

**HIV PREVENTIVE BEHAVIOR AND ASSOCIATED FACTORS AMONG
MINING WORKERS IN SALI TRADITIONAL GOLD MINING SITE
BENCH MAJI ZONE SOUTHWEST ETHIOPIA USING HEALTH BELIEF
MODEL**



BY: HORDOFA GUTEMA (B.Sc)

THESIS SUBMITTED TO DEPARTMENT OF HEALTH EDUCATION AND BEHAVIORAL
SCIENCES COLLEGE OF MEDICAL SCIENCE AND PUBLIC HEALTH, JIMMA
UNIVERSITY IN PARTIAL FULFILLMENT FOR THE DEGREE OF MASTER OF PUBLIC
HEALTH (MPH) IN HEALTH EDUCATION AND PROMOTION

MAY 2012

JIMMA ETHIOPIA

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BENCH MAJI ZONE SOUTHWEST ETHIOPIA: USING HEALTH
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Abstract

Background: Currently each day approximately 7,100 new infections and 4,900 deaths by HIV/AIDS occur worldwide. Migrant mining workers are taken to be HIV vulnerable group in different part of the world. In Ethiopia they were not thought as at risk group yet.

Objectives: The objective of this study was to assess HIV preventive behaviours and associated factors among gold miners in Sali traditional gold mining site Bench Maji zone south west Ethiopia from Jan 15, 2012 to Feb 15, 2012

Method: A cross sectional study triangulated with qualitative study was conducted. The health belief model was used as conceptual framework to assess the behavior. The Standardized Questionnaires which was adopted and developed from other behavioral research was used for data collection. OpenCode version 3.6 was used for analysis of qualitative data. The quantitative data was entered using EPI data version 3.1 and analyzed using SPSS version 17. Descriptive statistics, Bivariate analysis, multiple logistic regression was done. Reliability of the instrument was also checked using Cronbach's alpha.

Result: A total of 393 respondents with response rate of 93.12% were participated. Most of the respondents 362(92.1%) were sexually active currently. Less than half of the respondents 187(47.6%) were engaged in HIV preventive behavior. Regarding the perception 215(54.7%) of them have low perceived susceptibility to HIV /AIDS, 247(62.8%) of them has high perceived severity, 223(56.7%) of them have high perceived benefit and 208(52.9%) of them have high perceived barrier. HIV preventive behavior significantly associated with being in middle, higher and highest income, Completing secondary and tertiary school and self efficacy.

Conclusion and Recommendation: The HIV preventive behavior of the mining worker was low. Income, educational status and self efficacy were factors affecting the HIV preventive behavior of mining workers. Working condition and existence of only masculine identity may have an effect on their preventive behavior. Thus this population group should be understood as most at risk population group at national level and Intervention like community based outreach on HIV should be implemented and also developing and implementing VCT campaign as special case for this population group should be designed.

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Abbreviation/Acronyms

AIDS	Acquired Immune Deficiency Syndrome
AOR	Adjusted odds ratio
CI	Confidence interval
CSW	Commercial Sex Workers
FGD	Focus Group Discussion
HAPCO	HIV/AIDS Prevention and control office
HBM	Health Belief Model
HIV	Human Immune Deficiency Virus
IEC	Information Education Communication
IOM	International Organization for Migration
MOH	Ministry of Health
OR	Odds ratio
SNNPR	South Nation Nationality and People Region
SPSS	Statistical Package for Social Science
STIs	Sexually Transmitted Infections
UNAIDS	United Nations Program on HIV/AIDS
VCT	Voluntary Counseling and Blood Testing
WHO	World Health Organization

CHAPTER 1: INTRODUCTION

1.1. Background

Infection with HIV constitutes a major health crisis worldwide; currently the number of people living with HIV/AIDS in the world is estimated 34 million which reflects large number of HIV/AIDS infection which is due significant expansion of access to antiretroviral therapy and reduced AIDS related death. Every day approximately 7,100 new infections and 4,900 deaths occur worldwide. Sub-Saharan Africa remains by far the most affected region in the world. Of the estimated 34 million people infected with HIV worldwide in 2010, sub-Saharan Africa accommodated 68%, During the same year, sub Sahara Africa accounted for 70% of new HIV infections and 72% of deaths due to HIV, with the HIV prevalence in adults 5%(1).

In 22 countries in Sub Saharan African the HIV infection is declining by including Ethiopia. But the number of people living with the HIV virus in the country is still large. The total number of people living with HIV is more than 1.3 -1.5 million. With estimated prevalence rate to be between 1.4% and 2.8% .The epidemic pattern continues to be generalized and heterogeneous with marked regional variations in the country but its prevalence appears to be declining in urban areas when related to the rural one. The country faces an HIV epidemic among different sub-populations and geographic areas as it has led to decrease in life expectancy and greatly reduce workforce(2).

HIV prevention programs such as being sexually abstinent, delay sexual debut, being faithful, reduction of number sexual partners, use of condoms consistently, avoidance of commercial sex, abstain from injecting drugs, fight against violence against women, knowing HIV status prevent mother to child transmission of HIV are under promotion through information, education and communication(2).

In the country population segment such as uniformed services, sex workers, long distance truck drivers, refugees and displaced peoples, daily laborers, migrant laborers, steer children, high school and university students, out of school youth and indigenous population are known to be most at risk population as noted(3).

Migrant mining workers are known to be HIV vulnerable group in different part of the world due to factors such as dangerous working conditions, only masculine identities existence, living away from families, limited access to healthcare and settling in isolated, desolate and inhospitable place (4-6).

Sali traditional gold mining site is among gold mining site in Ethiopia which is found in bench maji zone southwest Ethiopia where different young workers migrate to the site from different part of the country to get better work opportunity and income. And this mining site may be the potential site to HIV infection as other part of the world. Therefore, it is thought that it is important to assess the HIV preventive behaviors of the gold mining workers who are in Sali mining site.

1.2. Statement of problem

HIV/AIDS is still the pandemic disease killing too many people especially in many poorest counties. Even though there is a progress in the prevention of the spread of infection, so many people becoming infected and dying each day worldwide(1). HIV infected individual experience significant level of stigma and discrimination like denial of employment, eviction from home, loss of job due to their HIV status and they also face verbal insults from co-workers friends and social acquaintance. This stigma and discrimination is the worst consequence of the epidemic and lead to large psychological, physical and social impact on the infected individual and their family further to the community and to the country(7).

Nowadays, the impact of HIV/AIDS is the forefront factor that constrains the economic development of the country especially the low income developing countries. Since it strikes mostly the productive age group of the population, it cause reduction in the capacity of the labor force, decline in number of workers and workers productivity which have great impact on the economic development(8). According UNAIDS report in 2010 5% of adults are infected by HIV and 1.2 million of them died due to AIDS in Sub Sahara countries which is higher as related to other part of the world. This indicates that the economically active population or the labor force is affected more than other population group(1).

Mining worker population group who are known to be highly at risk group to HIV infection in different part of the world are the productive age group. So being infected by HIV, absenteeism from their work due to the illness from HIV infection and death due to AIDS among these population segment have severe impact on economic development of one county(8). In Ethiopia mining plays a major role in generating foreign currency which is important for the economic development of the country, so being infected by HIV among mining worker have the impact on this development. But no attention was given to mining workers as other part of the world to understand them as at risk to HIV infection in the country.

Even though different population segment are known to be at high risk to HIV/AIDS throughout the country, the size and distribution of those at high risk groups remain largely unknown due to lack of sufficient longitudinal, cross-sectional and behavioral data. In Small towns and market

centers the epidemic is higher when compared with bigger town, which may be due to the small towns are hot-spots that have been neglected in HIV prevention to date but still there no sufficient information(9).

Despite of its being small town like other small town where epidemic of HIV is known to be higher and different HIV prevention programs such as being sexually abstinent, delay sexual debut, being faithful, use of condoms consistently, knowing HIV status are under intervention nationally, Sali traditional mining site where almost all of the populations are male migrant mining workers living away from their spouses, families and community, there is no any HIV prevention program available and there is no any research done at the site yet. So, this is best time to study the HIV preventive behavior of this population segment at this specific area.

CHAPTER 2: LITERATURE REVIEW

There are many models to explain different health behaviors. Among these models this study seeks to use HBM as predictor of HIV preventive behavior.

2.1 Health Belief Model

Since the early 1950s, HBM has been one of the most widely used conceptual frameworks in health behavior research, both to explain change and maintenance of health-related behaviors and as a guiding framework for health behavior interventions. It assumes that behavior is function of the individual's subjective value of outcome and of the subjective expectation of particular action will achieve that outcome which is termed as value-expectation theory. When this value-expectation concept were gradually reformulated in the concept of health related behavior ,it is assumed that individual value avoiding illness and expect that a specific health action may prevent illness, then this expectance further explained in terms of the individual's estimates personal susceptibility to and perceived severity of an illness(10).

The HBM contains several constructs: these includes perceived susceptibility (beliefs about the likelihood of getting a disease or condition), perceived severity (Feelings about the seriousness of contracting an illness), perceived benefit(belief regarding various available actions for reducing the disease threat), perceived barrier (The potential negative aspects of a particular health action), cue to action (Strategies to activate readiness), self efficacy (Confidence in one's ability to take action)(10).

Some Strength of HBM includes:- it can be used both for descriptive research and interventional purpose, it use combination of perceived susceptibility and perceived severity as perceived threat when compared with other model that conceptualize threat as perceived risk only. There are some limitation of the HBM, these are it is only cognitive based model and not consider the emotional component of the behavior, there may be variability in measuring the constructs, cultural and population difference can make measurement error, the predictive power of one construct may depend on the value of another(10).

Socio demographic factors are believed to have an indirect effect on behavior by influencing the perception of susceptibility, severity, benefits and barriers. Different research conducted in

different area also showed that the HBM constructs were the best to predict HIV preventive behavior. In this study in addition to HBM constructs and socio demographic characteristic alcohol and substance use are thought to predict HIV preventive behavior (10-13).

Thus the HIV preventive behaviors, constructs of HBM and the modifying factors including the alcohol and substance use which is added are going to be reviewed below.

2.2. HIV preventive behaviors

2.2.1. Abstinence

In cross sectional study conducted in Japan among adolescent students AIDS beliefs and intention for sexual abstinence perceived severity was more likely to have a strong abstinence intention than those with a low level of perceived severity(11). In study conducted in Nigeria among high school students perception about sexual abstinence, smaller proportion of male respondents (79%) abstained compared with the females (98%). sexual abstinence was also significantly associated with perceived self efficacy to refuse sex and negative perception of peers who engage in sexual behaviors(14). In study conducted in four sub-Saharan Africa countries among adolescents sexual abstinence and its associated factor 42% to 85% of the adolescents were abstaining and having a girl friend or a boy friend is positively associated with abstinence and also being out of school associated with being sexually active(15).

2.2.2. Condom use

In study done in China region of Gejiu city among miners consistent condom use with FSWs was low among miner clients, with only 13.3% reporting consistent use of condoms and 61.2% reported they have never used condom and the left use condom rarely with FSWs(4). In another cross sectional study conducted in china to assess sexual transmitted disease/AIDS and Heterosexual risk among miners out of those who were sexually active and looked for commercial sex workers, 77.2% of them did not used condom during sexual relationship while the others used consistently condom(16).In another cross sectional study conducted in china among mining workers of those who had sex with CSWs 72% of them did not used condom.(17)

In different cross sectional study done in different part of Africa on migrant workers on condom use, consistent condom use is very low in all the area during the study.(18-22) But, in another way in cross sectional study conducted in Tanzanian mine workers 72 % of them use condom always while the rest 28% of them reported not always use condoms for paid sex(6).

Another study done in Bahir Dar to assess perceived barriers to behavioral change to words the prevention of HIV/AIDS among age groups 15 to 49 years also revealed that out those who had sex in the past 12 months only 16.4 % used condoms(23). In cross sectional study conducted at Haramaya University on students to assess the predictor of the condom use 44.4% non-user of condom, 16.3% used occasionally, 15.7% used condom always(24).

