan garii jeetan yaadan? Deebin kesaneeyyen yo ta’ee maliif? Miti yo ta’ee maliif?
2. Shamaraa dhirsiirra du’e dhaluun nanoo keesaantt bekkama dha? Eyyen yo ta’ee sababin isa maliil? Fayidaaf rakko isa?
3. Lakk. 2 irrat deebin ke eeyyen yo ta’ee qoraanoo dhigaa booda (VCT) dha?
4. Fayidaan qoranoo dhigaa fedhii (VCT) irrat hunda’ee maliil jetani yaadan?
5. HIV/AIDSii fi Aadaa boodat aftuu dhukkuuba kanaf nama saxiiluu ambiisuuf barnoon ummaataaf kenitee beektaa?
6. HIV/AIDSii fi Aadaa boodat aftuu walitii dhufinsii isan maliil?
7. Shamaaroota baayee fudhuun (polygamy) nanoo kesaantt beekam dha? Eeyyen yo ta’ee fayidaaf dhibaanu isan maloo?

Annex 3. Study Information Sheet:

My name is ______________I am from Addis Ababa University, College of Health Science, and School of Public Health. The purpose of the study is to assess Knowledge and Perception about HIV/AIDS and Cultural health risk behaviors among reproductive age groups to prevent from HIV/AIDS. Since outcome of this study is very important to determining decisions regarding health of the community. I kindly request your genuine
and entirely personal, attitudes and experience on the various issues. I inform you that a lot of personal area will be addressed by the questionnaire, but all are important to the final recommendations; I would like to ask your cooperation to freely and openly give us your genuine responses. You have a full right to participate throughout, or to discontinue at any time, or never participate in the study.

Regarding confidentiality, the whole process of the questionnaire administration is set up in such way that utmost secrecy is maintained. Therefore, please **DON’T WRITE YOUR NAME OR ADDRESS** on any of the question pages. Do you have any question concerning this information? If you have questions or any concern regarding the study, you can feel free to communicate with the principal investigator. Are you willing to allow me to use the information for this study? Interviewer’s signature certifying that informed consent has been given by the interviewee verbally.

Full Name: ---------------------

Signature: ---------------------

**CONSENT FORM:**
Please make (√) mark to show your commitments to participate in the study.

1. I have read and understood all instructions and confidentiality procedures and I on my free will consent to participate-------------------------

2. I have read the instructions but I am not willing to participate---------

**Address of Principal Investigator:**

Godana Arero (Mobil: 0911964128)
Waraqaa odeffannoo marii Qorannichaay version Afan Oromo

Yuniversiti Finfinnee, Kollegii Saansii Fayya. Mana barnoota Fayyaa Hawaasaatti

Naanno Oromiyaa Godina Boranaatti gahee abbootin gadaa ittisa dhibee HIV tii fi
barmaatilee miidha qaban irratti qaban

Maqan koo __________________ jedhama, kayoon ani asii dhufeef Booranaa keessatti kan
gaggeeffamu marrii hawwassa namoota dhimmicha ammantaa dhan dirqamma kam malee
feedhii offitin fudhatan qorannoo keesat irmatan yaadaa irra fudhachuu dha. Ragaa barmmaatile Aadaa fayyaa hawaasaa ittisu irratt ummata keenyaa qorannoo kanaaf kan itti fayyadamnu fedhaa fi hayyama ummata qoranoof filataman irratti hundoofnee qofaa yemmuu ta’u sababa kanaaf hayyamamaa ta’ee yoking hayyamamaa ta’uu dideef faaydaan addaa yoking miidhaan ummata irra gahu tokkooyyyu hin jiru. Ummati kamiiyyu hayyamamaa ta’uu diduu mirga guutuu kan qabu yemmuu ta’uu qorannoo kana keessatti hirmaachuun garuu faaydaa barmmaatilee Aadaa fayya ummata midhuuf ittisu irratt ga’een ummata kanaa irraa argamu hubatanii akka waliigalaatti fayyaa ummataa kana cimsudhaaf bu’aan inni qabu olaana dha. Odeefffannoon raga barmmaatilee Aadaa fayya ummata midhuuf ittisa irratt ga’een Abboot Gada keessan irraa funaanamu maqaa keessan bifa hin ibsinee fi ogeessa (Principal Invsteqator) kanaan dura raga kana qindeessaa turaniin kan funaanamu dha. Ragaa kana irratti hundaa’un nama kamiinuu adda baasanii beekuun kan hindanda’amnee fi ragichi qaama biraatiíf dabarfamee gonguma kan hinkennamne ta’uu isniif mirkaneeessa. Isnis Ummatin Jirratoom Aanichaa ( Ganda irra) filataman keessatti keessaa jiraata tokko waan taataniif qorannoo kana keessatti akka hirmaattan isin gaafanna. Gaaffii dhimma kanaan walqabatu yoo qabaattan nagaafachuu dandeessu!

Isin marii qoranoo keessatti hirmaachudhaaf hayyamamaa dhaa?________

**Galatoomaa!**

Hayyama jechaa ummata irraa argachuu mirkaneessudhaaf maqaa fi mallattoo gaafataa guyya wajjiiin:Maqaa guutuu____________Mallattoo________________Guyyaa gaafatame__________

Gaaffii, mirgaa fi komii (teessoo qaama qunnamamuu): tajaajilamaan qorannoo kana keessatti hirmaatee dhimma qorannichaan walqabatu irratti gaaffiiis ta’ee komii qabu kan qunnamuu qabu Teessoo qaama qunnamamuu:

Godaanaa Areeroo ( lakk.bilbila 0911964128 irratti dha).

Ykn. E.mail: godana2007@yahoo.com
Annex 4: Map of Oromia
Annex 5: Map of Borena zone
Annex 6: Declaration
I, the undersigned, declare that this is my original work and has never been presented by another person in this or any other University and that all the source materials and references used for this thesis have been duly acknowledged.

Name: Godana Arero
Signature: 
Place: AAU, CHS, SPH
Date of Submission: May 20, 2011

Approval of the Primary Advisor
The thesis has been submitted for examination with my approval as a university advisor.

Name of advisor: Prof. Wakgari Deressa (PHD)
Signature: 
Date: 