2.2.3. Number of sexual partners and faithfulness

In study that conducted in Tanzania among mining workers most the mine workers study participants, 63% of them reported they have more than one sex partner in their last 12 months of the study time(6). Study conducted in Malawi among migrant mine laborers sexual networking and multi-partner sex showed that only 5.5% of the respondent have single partner while the rest 94.5% of migrants had multiple sexual partner(25). In cross sectional study conducted in Haiti among Youth on Social and Psychological Influence on HIV preventive behavior, 43% of the participant had three and more three sexual partners(26).

In study conducted in Thailand's migrant fisherman on their unsafe sexual behavior for prevention of HIV /AIDS Transmission only 10% of them have one sexual partner where more than 90% had had two or more female partners(27).

Similarly in a study on male factory workers in Zimbabwe, HIV positive men were more likely have multiple sexual partners than HIV negative men(28).But in another cross sectional study conducted in South African-Mozambican boarder on HIV/AIDS vulnerability among migrant farm workers revealed that 64% of them have only one partner when the left 36% of the respondents known to having two or more concurrent sexual relationships(18). In cross sectional study conducted at Haramaya University on students to assess the predictor of the condom use 34.6% of the student experienced multiple sexual partners(24).

2.2.4. HIV testing

In a cross sectional study conducted in Britain among black Africans on the factors associated with HIV testing 44% of women participants and 36.4% of men were ever tested for HIV. Being born abroad, having new partner from abroad, educational attainment, perception of risk are related with HIV testing(29). In study conducted in Tanzania among medical students on their social and cognitive factors predicting voluntary HIV counseling and testing 43.3% of the respondent reported having been tested for HIV. And fear of being positive to HIV infection and self efficacy were significant predictor of being tested(30).

In other study conducted in Kenya among youth in urban on their motivation for HIV testing 19% of male and 35% of female had been tested for HIV. It reported that about half of youth who had ever had sex but had never been tested reported that they had not been tested because they were not at risk(31). In other study conducted in Uganda among men on factor associated with self-reported HIV testing, knowledge about HIV/AIDS, history of paying for sex, spousal communication about HIV prevention, educational status are positively associated with HIV testing(32).

2.3. Health Belief Model

2.3.1. Constructs of health belief model

2.3.1.1. Perceived susceptibility

In cross sectional study conducted Britain among black Africans on factors associated with HIV testing participants risk perception is significantly associated with HIV testing(29). A cross sectional study conducted in Ghana among youth on determinants of condom use to prevent HIV infection also showed that perceived susceptibility was significant predictor of condom use(22). Additionally on study of south Africa university student on factor affecting condom use perceived susceptibility significantly related with consistent condom use(21).

But on another direction different study conducted in different part of the world indicated that perceived susceptibility do not have relation with other HIV preventive behavior like consistent condom use, abstinence and being faithful to one sexual partner(11, 30, 31)

2.3.1.2 Perceived severity

In cross sectional study conducted in Japan among adolescent students AIDS beliefs and intention for sexual abstinence perceived severity was more likely to have a strong abstinence intention than those with a low level of perceived severity(11). In study conducted in America among Asian American college students to examined the predictive power of HBM in relation to prevention of HIV infection, perceived severity was found to be significant predictor of the adoption of HIV preventive behaviors(40).

2.3.1.3. Perceived barrier

In study conducted in USA to examine the predictive power of HBM in relation to prevention of HIV infection among Asian American college students perceived barrier was significant predictor of adoption of HIV preventive behavior. In the study done in Scotland on belief and promotion of HIV Preventive intentions the Perceived barriers were found to be important predictors to preventive behaviors(12).

In cross sectional study conducted in Haiti's youth on their HIV preventive behavior participants who perceived high barriers to condom use were 53% less likely to have consistently used a condom than those with low perceived barriers(26). In another conducted in South Africa among university students on factors affecting their condom use high Perceived barrier was associated with reduced condom use intentions(21). In that of study done in Benin toward understanding of barrier to condom use there is a relationship between perceived barrier and condom use(41). In the study in Ghana perceived barrier as significant predictor of condom use, additionally it also significantly interacted with perceived susceptibility and self efficacy(22).

2.3.1.4. Self efficacy

In study conducted in Haiti's youth on their HIV preventive behavior Subjects who high self-efficacy to use a condom in appropriate situations were 2.74 times more likely to have consistently used condoms than those with low self-efficacy(26). In the study of South Africa university student Self-efficacy of condom use was associated with past condom use and condom use intentions(21). Additionally self efficacy showed significant relation with voluntary HIV counseling and testing in that of Tanzanian medical student study(30). Self efficacy is still significant predictor of condom use in study that conducted in Ghana among youth(22). In study

conducted in America among Taiwanese immigrant only self efficacy is significantly predictor of HIV prevention(13).

2.3.1.5. Perceived benefit and cue to action

There is no any literature that showed any relation between perceived benefit and cue to action with HIV preventive behaviors from all reviewed.

2.3.2. Modifying factors

2.3.2.1. Socio demographic variables

In that of cross sectional study conducted in Thailand among Myanmar migrant fishermen, respondents with more income were more likely to practice unsafe sex than those with less income(27). Educational status was significantly related with HIV testing in study conducted in Britain among black African and in that of conducted in Uganda among men on factor associated with self-reported HIV testing (29, 32).

Additionally in study conducted in Addis Ababa among Addis Ababa university undergraduate student to assess determinants of VCT, marital status and previous place of residency are significantly related to HIV testing(33). And also self efficacy and perceived barrier were significantly associated with age of the participant in study conducted in South Africa among university student on condom use(21).

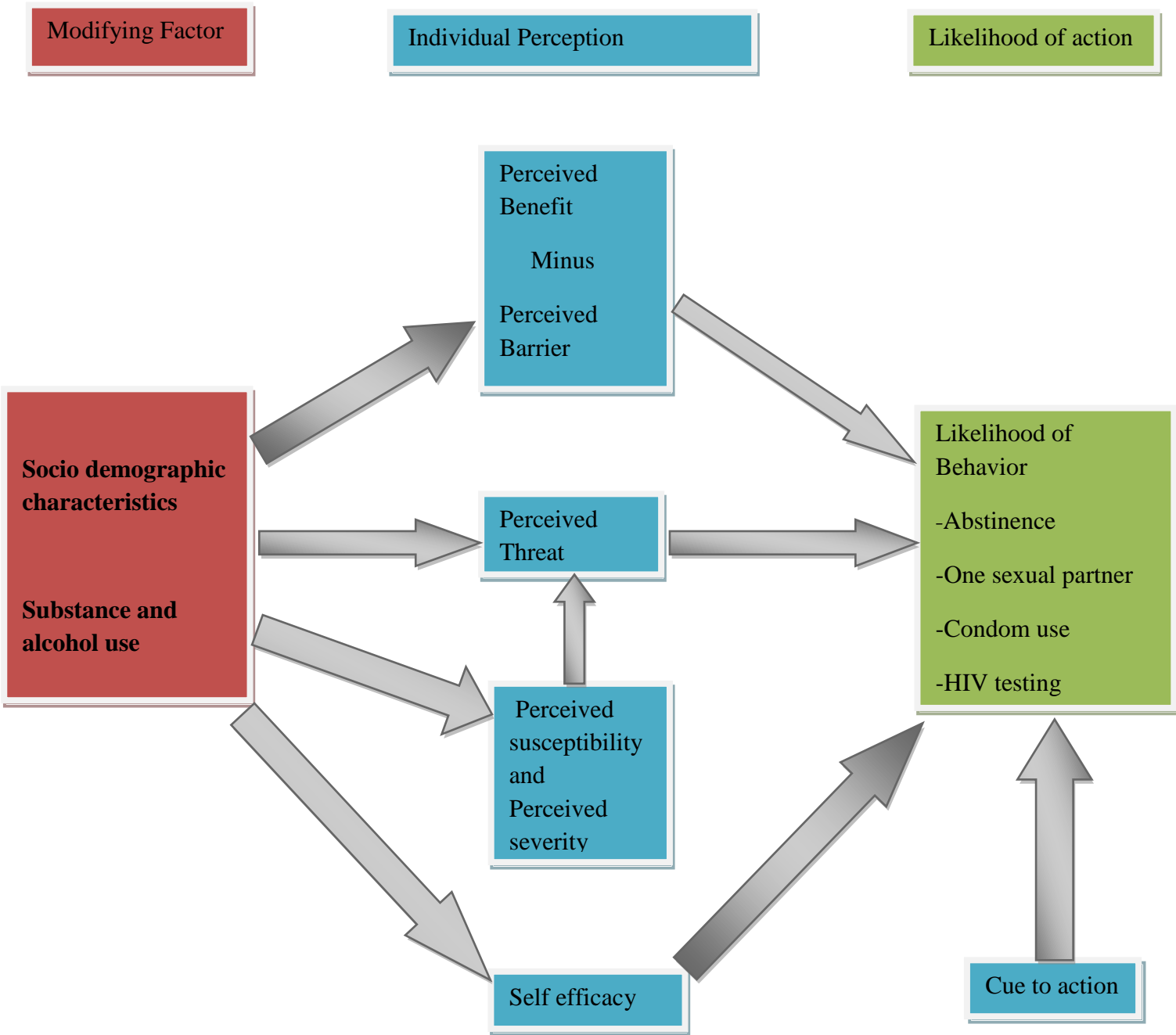
2.3.2.2. Risky behaviors to HIV risks: Alcohol, chat & Drug use

In a cross sectional study conducted in china on HIV-1 and STIs Prevalence and risk factors of miners in mining districts of Yunnan, drug use was significantly related with HIV infection(17). Alcohol intake is significantly associated with HIV infection in cross sectional study that was conducted in Tanzanian mining workers(6). In study conducted in south Africa among HIV positive mining workers psychotic disorders, of those tested for using of alcohol and cannabis 26% of them suggesting recent alcohol abuse and positive for cannabis(34). In study conducted in USA on HIV screening among substance use veterans in care the screening for HIV lower among those with alcohol users but it is higher among those treated for substance use(35).

In general many study conducted in different part of the world showed association between substance and alcohol use and HIV infection (36-38). A study conducted at national level

demonstrated that alcohol and khat use substantially and significantly increase the likelihood of having multiple sexual partnerships. Those who use alcohol and khat are about twice more likely to have MSPs than those who are not using these substances. Condom use is less by at least 50% among alcohol and khat users than those who do not use these substances.(39)

Figure 1 Conceptual framework for HIV preventive behaviors



2.4. Significance of the study

Since this study assess the HIV preventive behavior of mining workers it is believed that outcome of this study will have important implication in strengthen the existing information which lack sufficient data on behavioral data on HIV/AIDS prevention at national level. Additionally it will help the Bench Maji zone health department and Bero woreda health office to improve their HIV/AIDS prevention and control program for this specific population segment.

In another direction it also provides important information for NGOs working in the area of HIV/AIDS in the country and specifically for those working in Bench Maji zone. Furthermore, it will also encourage for further research to undertake in this study area and in other area of the same target group.

Chapter 3: Objective

3.1. General objective

- ❖ To assess HIV preventive behaviors and associated factors among gold miners in Sali traditional gold mining site, Bench Maji zone, southwest Ethiopia.

3.2. Specific objective

- To describe HIV preventive behaviors among gold miners in Sali traditional gold mining site.
- To determine perceptions related to HIV/AIDS and preventive measures among gold miners in Sali gold mining site.
- To describe alcohol and substance use behaviour of gold miners in Sali gold mining site.
- To identify factors associated with HIV preventive behaviors among gold miner in Sali traditional gold mining site.

Chapter 4: Method and Material

4.1. Study Area and Period

The study was conducted in Sali gold mining site, Bench Maji zone, SNNPR. It is 740 km from Addis Ababa and 180 km away from Mizan Teferi town, the Capital of Bench Maji Zone with an estimated population of 12,000. The populations in the area were not permanent settler and have no permanent home to live since they stay in one place for sometime where they assume they can get more gold and go to another place other time. The specific site where they dig for gold is distributed by mining site leader. Almost all of the miners are young age group migrants who migrate from different part of the country to get better income from the mining.

There is one health post and ten private clinics serving the mining site population. Additionally, there is no communication facility and school in the site. The main income source for the mining workers in the site is from the gold that they sell at site and for other population group in the site commercial sex work, selling of alcohol and chat are the main source of income. The study was conducted from Jan 15, 2012 to Feb 15, 2012 site after securing ethical clearance and budget.

4.2. Study design

A cross sectional study design triangulated with qualitative method was carried out.

4.3. Source population

The source populations were all gold miners working in Sali traditional gold mining site.

4.4. Study Population

Study populations were all sampled gold miners working in Sali traditional gold mining site who are happen to be present during study period.

4.5. Inclusion and exclusion Criteria

4.5.1. Inclusion Criteria

Individual who stayed in the site for more than three month were included

4.5.2. Exclusion Criteria

Individuals who are unable to communicate due to severe illness or deafness were excluded from the study.

4.6. Sample Size Determination

The sample size for study was determined using the assumptions: Level of confidence taken to be 95%, 5% margin of error, and P is the proportion of consistent condom use among mining workers which is low in different study on this specific group(4, 16), but since there is no study done on this specific population group in our country the p was 50%. Based on these assumptions the total sample size for the study was computed using the formula for single population proportion

$$n = \frac{(Z_{\alpha/2})^2 P(1-p)}{d^2}$$

Where, n= sample size, $Z_{\alpha/2}$ = confidence level=1.96, P= Prevalence of consistent condom use among the mining workers which is currently unknown in our country=0.5, d= precision (marginal error) =0.05,

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

Thus by adding 10% for possible non-response the total sample size was 422 individuals.

4.8. Sampling Technique

4.8.1. Quantitative part

The sampling frame was prepared by taking list of individual gold miners in the site from the site leaders with respective of their small site where they specifically work. Then using the simple random sampling technique the individual to be involved in the study was selected. After that those randomly selected individual was found by arranging with site leaders to know their respective small site. Finally the data was collected at small site where they specifically work.

4.8.2. Qualitative part

FGD participants were selected using convenient sampling from mining workers who were not included in the quantitative part. A total of 4 FGDs undertook with two of the groups having eight participants and the other two having ten and twelve participants.

4.9. Study Variables

4.9.1. Dependent variables

HIV preventive behaviour:

4.9.2. Independent variables

-Perceived susceptibility to HIV/AIDS infection

-Perceived severity to HIV/AIDS infection

-Perceived benefit from HIV/AIDS prevention

-Perceived barriers for HIV/AIDS prevention

-Self efficacy for HIV /AIDS prevention

- Cue to action to HIV/AIDS prevention

-Socio-demographic characteristics

-Alcohol and substance use

4.10. Operational definitions

HIV preventive behavior- if an individual is abstaining from sexual intercourse in the last one year until the time of study period, if individual is using condom consistently or have only one partner in the past one year, if individual is having only one sexual partner and tested for HIV before their first sexual relation in the last six month, if the individual is tested for HIV infection in last three month of the study period and consistently use condom it was said to be in HIV preventive behavior.

Perceived susceptibility- it is individual belief of being at risk of HIV/AIDS and obtained by sum of statements related to this belief.

Perceived severity- it is individual beliefs on seriousness of HIV/AIDS and obtained by sum of statements related to this belief.

Perceived benefit - it is individual belief on benefit from preventing HIV /AIDS obtained by sum of statements related to this belief.

Perceived barrier - it is individual belief on what prevent him/her from practicing HIV preventive measure obtained by sum of statements related to this belief.

Self efficacy- it is individual confidence toward preventing HIV /AIDS obtained by sum of statements related to this confidence.

Cue to action- it is readiness of individual to take action to prevent HIV/AIDS transmission which is obtained by summing items related to this readiness.

Traditional mining- is small scale mining activity which need high physical effort and the use of simple tools by the numbers of workers involved and digging the hole deep underground to search for gold.

4.11. Data Collection procedure

4.11.1 Quantitative part

Data was collected using interviewer administered structured Amharic questionnaire which developed and adapted from other related behavioural studies comprising of socio demography, HIV preventive behaviours, HBM constructs items and substance and alcohol use related.

The questionnaire was initially prepared in English and then translated into Amharic. The Amharic version was again retranslated back to English by other individual to check for consistency of meaning. The translated Amharic version questionnaire was pre-tested prior to the actual data collection on 5% of the sample size outside of the study area, at Shama traditional gold mining site which is found around 30 kilometres from actual study area. Modification of some questions was made based on findings from the pre-test. Six data collectors who were ten to 12 grades complete were recruited from the site for data collection. Two supervisors who are B.Sc holder's health professional were recruited. A two days training was given for data collectors and supervisors on how to collect the data and other related procedures by the

principal investigator. Continuous follow up and supervision was made by supervisors and the principal investigator throughout the data collection period.

4.11.2 Qualitative part

Non participant observation and four FGDs were conducted to collect data. Two of the FGD have 8 participants and the other two have 10 and 12 participants from mining workers who were not involved in sample for quantitative part and the participants was selected using convenient sampling. Observational checklist and discussion guideline were prepared and used for data collection. The data was collected by principal investigator by taking notes for the observation part. For the FGD one of the supervisors in quantitative part was the recorder and the note taker, while the principal investigator was modulator of the discussion. The discussions were undertaken in Amharic which is local area working language after appropriate time and place is identified and informed consent obtained from each participant.

4.12. Data quality control

To maintain the quality of data the questionnaire was pre-tested in Shama mining site and adjustments was made on some items based on the finding. Moreover, training was given for data collectors and supervisors, regular and continues follow up was made by the supervisors and the principal investigator to monitor quality of the data collection process. In addition, every filled questionnaire was checked on daily basis and feedbacks were given to data collectors. The filled questionnaires was edited and coded for computerization. Checkup for completeness and consistency of the collected data was done.

Double entry was done using EPI data version 3.1, after data was exported to SPSS version 17.0 and negatively worded items were reversely coded, reliability of each items which were developed and adapted from different behavioral study was checked using Cronbach's alpha coefficient for each items in each constructs of HBM, the coefficient with 0.70 and above was accepted as evidence of internal consistency of the constructs, item to total correlation was calculated for each items in each constructs to check its consistence with whole items in each constructs. Those items having item-total correlation value greater than 0.3 alpha coefficients were accepted as consistent with overall items in constructs and the item with an increase of > 0.10 in the total scale reliability or a correlation of < 0.30 between an item and subscale score, these items were considered as having poor function and thus were deleted (42).

4.13. Data Processing and analysis

4.13.1. For quantitative part

The data was analyzed using SPSS version 17.0 and descriptive statistical analysis like frequency and percentage for the categorical variables and mean, standard deviation, maximum minimum and percentage for continues variables was done. And the result was presented using frequency table and pie chart, the normality and the outliers was also checked from the histogram and box plot respectively. T-test and chi square was used as needed to check the association between HIV preventive behavior, constructs of HBM and modifying factors.

Multiple logistic regression was done to determine whether the constructs of HBM and modifying factors can predict HIV preventive behavior. The presence of a relationship between the dependent variable and combination of independent variables or the goodness of fit of the final model was checked based on the statistical significance of the model chi-square. The odds ratio was used for interpretation of strength of prediction of the independent variable to HIV preventive behavior. The result from all analysis was summarized and presented by graphs, tables and other summery measures. For all statistical significance tests, the cut- off value set was p value <0.05 with Confidence Interval of 95%.

4.13.2. For qualitative part

The collected data was transcribed and translated to English from the note taken and by listening from the tape recorder. Then the data was read and re-read for the content to identify emergent themes and how these themes are patterned and it was coded and categorised using OpenCode version 3.6 after the data was imported to it. Then verification was done on whether the categories developed make sense, on any information that can contradict the emerging ideas. The information was distilled to the most essential concept and relationship. Then it was interpreted by identifying the core meaning of the categories to the perspective of the study participants with wider social and theoretical relevance.

4.14. Data Dissemination

The result of the study will be disseminated to Jimma University College of public health and medical science, Bench Maji zone health department, Bero woreda health office, other concerned and interested organizations. And also Publication in local or international journals will be tried.

4.15. Ethical Consideration

For this study to proceed, it was reviewed and approved by ethical committee of college of public health and medical sciences of Jimma University. For legality of the study setting, official letter was also obtained from the research ethical committee, Bench Maji Zone Administration and Zone Health Department, Bero Woreda Health Office. Information sheet and consent form that introduce about the study, respondents right, autonomy and willingness to participate in the study was prepared and read to participants. Clients' written informed consent was sought before they are recruited to participate in the study. Names and other personal information which can violate the confidentiality of the respondents was not be taken or recorded. Any information was kept confidential and only used for research purpose and not exposed to third party for any other reason. During data collection privacy of respondents was kept. About the benefit and harms of the study was also explained to the respondents.

Chapter 5: Result

A total of 393 respondents participated in this study producing a response rate of 93.12%.

5.1 Socio demographic characteristics

All of the study participants were male 393(100%), more than two third of the respondents 319(81.2%) were found between the age group of 20-34 years. and the mean age of the participant was 24.0 ($\pm 5.13SD$). One hundred eighty two (46%) of the respondents were orthodox in religion followed by Muslim 108(27.5%), protestant 88(22.4%). Concerning ethnicity, 167 (42.5%) of the respondents were Amhara in their ethnicity, 59(15%), 53(13.5%), 51(13%) and 46(11.7%) of them were Oromo, Walayita, Hadiya and Gurage respectively.

Most of the respondents were single 271(69.0%) and 26(1.8%) of them were widowed. One hundred ninety three (49.1%) of the respondents were completed secondary school, 142(36.1%) of them were completed primary school, 35(8.9%) were who can't read and write, 23(5.9%) of them were completed tertiary school. Regarding the monthly income 117(29.8%) of the respondents were in higher income quartile, 99(25.2%) of them were in the lower income quartile.(Table 1)

Table 1: Socio demographic characteristics of mining workers in Sali traditional gold mining site Bench Maji Zone South West Ethiopia, February 2012 n=393

variables	frequency	Percent
Age		
15-19	53	13.5
20-24	185	47.1
25-34	134	34.1
35 and above	21	5.3
Religion		
Orthodox	182	46.3
Muslim	108	27.5
Protestant	88	22.4
Others	15	3.8
Ethnic group		
Amhara	167	42.5
Oromo	59	15.0
Walayita	53	13.5
Hadiya	51	13.0
Gurage	46	11.7
Others	17	4.3
Marital status		
Single	271	69.0
Married	105	26.7
Divorced	32	2.5
widowed	26	1.8
Monthly income*		
Lower	99	25.2
Middle	98	24.9
Higher	117	29.8
Highest	79	20.1
Educational status		
can't read and write	35	8.9
Primary school	142	36.1
Secondary school	193	49.1
Tertiary	23	5.9

*= Income categorized using quartile,

5.2 Risky behaviors to HIV risks

Of total respondents 229(58.3%) of them drink alcohol while the remaining do not drink. Out of those who drink alcohol 161(70.3%) of them drink sometimes, 56(24.5%) drinks always and 12(5.2%) of them drinks rarely. 213(54.2%) of respondents chew chat during their stay in the mining site. Of those who chew chat during their stay in the mining site 125(58.7%) of them chew sometimes, 81(38%) of them chew always and 7(3.3%) of them chew rarely. Regarding the substance use 52(13.2%) of the respondents use other substances while the remaining 341(86.8%) do not use it.

Of those who drink alcohol 104(26.5%) of those who drink alcohol engaged on HIV preventive behavior and 125(31.8%) of them were among those who were not engaged in preventive behaviors. While 83(21.1%) of those who do not drink were engaged in HIV preventive behavior and 81(20.6%) of those who do not drink were not engaged in HIV preventive behavior. From those who drink alcohol always 38(16.6%) of them were those who were not engaged in HIV preventive behavior. Of those who drink sometimes 82(35.8%) were from those who were not engaged in HIV preventive behavior and 79(34.5%) were from those who engaged in preventive behavior. (Table 2)

The result from the qualitative part also supports the figure from the quantitative one. Drinking alcohol and chewing chat were more commonly used in this mining site. even in the morning at 2:00 am local time the bar were open, people were drunk and dancing, a groups of people sat and drink by putting a plastic of beer by their side in different bar. Those who drink in the morning were those who were searching for gold from the site during the night time.

Most of the FGD participant agree on the belief that, mining workers don't have to save the money that they earns by selling the gold they gets each day, If they do so they have no chance of getting more gold once. So, they have to finish the money he earns today by drinking and buying sex, invite alcohol friends and this continue as usual tomorrow. As one of 22 years old male FGD participant said “... *every digger here wants to get more gold once which change his life. For example, I may dig and get one gram gold today but this will not bring change on my life. So I have to invite alcohol my friends who did not get that much or nothing today and they will also invite me tomorrow*” So this belief drives them to drinking alcohol and chewing chat among them.

They also agreed that the non existence of the recreational area in the site drive them to drinking alcohol and chat chewing. When they return from the digging site they have no place to go to refresh themselves other than going to drinking alcohol and chew chat. One of 25 years old participant said that *“here as you see we live in the camp there is no place to get our self refreshed after we return from digging, so the only thing to do is drinking alcohol, chewing chat and sometimes visiting commercial sex workers during the night.”*

In addition to this they also agreed that all mining workers were hopeless about thinking their future life due to the working environment and they drinks and chew chat. A 26 years old participant said *“during the time of digging, your friend may die or unable to work more and become dependent on someone due to land slide. When your friend die you become hopeless and expect your chance is also the same. So you become hopeless about everything.”*

Some of the participant also rose that the being living in the desert also drives them to drink to normalize the hotness. As one 20 years old participant said *“this is a desert, it is too hot. So, to prevent or.... to reduce the hotness, you have to drink alcohol this is the reason why every digger here drinks”*

Table 2: Frequency distribution of risky behavior and its association with preventive behavior to HIV risk among mining workers in sali traditional gold mining site, Bench Maji Zone, South West Ethiopia, Feb 2012 n=393

Risky behaviors	Frequency	Percent	HIV preventive behavior		OR(95%CI)
			No	Yes	Crude
			N (%)	N (%)	
Use alcohol during the stay in the site					
Yes	229	58.3	125(31.8%)	104(26.5%)	1.23(0.82, 1.84)
No	164	41.7	81(20.6%)	83(21.1%)	1
If yes how often do you use it					
Always	56	24.5	38(16.6%)	18(7.9%)	0.33(0.94, 1.21)
Sometimes	161	70.3	82(35.8%)	79(34.5%)	0.68(0.21, 2.25)
Rarely	12	5.2	5(2.2%)	7(3.1%)	1
During stay in the site chew chat					
Yes	213	54.2	113(28.8%)	100(25.4%)	1.05(0.71, 1.57)
No	180	45.8	93(23.7%)	87(22.1%)	1
If yes how often do you use it					
Always	81	38.0	48(22.5%)	33(15.5%)	0.91(0.19, 4.36)
Sometimes	125	58.7	62(29.1%)	63(29.6%)	1.35(.291, 6.30)
Rarely	7	3.3	4(1.9%)	3(1.4%)	1
Use other substance/drug during stay in the site					
Yes	52	13.2	25(6.4%)	25(6.4%)	0.89(0.49, 1.62)
No	341	86.8	181(46.1%)	162(41.2%)	1
If yes how often do you use it					
Always	20	38.5	9(17.3%)	11(21.2%)	0.85(0.11, 5.98)
Sometimes	27	51.9	15(28.8%)	12(23.1%)	0.53(0.08, 3.72)
Rarely	5	9.6	2(3.8%)	3(5.8%)	1

5.3. Perception toward HIV/AIDS

Of the response to perceived susceptibility 178(45.3%) of the respondents have high perceived susceptibility to HIV/AIDS, while 215(54.7%) of them have low perceived susceptibility to HIV/AIDS. For perceived severity of HIV/AIDS 247(62.8%) of them has high perceived severity, where as the remaining 146(37.2%) of them have low perceived severity. 223(56.7%) of the respondents have high perceived benefit from preventing HIV/AIDS, while 170(43.3%) of them have low perceived benefit from preventing HIV/AIDS.

From response to perceived barrier 208(52.9%) of the respondents have high perceived barrier toward preventing HIV/AIDS and 185(47.1%) of them have low perceived barrier. Regarding self efficacy 212(53.9%) of the respondents have high self efficacy on preventing HIV/AIDS, while 181(46.1%) of them have low self efficacy on preventing HIV/AIDS infection. 241(61.3%) them have high cue to preventive behavior while the remaining have low (Table 3)

Table 3: Frequency distribution of perception toward HIV/AIDS among mining workers in Sali traditional gold mining site Bench Maji Zone, South West Ethiopia, Feb 2012 N=393

Perceptions	frequency	Percent
perceived susceptibility		
High ^a	178	45.3
Low ^b	215	54.7
perceived severity		
High ^a	247	62.8
Low ^b	146	37.2
perceived benefit		
High ^a	223	56.7
Low ^b	170	43.3
perceived barrier		
High ^a	208	52.9
Low ^b	185	47.1
self efficacy		
High ^a	212	53.9
Low ^b	181	46.1
Cue to preventive action		
High ^a	241	61.3
Low ^b	152	38.7

5.4. HIV preventive behaviors

Most of the respondents 362(92.1%) were not abstaining from sex while the remaining 31(7.9%) were abstaining from sexual intercourse during the last twelve months. Out of those who are sexually active and use condom, 127(46%) of them were using condom consistently in the last twelve months while 149(54%) were not using condom consistently. Out of these sexually active respondents only 86(23.5%) of them have only one sexual partner in the last twelve months while the rest of them 276(76.5%) had more than one sexual partners. 170(43.5%) of the respondents were undergone voluntary counseling and testing for HIV in the last three of the study period, while 221(56.5%) of them did not undergo the testing for HIV.

From total respondents 187(47.6%) of them were engaged in HIV preventive behavior which was obtained by counting from each component, while 206(52.4%) of them were not engaged in HIV preventive behavior. Of those sexually active and have more than one sexual partner only 98(35.5%) of them were using condom consistently. Out of those who not used condom consistently 7(4.7%) of them said it is not available, 15(10.1%) ashamed of asking partner, 62(41.6%) trust their partner and 66(44.3%) were drunk. (Table 4). Of these sexually active respondents, 173(47.79%) of them engaged in sex with commercial sex workers, 94(25.97%) of them engaged in sex with casual partner, 86(23.76%) of them engaged with regular partner and 9(2.49%) of them with others.(Figure 2). From mining workers who visited commercial sex workers and used condom only 56(41.48%) of them used condom consistently.

The entire FGDs participant mining worker agreed that having one sexually partner exists only if there is marriage which happens sometimes. Otherwise having one sexual partner is unthinkable in this site because the only women in the site are commercial sex worker and they go and visit sex worker when they need sex. In the site having sex with commercial sex worker viewed as normal, Beside of that, buying sex is cheap for them in relative to the amount of money they earn each day, the top amount that should paid for sex is 100 birr and sex workers do not have right to ask more than this amount, this is the rule of the site but the amount of money that diggers earn each day may reach up to 1000 birr each day and drives them to visit commercial sex workers. One of 26 years old male FGD participant said “ *each and every digger here get at least 500 birr, may be more each day and live far from the family, the wife. So during stay in the site if you need sex you have to visit commercial sex workers, since they are the only female in the camp.* ”

As all the mining workers agreed the nature of working condition affects their preventive behavior. For example, they dig deep underground to search for gold. During this time there is land sliding which most of the time lead them to disability and further to death. So they do not worry about the future health because they think that they may die tomorrow due to this accident. One of 22 years old male FGD participant said *“We dig underground from seven to twelve man height and again into the side of that hole to search gold, during this time the land slide sometimes. If it is your day you may even buried there inside without getting any help. So I only take care about my health when I am out of this camp.”* Some of the participant also said that living in the desert also increase their desire of having sex. One of 24 years old male participant said *“living in this desert is another problem which affects the behaviour. Every digger drinks alcohol to be adjusted with the hotness in the camp and become drunk and emotional involved in sex with sex workers. Not only becoming drunken drives to sex but this the hotness also increases the need for sexual intercourse.”*

Additionally, the existence of belief on not saving the money they earn today to get stoke of gold tomorrow makes them drink alcohol and visit commercial sex workers. For example as one of 27 years old male participant said *“the digger not save the money he gets today he has to finish it to get more gold. But if you take the amount of the money he get today and the amount he pay for food and others, the amount of the money he gets is more. So, to finish that money he earns today he have to drink, invite his friends alcohol and pay for sex every day.”*

Table 4: Frequency distribution of HIV preventive behavior among mining workers in Sali traditional gold mining site Bench Maji Zone, South West Ethiopia, Feb 2012 N=393

Variables	frequency	percent
Currently abstaining from sex		
Yes	31	7.9
No	362	92.1
Consistent condom use		
Yes	127	46
No	149	54
Have one sexual partner		
Yes	86	23.5
No	276	76.5
Undergone HIV testing in the last three month		
Yes	170	43.5
No	221	56.5
HIV preventive behavior		
Yes	187	47.6
No	206	52.4
Reason why not using condom consistently		
Not available		
Yes	7	4.7
No	142	95.3
Ashamed to ask my partner		
Yes	15	10.1
No	134	89.9
I trust my partner		
Yes	62	41.6
No	87	58.4
I was drunk		
Yes	66	44.3
No	83	55.7

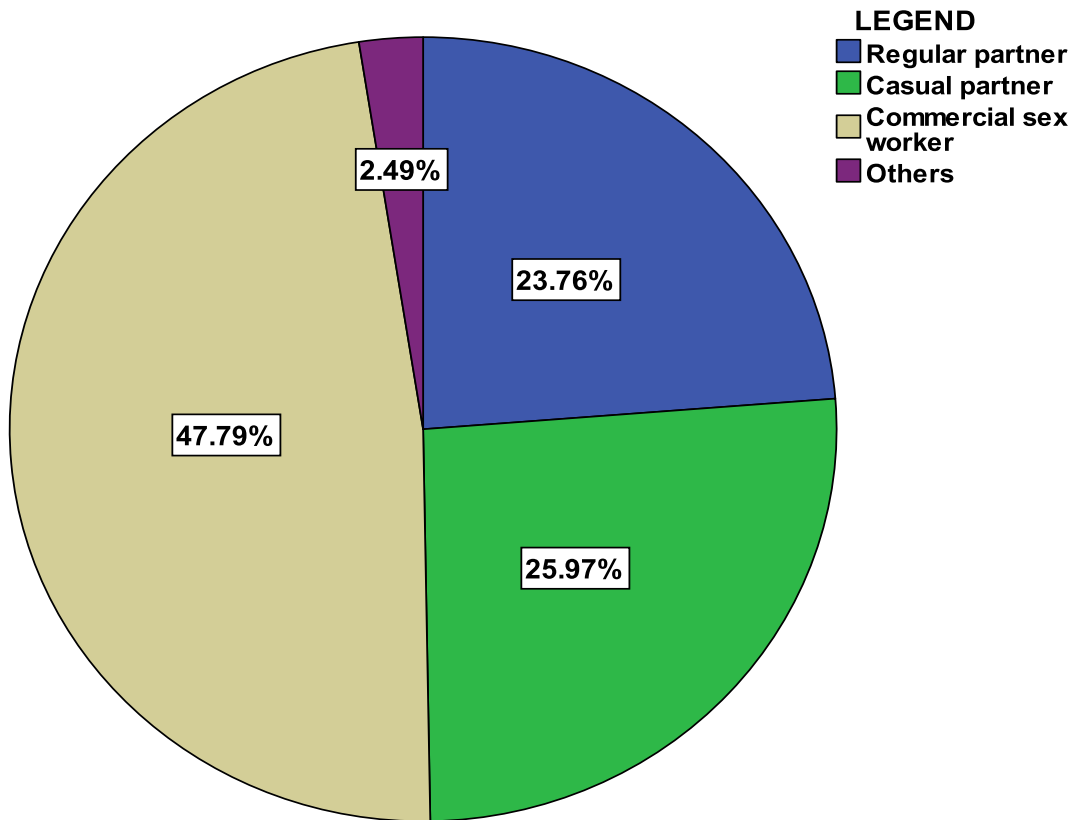


Figure 2: Distribution of with whom being engaged on sex among mining workers in Sali traditional gold mining site Bench Maji Zone, South West Ethiopia, Feb 2012. n=393

5.5. Association between Socio demographic characteristics and HIV preventive behavior

From socio demographic variables only the monthly income and educational status has significant association with HIV preventive behavior. Mining workers whose monthly income in middle and highest level were less likely to be engaged in HIV behaviors as compared with those whose monthly income in lower level with (COR=0.48, 95% CI: 0.28, 0.86) and (COR=0.38, 95% CI: 0.20, 0.70) respectively. Those workers who completed secondary school and tertiary school were more likely engaged in HIV preventive behavior as compared with those who can't read and write with (COR=2.75, 95% CI:1.17, 5.65) and (COR=5.71, 95% CI: 1.8,18.08) respectively. (Table 5)

Table 5: Socio demographic characteristics and their association with HIV preventive behavior among mining workers in Sali traditional gold mining site Bench Maji Zone, South West Ethiopia, Feb 2012 N=393

Variables	HIV preventive behavior		Crude OR (95% CI)
	Yes n (%)	No n (%)	
Age of respondent			
15-19	21(5.3%)	32(8.1%)	1
20-24	93(23.7%)	92(23.4%)	1.54(0.82, 2.86)
25-34	67(17.0%)	67(17.0%)	1.52(0.80, 2.86)
35 and above	6(1.5%)	15(3.8%)	0.61(0.20, 1.82)
Religion			
Orthodox	92(23.4%)	90(22.9%)	1
Muslim	46(11.7%)	62(15.8%)	0.72(0.44, 1.17)
Protestant	44(11.2%)	44(11.2%)	0.97(0.588, 1.62)
Others	5(1.3%)	10(2.5%)	0.48(0.16, 1.48)
Ethnic status			
Amhara	74(18.8%)	93(23.7%)	1
Oromo	30(7.6%)	29(7.4%)	1.30(0.71, 2.35)
Walayita	25(6.4%)	28(7.1%)	1.12(0.64, 2.08)
Hadiya	21(5.3%)	30(7.6%)	0.88(0.46, 1.66)
Gurage	26(6.6%)	20(5.1%)	1.63(0.84, 3.15)
Others	11(2.8%)	6(1.5%)	2.30(0.81, 6.52)
Marital status			
Single	131(33.3%)	140(35.6%)	1
Married	50(12.7%)	55(14.0%)	0.98(0.61, 1.52)
Divorced	3(0.8%)	7(1.8%)	0.45(0.11, 1.80)
Widowed	3(0.8%)	4(1.0%)	0.80(0.17, 3.64)
Monthly income			
Lower	60(15.3%)	39(9.9%)	1
Middle	42(10.7%)	56(14.2%)	0.48(0.28, 0.86)*
Higher	56(14.2%)	61(15.5%)	0.59(0.34, 1.02)
Highest	29(7.4%)	50(12.7%)	0.38(0.20, 0.70)*
Educational status			
Can't read and write	10(2.5%)	25(6.4%)	1
Primary school	63(16.0%)	79(20.1%)	2.00(0.89, 4.45)
Secondary school	98(24.9%)	95(24.2%)	2.57(1.17, 5.65)*
Tertiary	16(4.1%)	7(1.8%)	5.71(1.8, 18.08)*

*=significant at $p \leq 0.05$

5.6. Association between Perception toward HIV/AIDS and HIV preventive behavior

Perceived susceptibility, perceived severity and perceived barrier showed no association with HIV preventive behavior, while perceived benefit and self efficacy were significantly associated with HIV preventive behavior. Those who have high perceived benefit were more likely to be engaged in HIV preventive behavior when compared with those who were not in HIV preventive behavior with (COR=1.57, 95% CI: 1.05, 2.36). The likelihood of being engaged in HIV preventive behavior among mining workers was higher among those who had high self efficacy on preventing HIV HIV/AIDS as compared with those who had low self efficacy on preventing HIV/AIDS with (COR=1.95, 95% CI: 1.30, 2.92). (Table 7)

Table 6: Perception toward HIV/AIDS and their association with HIV preventive behavior of mining workers in Sali traditional gold mining site Bench Maji Zone, South West Ethiopia, Feb 2012 N=393

Perceptions	HIV preventive behavior		OR(95%CI) Crude
	Yes	No	
	N (%)	N (%)	
Perceived susceptibility			
High *	80(20.4%)	98(24.9%)	0.82(0.55, 1.22)
Low **	107(27.2%)	108(27.5%)	1.00
Perceived severity			
High *	118(30%)	129(32.8%)	1.02(0.67, 1.53)
Low **	69(17.6%)	77(19.6%)	1.00
Perceived benefit			
High *	117(29.8%)	106 (27%)	1.57(1.05, 2.36)***
Low **	70(17.8%)	100 (25.4%)	1.00
Perceived barrier			
High *	100(25.4%)	108(27.5%)	1.04(0.70, 1.55)
Low **	87(22.1%)	98 (24.9%)	1.00
Self efficacy			
High *	117(29.8%)	95(24.2%)	1.95(1.30, 2.92)***
Low **	70(17.8%)	111(28.2%)	1.00
Cue to action			
High *	121(30.8%)	120(30.5%)	1.31(0.87, 1.97)
Low **	66(16.8%)	86(21.9%)	1

*= above mean, **= below mean, *** = significant at $p \leq 0.05$

5.7. Factors significantly associated with HIV preventive behavior

Multiple logistic analysis was carried out to assess the effect of the explanatory factors on the HIV preventive behavior. All independent variables were entered in the model including socio demographic variables, alcohol use, chat use, other substance use, perceived susceptibility, perceived severity, perceived benefit, perceived barrier, self efficacy and cue to action. From all variable entered for analysis using enter method, only monthly income, educational status and self efficacy were remained significantly after adjusting other variables entered for analysis.

Being engaged in HIV preventive behavior was 46%, 60% and 61% less likely among mining workers whose monthly income found in middle, higher and highest level as compared with those whose monthly income found in lower level with (COR=0.48, 95% CI: 0.28, 0.86) and (AOR=0.54, 95% CI: 0.30, 0.98) (COR=0.59, 95% CI: 0.34, 1.02) and (AOR=0.40, 95% CI: 0.21, 0.74), (COR=0.38, 95% CI: 0.20, 0.70) and (AOR=0.39, 95% CI: 0.20, 0.77) respectively. Mining Workers those who completed secondary school and tertiary school were 2.66 and 5.4 times more likely to be engaged in HIV preventive behavior as compared with those who can't read and write with (COR=2.57, 95% CI: 1.17, 5.65) and (AOR=2.66, 95% CI: 1.11, 6.41) and (COR=5.71, 95% CI: 1.80, 18.08) and (AOR=5.40, 95% CI: 1.54, 19.00) respectively.

Self efficacy was the only from HBM constructs which was significantly associated with HIV preventive behavior. The likelihood of being engaged in HIV preventive behavior is 1.88 times higher among those who have high self efficacy toward HIV prevention as compared with those who have low self efficacy toward HIV prevention with (COR=1.95, 95% CI: 1.30, 2.98) and (AOR=1.88, 95% CI: 1.18, 2.94). Perceived benefit which was significant in bivariate analysis did not show significant effect in the final model. (Table 8)

Table 7: Summary of logistic regression of the relative effect of explanatory variable on HIV preventive behavior of mining workers in Sali traditional gold mining site Bench Maji Zone, South West Ethiopia, Feb 2012 N=39

Variables	HIV preventive behavior		OR(95%CI)	
	Yes	No	Crude	adjusted
	N (%)	N (%)		
Age of respondent				
15-19	21(5.3%)	32(8.1%)	1	1
20-24	93(23.7%)	92(23.4%)	1.54(0.82, 2.86)	1.50(0.75, 2.97)
25-34	67(17.0%)	67(17.0%)	1.52(0.80, 2.86)	1.63(0.79, 3.36)
35 and above	6(1.5%)	15(3.8%)	0.61(0.20, 1.82)	0.60(0.18, 2.01)
Religion				
Orthodox	92(23.4%)	90(22.9%)	1	1
Muslim	46(11.7%)	62(15.8%)	0.72(0.44, 1.17)	0.83(0.47, 1.46)
Protestant	44(11.2%)	44(11.2%)	0.97(0.588, 1.62)	1.20(0.64, 2.26)
Others	5(1.3%)	10(2.5%)	0.48(0.16, 1.48)	0.68(0.19, 2.34)
Ethnic status				
Amhara	74(18.8%)	93(23.7%)	1	1
Oromo	30(7.6%)	29(7.4%)	1.30(0.71, 2.35)	1.28(0.64, 2.56)
Walayita	25(6.4%)	28(7.1%)	1.12(0.64, 2.08)	0.88(0.40, 1.92)
Hadiya	21(5.3%)	30(7.6%)	0.88(0.46, 1.66)	1.06(0.50, 2.25)
Gurage	26(6.6%)	20(5.1%)	1.63(0.84, 3.15)	1.17(0.56, 2.46)
Others	11(2.8%)	6(1.5%)	2.30(0.81, 6.52)	2.93(0.93, 9.21)
Marital status				
Single	131(33.3%)	140(35.6%)	1	1
Married	50(12.7%)	55(14.0%)	0.98(0.61, 1.52)	0.89(0.53, 1.50)
Divorced	3(0.8%)	7(1.8%)	0.45(0.11, 1.80)	0.56(0.13, 2.43)
Widowed	3(0.8%)	4(1.0%)	0.80(0.17, 3.64)	0.89(0.18, 4.33)
Monthly income				
Lower	60(15.3%)	39(9.9%)	1	1
Middle	42(10.7%)	56(14.2%)	0.48(0.28, 0.86)*	0.54(0.30, 0.98)*
Higher	56(14.2%)	61(15.5%)	0.59(0.34, 1.02)	0.40(0.21, 0.74)*
Highest	29(7.4%)	50(12.7%)	0.38(0.20, 0.70)*	0.39(0.20, 0.77)*
Educational status				
Illiterate	10(2.5%)	25(6.4%)	1	1
Primary school	63(16.0%)	79(20.1%)	2.00(0.89, 4.45)	2.07(0.85, 5.05)
Secondary school	98(24.9%)	95(24.2%)	2.57(1.17, 5.65)*	2.66(1.11, 6.41)*
Tertiary	16(4.1%)	7(1.8%)	5.71(1.8, 18.08)*	5.40(1.54, 19.00)*
Perceived susceptibility				
High	80(20.4%)	98(24.9%)	0.82(0.55, 1.22)	0.92(0.60, 1.43)

Low	107(27.2%)	108(27.5%)	1	1
Perceived severity				
High	118(30%)	129(32.8%)	1.02(0.67, 1.53)	0.98(0.42, 1.52)
Low	69(17.6%)	77(19.6%)	1	1
Perceived benefit				
High	117(29.8%)	106 (27%)	1.57(1.05, 2.36)*	1.42(0.88, 2.31)
Low	70(17.8%)	100 (25.4%)	1	1
Perceived barrier				
High	100(25.4%)	108(27.5%)	1.04(0.70, 1.55)	1.28(0.82, 2.02)
Low	87(22.1%)	98 (24.9%)	1	1
Self efficacy				
High	117(29.8%)	95(24.2%)	1.95(1.30, 2.92)*	1.88(1.18, 2.94)*
Low	70(17.8%)	111(28.2%)	1	1
Cue to action				
High	121(30.8%)	120(30.5%)	1.31(0.87, 1.97)	1.07(0.80, 1.45)
Low	66(16.8%)	86(21.9%)	1	1

*= significant at p< 0.05

Chapter 6: Discussion

This study gives important information regarding the sexual behavior of mining workers and their perceptions toward HIV/AIDS. In this study, Out of those sexually active respondents only (23.5%) of them have only one sexual partner in the last twelve month of study time. Their becoming hopeless due to dangerous working condition and existence of only male in the site decreases their having one sexual partner. If we compare with other study the figure of this study for having one sexual partner is lower, if we take the study conducted in Tanzania among mining workers 63% of them reported to have more than one sexual partner in their last 12 month of the study time(6). In study among south African- Mozambican boarder migrant workers 64% of them have only one sexual partner (18). The difference might be the two studies (that of Tanzania and south African-Mozambican boarder) were done after some intervention was implemented in the area among the mining workers.

Out of those who were sexually active and use condom (46%) of them were using condom consistently in the last twelve month while (54%) were not using condom consistently. This is also related with their hopelessness and not thinking about their future health. Since they drink starting from morning they became drunk and forgot about using condom. This figure is somewhat higher when compared with other studies. In study conducted in china gejiu city among miners consistent condom use was low with only 13.3% and 61.2% reported never used condom(4). In other two studies conducted in china among mining workers 77.2% and 72% of them did not used condom consistently(16,17). There might be some knowledge gap on the importance of condom use among the mining workers in those of studies in china which create the discrepancy.

In this study 43.5% of mining workers were under gone testing for HIV in the last three of the study period. This low percent related with the non existence of the VCT service in this mining site and their being hopeless about their health. This is almost the same to study conducted in Britain among black Africans on the factors associated with HIV testing, 44% of women and 36.4% of men were ever tested for HIV(29) and that of conducted in Tanzania among medical students which was 43.3%(30).

Of Mining workers who participated in this study 58.3% of them drink alcohol during their stay in the mining site, 54.2% and 13.2% of them chew chat and use drug respectively. This is related with their being hopeless due to working condition, non existence of the recreational place in the site and their belief of not saving the money they earn each day to get stoke of gold. And none of these were significantly associated with HIV preventive behavior. But in different study alcohol use, chewing chat and substance were significantly associated with HIV infection and preventive behavior. In study that conducted in china among miners in mining district of Yunnan, drug use was significantly associated with HIV infection (17). And also alcohol intake was significantly associated with HIV infection in cross sectional study conducted in Tanzania among mining workers (6). A study conducted at national level demonstrated that alcohol and khat use substantially and significantly increase the likelihood of having multiple sexual partnerships (39). In general many study conducted in different part of the world showed alcohol and substance significant association with HIV infection (34-38). This difference may be because of the outcome in this study was the combination of different preventive behaviors.

Mining workers who completed secondary school and tertiary school were 2.66 and 5.4 times more likely engaged in HIV preventive behavior respectively as compared with those who can't read and write. In study conducted in Britain among black African and in Uganda among men Educational status was also significantly associated with HIV testing (29, 30). Mining workers whose monthly income is middle, higher and highest were less likely to be engaged in HIV preventive behaviors as compared with those whose monthly income is lower by 60%, 46% and 61% respectively. This is also similar with that of study conducted in Thailand among migrant fishermen; in this study respondents with more income were more likely to practice unsafe sex than those with less income (27).

In this study perceived susceptibility was not associated significantly with HIV preventive behavior. In different study it was also not significantly associated with HIV preventive behavior (11, 30, and 31). But in some study it was significantly related with HIV preventive behavior, in that of study conducted in Britain among black African perceived susceptibility was significantly associated with HIV testing. And also in study done in Ghana among youth and that of South Africa university students it was significantly associated with consistent condom use (21, 22).

This difference may be due to the outcome variable which was the combination of different preventive behaviors.

Perceived severity had also no significant association with HIV preventive behavior, but in different study it was associated with HIV preventive behavior. In study done in Japan among adolescent student AIDS belief and intention to sexual abstinence high perceived severity was more likely to have a strong abstinence intention than those with low level of perceived severity (11). And it was also found to be significant predictor of the adoption of HIV preventive behavior in study conducted in America among Asian American college students to examine predictive power of HBM (40). This discrepancy may be still due to the outcome variable which was the combination of different preventive behaviors

Perceived benefit and perceived barrier was also not significantly associated with HIV preventive behavior in this study. In other studies perceived benefit had showed no association with HIV preventive behavior (11, 12, 21, 22, 40 and 41). But perceived barrier was significantly associated with HIV preventive behavior in other studies, in study conducted in Haiti's youth on their HIV preventive behavior participants who had high perceived barriers to condom use were 53% less likely to have consistently used a condom than those with low perceived barriers(26). Generally Perceived barrier was significantly related to HIV preventive behavior in different studies (12, 21, 22, and 41).

Perceived Self efficacy was the only construct from HBM construct which showed significant relation with HIV preventive behavior in this study. Mining workers who had high perceived self efficacy were 1.88 times more likely to practice HIV preventive behavior as compared with those who had low perceived self efficacy. This was also the same with different studies done in different areas. In that of study done in Haiti among youth on their HIV preventive behavior subjects who had high self efficacy to use condom in appropriate situation were 2.08 times more likely to have consistently used condom than those with low self efficacy (26). In study conducted in America among Taiwanese immigrant only self efficacy was significant predictor of HIV prevention (13). In generally self efficacy was predictor of HIV preventive behavior in different studies (21, 22 and 30).

Chapter 7: Strength and limitation of the study

7.1. Strength of the study

- The study was done using HBM as conceptual framework to predict HIV preventive behavior of study participant.
- It was the triangulation of the quantitative and qualitative study

7.2. Limitation of the study

- There may be social desirability bias since the data was collected using interviewer administered questionnaire.
- Since the study is cross sectional, it is difficult to know whether the behavior or the predicting variable occurred first.
- And also Cultural and population difference may affect the predictive power of constructs of HBM.

Chapter 8: Conclusion and recommendation

8.1. Conclusion

The finding from this study indicated that the HIV preventive behavior of the mining worker was low. Being engaged in sexual intercourse with one sexual partner is very low. So there would be high sexual networking among them. And Consistent condom use among these mining workers was low. Besides this having sexual intercourse with commercial sex workers was also high. Risk behavior like alcohol use and chat chewing was highly used by the mining workers. Generally all these weigh up the possibility of rapid spreading of HIV infection among them.

Income, educational status and self efficacy have significant effect on the HIV preventive behavior of mining workers. Additionally the working environment and dangerous working condition may have an effect on the preventive behavior of the mining worker. And also existence of only masculine identity in the site may drive them to buy sex and to have multiple sexual partners, and would have an effect on their preventive behavior.

8.2. Recommendation

Based on the finding from this study the following recommendation were forwarded

- This population segment should be understood as most at risk population group as being understood in different part of the world and as other population segment at national level.
- Interventional program such as community-based outreach, behavioral change communication and information, education and communication which make the target group involved as fully as possible in design and implementation of the program should be implemented.
- Nongovernmental organization working on HIV/AIDS in bench maji zone or at national level should expand their program to this specific area and target group.
- Developing and implementing VCT campaign as special case for this population segment to promote behavior change among them.
- Recreational area should get due attention by governmental or nongovernmental organization in order to bring behavioral change on mining workers risky behavior to HIV risk.
- Further studies related to behavioral change interventions should be under taken.

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Annex 2: English version questionnaire

Questionnaire No -----

Data collector code No-----

Jimma University

College of Public Health and Medical Science,

Department of Health Education and Behavioral Science

QUESTIONNAIRE PREPARED FOR HIV PREVENTIVE BEHAVIOR AND ASSOCIATED FACTORS AMONG MINING WORKERS IN SALI TRADITIONAL GOLD MINING SITE BENCH MAJI ZONE SOUTH WEST ETHIOPIA

Part I Socio Demography related questions

No	Questions	Responses and coding	Skip to
101	Sex of respondent	1.Male 2.female	
102	How old are you?	-----years	
103	What is your religion?	1.orthodox 2.Muslim 3.Protestant 4.others, specify-----	
104	What is your ethnic group?	1. Amhara 2.Oromo 3.Walayita 4.Hadiya 5.Other, specify-----	
105	What is your marital status?	1.single 2.Married 3.Divorced 4.Widowed	If other than 2 skip to 108
106	If married are you living with your wife in the site?	1.yes 2. no	
107	If no, how often do you visit your family during your stay in the site	In ----- month	
108	What is your average monthly income?	-----birr	
109	What is your educational Status	1. Can't read and write 2. grade 1-4 3. grade 5-8 4. grade 9-10 5. grade 11-12 6. Collage and above	

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Part II Risky behaviors related to HIV risk

No	Questions	Responses and coding	Skip to
201	Do you use alcohol during your stay in the site?	1. Yes 2.No →	Q203
202	If yes how often do you use it?	1.always 2.sometimes 3.rarely	
203	During your stay in the site do you chew chat?	1. Yes 2.No →	Q205
204	If yes how often do you use it?	1.Always 2.Sometimes 3.Rarely	
205	Do you use any other substance/drug during your stay in the site?	1. Yes 2. No →	Q301
206	If yes how often do you use it?	1.Always 2.Sometimes 3.Rarely	

Part III HIV preventive behavior related questions

No	Questions	Responses and coding	Skip to																		
301	Have you ever had sexual Intercourse?	1. Yes 2.No →	Q401																		
302	Are you sexually active currently during your stay in this site in the last 12 month?	1. Yes 2.No →	Q309																		
303	If yes, do you use condom during sexual intercourse?	1.yes 2.No →	Q305																		
304	If yes, how often do you use condom?	1.Consistently → 2.Sometimes 3.Rarely 4.Occasionally	Q306																		
305	If you have not used condom at all, or have not used it consistently what was the reason? (multiple response possible)	<table style="width: 100%; border: none;"> <tr> <td></td> <td style="text-align: right;">Yes</td> <td style="text-align: right;">No</td> </tr> <tr> <td>1. Not available</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>2. Too expensive</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>3. Ashamed to ask my partner</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>4. I trust my partner</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>5. I was drunk</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> </table>		Yes	No	1. Not available	1	2	2. Too expensive	1	2	3. Ashamed to ask my partner	1	2	4. I trust my partner	1	2	5. I was drunk	1	2	
	Yes	No																			
1. Not available	1	2																			
2. Too expensive	1	2																			
3. Ashamed to ask my partner	1	2																			
4. I trust my partner	1	2																			
5. I was drunk	1	2																			
306	If yes to 302 with whom you are engaged on sex?	1.Regular partner 2.Casual partner 3.Commercial sex worker 4.Other, specify-----																			

307	If yes to 302 what is the number of your sexual partner?	-----	
308	Did you undergo HIV testing in the last three month?	1.Yes 2.No	
309	What is your current plan for HIV transmission prevention?	1.Abstaining 2.Being faithful to one partner 3.Condom use	

Part IV Constructs of Health Belief Model items

Perceived susceptibility

No	Items	Strongly disagree(1)	Disagree (2)	Neutral(3)	Agree(4)	Strongly Agree(5)	Not available
401	I feel that the chances are high that I can get AIDS						
402	I am afraid that I might contract AIDS						
403	One may fail to know HIV status ones partner. I may be exposed to HIV because my partner may be at risk of getting HIV/AIDS.						
404	A person may get infected with HIV in one or the other way. I might have been infected with HIV/AIDS in some way.						
405	My sexual behavior is safe and didn't expose me to HIV/AIDS						
406	I am not confident that I might have not get HIV/AIDS still.						

Perceived severity

No	Items	Strongly disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly agree(5)	Not available
407	AIDS causes death						
408	HIV/AIDS is a disease that has neither cure nor vaccine						
409	I would rather die from a violent death than from AIDS						
410	One lives with HIV/AIDS means he/she will suffer from discrimination						
411	HIV/AIDS is probably the worst disease one can get						
412	I would rather have any other fatal illness than AIDS						

Perceived benefit Abstaining from sex

No	Items	Strongly disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly agree(5)	Not available
413	Being abstained from sexual intercourse before marriage is the way one can prevent HIV/AIDS.						
414	Abstinence from sexual intercourse is the first choose to prevent unintended pregnancy.						
415	Being abstained from having sexual intercourse with girl friend/boy friend until testing for HIV can prevent its transmission.						
416	Abstinence from sexual intercourse until marriage have social and friend support.						

Perceived benefit from having one sexual partner

417	Being faithful is the best way to prevent HIV/AIDS transmission						
418	Being faithful to one sexual partner is the first chapter in the book of marriage						
419	Being faithful to my sexual partner will make our love and future life better						
420	If one can stay with one sexual partner, I belief he/she can prevent transmission of STIs						

Perceived benefit from using condom							
421	Consistent condom use can prevent HIV /AIDS transmission						
422	Condom use during sexual intercourse with steady sexual partner until knowing partners HIV status prevent the HIV transmission.						
423	I belief Condom use prevents the happening of unintended pregnancy.						
424	Consistent condom use prevent transmission of other STI other than HIV/AIDS						

Perceived benefit from HIV testing							
425	HIV testing helps to decide reducing risky behaviors that expose to HIV infection.						
426	HIV testing is the first step to confidently start to have safer sex with ones partner						
427	Knowing ones HIV status is important for ones future sexual and health life plan						
428	HIV testing helps to decide reducing risky behaviors that expose to HIV infection						

Perceived barrier of Abstaining from sex							
No	Items	Strongly disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly agree(5)	Not available
429	Peer influence can prevent me from staying abstained from sex						
430	If someone becomes drunk he/she may be motivated to sexual intercourse. I belief I cannot be forced to have sex even if I am drunk.						
431	The age of individual can affect his/her being abstained from sexual intercourse. My age can affect my being abstained from sexual intercourse.						
432	The working environment of the site may affect my being abstained from sexual intercourse.						

Perceived barrier to having one partner							
433	My being stay away from my steady sexual partner makes me to have extra sexual partner than my steady sexual partner						
434	If I become drunk I may annoyed to have sex						

	with someone who is not my steady sexual partner.						
435	I believe that my friends in the site can pressure me to have sexual intercourse with someone other than my steady sexual partner						
436	The mining site working environment may make me not to stay with one sexual partner						

Perceived barrier to condom use

437	Some people would be embarrassed to buy condom from the shop. I believe I would be uncomfortable to buy condom from shop.						
438	It would be wrong to carry condom with me because it would mean that I am planning to have sex.						
439	People may believe using condom would be embarrassing. I believe it is comfortable to use condom during sexual intercourse.						
440	I will not be ashamed to buy condom from the pharmacy or shop.						

Perceived barrier to HIV testing

441	I will get HIV testing only when the tester doesn't know me personally						
442	Undergoing HIV testing, when I may not be ready for it, is not convenient to me.						
443	It would bother me a lot if someone I know is around me while getting an HIV test and result.						
444	Health care providers who offer HIV testing will never keep results really confidential.						

Self efficacy to abstain from sex

No	Items	Strongly disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly agree(5)	Not available
445	If someone becomes drunk or uses substances he/she may be influenced to have sexual intercourse. I am confident I can stay abstained from sex even if I am drunk						
446	I will not have sexual intercourse with my boy/girl friend until we know our HIV status						
447	I am confident that I can say no to have sexual intercourse with my boy/girl friend before						

	marriage even if he/she enforced me to have sex.						
448	I am confident that I can stay abstain even if my friends are have sexual intercourse with someone.						

Self efficacy to have one sexual partner

449	I am confident that I can be with one sexual partner throughout my life.						
450	I am not confident that I stay in the mining site without sexual inter course until I visit my wife back home.						
451	I am sure that I can control myself from having sexual intercourse other than my steady sexual partner even though I am drunk.						
452	I am confident that the mining work environment can not affect my being faithful to my sexual partner.						

Self efficacy to use condom

453	I am confident that I use condom consistently even if I am drunk.						
454	I am confident that I could go to shop and by condom if I want to get it						
455	I am not confident condom can prevent HIV infection						
456	I am confident that I consistently use the condom during my sexual relationship.						

Self efficacy to HIV testing

457	I am confident to undergo HIV testing whenever needed.						
458	I am not afraid of being positive after the result Of HIV testing						
459	People may experience fear to use ART service in transparent way. If I get tested to be HIV positive, I am confident to transparently use ART service.						
460	I can freely continue my daily routine activities as previous in spite of HIV positive test result.						

Cue to action to abstain from sex

No	Items	Strongly disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly agree(5)	Not available
461	I have heard from media about the importance of abstaining from sex						
462	My friends were discussing with me to abstain from sex						
463	My parents were discussing with me about the abstinence from sex.						

Cue to action to have one sexual partner

No	Items	Strongly disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly agree(5)	Not available
464	I have heard from media about the importance of having only one sexual partner						
465	My friends were discussing with me about having only one sexual partner.						
466	My partner discuss with me about having only one sexual partner.						

Cue to action to use condom

No	Items	Strongly disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly agree(5)	Not available
467	I have heard from media about HIV testing few days before visiting health institution.						
468	My friends were discussing with me to use condom during sexual intercourse						

469	My partner talks with me to use condom when to have sexual intercourse.						
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Cue to action to HIV testing

No	Items	Strongly disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly agree(5)	Not available
470	I have heard from media about HIV testing few days before visiting health institution.						
471	My friends/partners/were discussing with me to get HIV testing few days before visiting health institution						
472	My partners discuss with me to get HIV testing few days before visiting health institution						

Annex 4: Information sheet for interview participants

Study Title: HIV preventive behavior and associated factors among gold mining workers in Sali mining site bench maji zone southwest Ethiopia.

Will be read for the study participants

Introduction and purpose of the study

Hello! My name is _____ (give the name) and I am health professional working in _____ (state where you work). I am gathering information on HIV preventive behavior and its associated factors in this mining site. Now days, HIV/AIDS is a major public health problem globally and nationally as it affected, is infecting and killing millions people especially in sub-Saharan countries including Ethiopia. The current strategies to prevent and control HIV/AIDS worldwide and Ethiopia are manly on related with behavior. Knowing the status of HIV preventive behavior and its associated factors in this mining site will help for further intervention at the site level and may make this population segment understood as at risk group. So the aim of this study is to know more about HIV preventive behavior among mining workers. If you participate in this study, information you give is valuable by far, to meet the aim health sector aim for, in enhancing the way individuals will get access to benefit from m existing services provided for HIV/AIDS. Now I need your consent to participate in the study while simultaneously considering your opportunity to get your compliant managed when your turn should be kept as it is.

Procedure

If you agree to participate, I will have an interview with you mainly about your practice toward HIV prevention, your belief on HIV/AIDS, belief to HIV test, other factors which may inhibit or facilitate for HIV preventive behavior. We use questionnaire sheet to facilitate our interview and I tick your response on the sheet. The interview may take about 20-30minutes.

Confidentiality

The information you provide me will not be disclosed to anyone .only the researcher will have access to the information you provide. Your name will not be written any where rather we use unique code for each participant.

Risk or discomfort

There might be slight discomfort to share some personal information .However; we do not wish this to happen. Thus feel free to refuse to answer any of the questions, if you are uncomfortable.

Benefits

Do not expect any direct benefit or payment to you by participating in this study but the information learned from this study may be valuable to develop appropriate strategy to prevention and control HIV/AIDS.

Right to refuse or withdraw

I really value your participation by giving me your precious time while that time may only slightly touch some of your other issues. However, it's up to you to decide whether to participate in this interview or not. Will definitely respect what so ever your decision will be, you can withdraw at any time you want.

For further information Contact:-

For general questions about the study:

Principal investigator: Hordofa Gutema: Tel: 0911791775

For questions about one's rights as a research participant:

Secretary of Ethics Review Board of Jimma University; Tel -----

Fax: +2511471114484; P.O.BOX 378, Jimma University

4.1. Consent form for interview client participants

I have been fully informed about this research study, and understand that its aim is to learn more about HIV preventive behavior and its associated factors. I have also been told that our interview may take about 20-30 minutes. I have been informed that my participation may only slightly take my time for other issues and research study does not harm me but may be associated with minimal discomfort.

I am aware that information acquired from the interview will not be shared outside the research team. I consent voluntarily to take part in the study and understand that I have the right to withdraw from the interview at any time without in a way that affects my right.

Print name of study participant, date and signature, or thumb impression of subject

_____, _____ / _____ / _____ (dd/mm/yyyy)

_____ signature/thumb impression (if illiterate)

Print name of independent literate witness, date, and signature of witness

_____, _____ / _____ / (dd/mm/yyyy)

_____ signature

Print name of researcher, date, and signature, of researcher

_____, _____ / _____ / _____ (dd/mm/yyyy)

_____ signature

Annex 5: Guideline for the FGD and observation

5.1. The guideline for the mining workers

1. What behaviour of the workers looks like related to HIV transmission? Nature of condom use? Number of partner? And rate of partner change? Nature of HIV testing?
2. Whether the mining environment may make the workers at risk of HIV infection? Access to condom use?
3. What do they do usually during their break time? Nature of taking alcohol, chewing chat? Where do they take it at home or at local site?
4. Where do they go after substance use? What do they do? Do they visit commercial sex workers?

5.2. Checklist for observation

1. Observe the nature of the mining site, how common alcohol use? How common chat chewing?
2. What does the mining worker who returned from mining site which is out of the camp do starting from the time of selling the gold to the night time?
3. Observe how common the commercial sex worker in the site? How common the mining workers be with them?

Annex 6: የአማርኛ ቅጅ መጠይቅ ቅጽ

የመጠይቅ ቅጽ ቁጥር -----

የመረጃ ሰንሰብዕ መለያ ቁጥር -----

በጅም ዩኒቨርሲቲ

የሕብረተሰብ ጤና እና ህክምና ክፍተኛ ትምህርት

የጤና አጠባበቅ እና ስነ-ባህሪ ትምህርት ክፍል

ስለ ኤች ኦይ ቪ መከላከል ባህሪ ና ተዛማጅ ምክንያቶችን በወረቅ ቁፋሮ ስራተኞች በሳሊ በህላዌ ወረቅ ቁፋሮ ቤንች ማጂ ዞን ደቡብ ምዕራብ ኢትዮጵያ ለማወቅ የተዘጋጀ መጠይቅ

ክፍል 1: ማህበራዊ ሁኔታዎች

ቁ	ጥያቄዎች	የመልሶች አማራጭ ና መለያ	
101	የመላሹ/ሷ ጾታ	1. ወንድ 2. ሴት	
102	የመላሹ/ሷ እድሜ	----- ዓመት	
103	የመላሹ/ሷ ሀይማኖት	1. ኦርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 4. ሌላ/ይገለፅ -----	
104	የመላሹ/ሷ ብሔር/ ጎሳ?	1. አማራ 2. ኦሮሞ 3. ወላይታ 4. ሃድያ 5. ሌላ/ይገለፅ-----	
105	የመላሹ/ሷ የትዳር ሁኔታ?	1. ያላገባ/ች 2. ያገባ/ች 3. የተፋታች 4. ሚስት/ባልዋ የሞተባት	ያገባ ካልሆኑ ወዴ 108 ይላፈ
106	ያገባህ/ሽ ከሆነ ከሚስትህ/ከባልሽ ጋር አብራቸው ነው የምትኖሩት?	1. አዎ 2. አይደለም	
107	አብራቸው የማትኖሩ ከሆነ በምናህል ጊዜ ትጎበኛታለህ/ሽ	1. በአንድ ወር 2. በሶስት ወር 3. በስድስት ወር 4. ከስድስት ወር በላይ	
108	የወር ገቢህ በግምት ስንት ይሆናል?	----- ብር	
109	የትምህርት ደረጃ	1. ማንበን እና መጻፍ የማይችል 2. 1-4 ክፍል 3. 5-8 ክፍል 4. 9-10 ክፍል 5. 11-12 ክፍል 6. ኮሌጅና ከዚያ በላይ	

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ክፍል 2: ለኤች ኦይ ቪ አገላጭ የሆኑ ባህሪን በተመለከቱ ጥያቄዎች

ቁ	ጥያቄዎች	የመልሶች አማራጭ ና መለያ	ይለፍ
201	በቁፋሮ ቦታ ቆይታህ የአልኮል መጠጥ ትጠግለህ?	1. አዎ 2. አይደለም →	ቁ203
202	አዎ ከሆነ በምናህል ጊዜ?	1. ሁል ጊዜ 2. አልፎ አልፎ 3. እምብዛም	
203	በቁፋሮ ቦታ ቆይታ ህጫት ትቅማለህ?	1. አዎ 2. አይደለም →	ቁ205
204	የምትቅም ከሆነ በምናህል ጊዜ?	1. ሁል ጊዜ 2. አልፎ አልፎ 3. እምብዛም	
205	በቁፋሮ ቦታ ቆይታህ ሌላ እጽ ትጠቀማለህ?	1. አዎ 2. አይደለም →	ቁ301
206	የምትጠቀም ከሆነ በምናህል ጊዜ?	1. ሁል ጊዜ 2. አልፎ አልፎ 3. እምብዛም	

ክፍል 3: የመከላከል በሃረን በተመለከቱ ጥያቄዎች

ቁ	ጥያቄዎች	የመልሶች አማራጭ ና መለያ	ይለፍ																		
301	የግብረሰጋ ግንኙነት አድርገህ/ሽ ታውቃለህ/ሽ?	1. አዎ 2. አይደለም →	ቁ 401																		
302	ባለፉት አስራ ሁለት ወራት በማዕድን ቁፋሮ ቦታ ቆይታህ የግብረሰጋ ግንኙነት አድርገህ/ሽ ታውቃለህ/ሽ?	1. አዎ 2. አይደለም →	ቁ309																		
303	አዎ ከሆነ በቆይታክ/ሽ ኮንዶም ትጠቃማለክ/ሽ?	1. አዎ 2. አይደለም →	Q305																		
304	አዎ ከሆነ ባለፉት አስራ ሁለት ወራት የምትጠቃመዉ/ምዉ ምን ያህል ጊዜ?	1. በዘላቂነት → 2. አንድንድ ጊዜ 3. እምብዛም 4. አልፎ አልፎ	Q306																		
305	በግንኙነት ወቅት ኮንዶም የማትጠቀመዉ/ም ከሆነ ለምንድን ነዉ?	<table border="0"> <tr> <td></td> <td>አዎ</td> <td>አይደለም</td> </tr> <tr> <td>1. አገልግሎቱ ስለሌለ</td> <td>1</td> <td>2</td> </tr> <tr> <td>2. ውድ ስለሆነ</td> <td>1</td> <td>2</td> </tr> <tr> <td>3. ለመጠየቅ ስለማፍር</td> <td>1</td> <td>2</td> </tr> <tr> <td>4. አጋሬን ስለማምን</td> <td>1</td> <td>2</td> </tr> <tr> <td>5. ጠጥቼ ስለነበር</td> <td>1</td> <td>2</td> </tr> </table>		አዎ	አይደለም	1. አገልግሎቱ ስለሌለ	1	2	2. ውድ ስለሆነ	1	2	3. ለመጠየቅ ስለማፍር	1	2	4. አጋሬን ስለማምን	1	2	5. ጠጥቼ ስለነበር	1	2	
	አዎ	አይደለም																			
1. አገልግሎቱ ስለሌለ	1	2																			
2. ውድ ስለሆነ	1	2																			
3. ለመጠየቅ ስለማፍር	1	2																			
4. አጋሬን ስለማምን	1	2																			
5. ጠጥቼ ስለነበር	1	2																			
306	ለቁ302 አዎ ከሆነ ከማን ጋር ያደርጋሉ?	1. ከቋሚ ዳደሮች 2. ባጋጣሚ ከምገኝ 3. ሴተኛ አዳሪ 4. ሌላ/ይገለፅ-----																			

307	ለቁ302 አዎ ከሆነ ከምናህል ሰዎች ጋር ግንኙነት አድርገህል/ሻል?	-----	
308	ባለፉት ሶስት ወራት የኤች አይ ቪ ምርመራ አድርገህ ታውቃለህ?	1.አዎ 2.አይደለም	
309	እራስህን ከኤች አይ ቪ ለመከላከል ምን ለማድረግ አስበህል ?	1. ለመታቀብ 2. ከአንድ የወሲብ ጃደኛ ጋር ለመወሰን 3. ኮንዶም ለመጠቀም	

ክፍል 4: ስለ ኤች አይ ቪ/ ኤድስ አመለካከት ጥያቄዎች ለኤች አይ ቪ/ ኤድስ ተጋላጭነት አመለካከት

ቁ	ጥያቄዎች	በጣም አልሰማም(1)	አልሰማም(2)	ሀሳብ የለኝም(3)	እሰማለሁ (4)	በጣም እሰማለሁ(5)	መልሱ የሌም
401	በኤድስ በሽታ የመያዝ እድሌ ከፍተኛ ይመስለኛል						
402	በኤድስ በሽታ የተያዘኩ ይመስለኛል						
403	አንድ ሰው የፍቅር አጋሩ ኤች አይ ቪ ሁኔታውን ላያቅ ይችላል። እኔ ተጋላጭ ልሆን ይችላለሁ ምክናቱስ ፍቅሬኛዬ ለኤች አይ ቪ ተጋላጭ ልሆን/ልትሆን ስለምችል/ስለምትችል						
404	ኤች አይ ቪ በተለያየ መንገድ ሊተላለፍ ይችላል . ኤች አይ ቪ/ኤድስ በአንዱ የመተላለፍ መንገድ የተያዘኩ ይመስለኛል						
405	የግብረሰጋ ግንኙነት የምፈጽመው በጥንቃቄ ስለሆነ ለኤች አይ ቪ/ኤድስ አያገልጽኝም						
406	. በኤች አይ ቪ/ኤድስ አልተያዘኩም ብዬ እርግኛ መሆን አልችልም						

ስለኤች አይ ቪ/ ኤድስ አደጋናት አመለካከት

ቁ	ጥያቄዎች	በጣም አልሰማም(1)	አልሰማም(2)	ሀሳብ የለኝም(3)	እሰማለሁ (4)	በጣም እሰማለሁ(5)	መልሱ የሌም
407	የኤድስ በሽታ ገዳይ ነው						
408	ኤች አይ ቪ/ኤድስ መድሀኒትም ሆነ ክትባት የሌለው በሽታ ነው						
409	በኤድስ በሽታ ከምሞት በሌላ ነገር ብሞት እመርጣለሁ						

410	አንድ ሰው ከኤች አይ ቪ/ኤድስ ጋር አብሮ ቢኖር ከፍተኛ የሆነ መገለል ስቃይ ይደርስበታል						
411	ኤች አይ ቪ/ኤድስ ምናልባትም አንድ ሰው ሊዘው ከሚችለው አስቃቂ በሽታ አንዱ ነው						
412	በኤድስ ከምያዝ በሌላ አጣዳፊናጊዜ በማይሰጥ በሽታ ብያዝ እመርጣለሁ						

ስለኤች አይ ቪ/ ኤድስ በመከላከል ጠቃሚታ ያሉ አመለካከት

ቁ	ጥያቄዎች	በጣም አልሰማም(1)	አልሰማም(2)	ሀሳብ የለኝም(3)	እሰማለሁ (4)	በጣም እሰማለሁ(5)	መልሱ የሌም
413	ከጋብቻ በፊት ከግብረ ስጋ ግንኙነት መታቀብ የኤች አይ ቪ/ኤድስን መከላከያ መንገድ ነው						
414	ከግብረ ስጋ ግንኙነት መታቀብ ካልተፈለገ እርግዝና ይከላከላል።						
415	ከፍቅሬኛ ጋር ለኤች አይ ቪ ሳይመራመሩ ከግብረ ስጋ ግንኙነት መታቀብ ሲረጭቱን ይከላከላል።						
416	ከጋብቻ በፊት ከግብረ ስጋ ግንኙነት መታቀብ የህብረተሰብ ና የጓደኛ ድጋፍ አለው።						

417	መተማመን ጥሩ /ኤድስ መከላከያ መንገድ ነው						
418	ከአንድ የወሲብ ሾደኛ ጋር መተማመን በትዳር መጽሀፍ የመጀመሪያ አንቀጽ ነው						
419	ከወሲብ ሾደኛዬ ጋር መተማመኔ ፍቅራችንም ሆነ የወደፊት ህይወታችንን ጣፋጭ ያደርገዋል						
420	አንድ ሰው ከአንድ የወሲብ ሾደኛው ጋር መቆየት ከቻለ ጨብጥና ቂጥኝ መከላከል ይችላል ብዬ አምናለሁ						

421	ሁልጊዜ በግንኙነት ወቅት ኮንዶም በመጠቀም ኤች አይ ቪ/ኤድስን መከላከል ይችላል						
422	የኤች አይ ቪ ምርመራ ውጤት እስኪታወቅ ድረስ ከቆሚ የወሲብ ሾደኛ ጋር ኮንዶም መጠቀም ኤች አይ ቪን ይከላከላል						
423	ኮንዶም መጠቀም ያልተፈለገ እርግዝናን ይከላከላል ብዬ አምናለሁ						
424	ሁልጊዜ በግንኙነት ወቅት ኮንዶም በመጠቀም ሌሎች ዘባለዘር በሽታንም የከላከላል።						

የኤች አይ ቪ ምርመራ የምገኝ ጠቅም በተመለከተ

425	ለኤች አይ ቪ ከሚያጋልጡ ባህሪያት እንድንቆጠብ ይረዳናል።						
426	የኤች አይ ቪ ምርመራ ማድረግ ከወሲብ ሾደኛ ጋር መተማመን የተሞላበትናጥሩ የሆነ የግብረ ስጋ ግንኙነት ለመጀመር ይረዳል						
427	የአንድን ሰው የኤች አይ ቪ ምርመራ ውጤት ማወቅ ለወደፊት የግብረ ስጋ ግንኙነትም ሆነ የህይወት እቅድ ለማውጣት ይረዳል።						
428	የኤች አይ ቪ ምርመራ ማድረግ ለቫይራሱ ከምያጋልጡ						

ባህረደታት እንድንቆጠብ ይረዳል።

ስለኤች አይ ቪ/ ኤድስ ለመከላከል የምጋድቡ ያሌ አመለካከት ከወሲብ ተቅቦ ከመቆየት ይምጋድቡ ቢተማላካቱ

ቁ	ጥያቄዎች	በጣም አልሰማማም(1)	አልሰማማም(2)	ሀሳብ የለኝም(3)	እስሰማለሁ(4)	በጣም እስሰማለሁ(5)	መልሱ የሌም
429	የጓዴኛ ግፍት ከግብረ ስጋ ግኑንነት ታቅቤ እንዳልቆይ ልያረጋጅኝ ይችላል።						
430	አንድ ሰው መጠጥ ከጠጣ የግብረ ስጋ ግኑንነት ለማድረግ ይነሳሳል/ይገፋፋ .እኔ ግን መጠጥ ብጠጣም የምነሳሳ/የምገፋፋ አይመስለኝም						
431	የአንድ ሰው እድሜ ከወሲብ ለመታቀብ አስተዋጾ አለው። የእኔ እድሜ ከወሲብ እንዳልታቃብ ምክንያት ልሆን ይችላል።						
432	የወርቅ ቁፋሮ በታ ስራ ሁኔታ ከግብረ ስጋ ግኑንነት ታቅቤ መቆየቴን ልጎዳ ይችላል።						

ከአንድ የፍቅር ጓዴኛ ለመቆየት የምጋድቡን ቢተማላካቱ

433	ከፍቅረኛዬ በመራቄ ሌላ የወሲብ አጋር እንድፈልግ አድርጎኛል						
434	መጠጥ ከጠጣሁ ከፍቅረኛዬ ውጭ የግብረ ስጋ ግኑንነት ለማድረግ እገደዳለሁ።						
435	በወርቅ ቁፋሮ በታ ያሉት ጓዴኞቼ ከቋም የወሲብ አጋር ወች ወሲብ እንድፋጽም ልገፋፋኝ ይችላሉ።						
436	የወርቅ ቁፋሮ በታ ስራ ሁኔታ ከአንድ የወሲብ ጓዴኛ ጋር እንዳልቆይ ልያዳርጋኝ ይችላል።						

ኮንዶም ከመጠቃም የምጋድቡ ቢተማላካቱ

437	አንዳንድ ሰዎች ኮንዶምን ከሱቅ መግዛት አይመችም ብሎ ያምናሉ። ኮንዶም ከሱቅ መግዛት አይመችም ብየ አምናለሁ።						
438	የግብረ ስጋ ግኑንነት ለማድረግ እቅድ ያለው ስለሚያስመስለኝ ኮንዶም ይዞ መንቀሳቀስ የተሳሳተ ነው ብዬ አምናለሁ						
439	አንዳንድ ሰዎች ኮንዶም አሳፋሪ ነገር ነው ብለው ያምናሉ.እኔ ግን በግብረ ስጋ ግኑንነት ወቅት ኮንዶም መጠቀም ምቹ ነው ብዬ አምናለሁ						
440	ኮንዶም ከፋርማሲም ሆነ ከሱቅ ለመግዛት አላፍርም።						

የኤች አይ ቪ ምርመራ የምጋድቡ የታመላካቱ

441	የኤች አይ ቪ ምርመራ የማደርገው መርማሪው የማያውቀኝ ከሆነ ብቻ ነው						
442	ሳልአስብበት የኤች አይ ቪ ምርመራ ማድረግ አይመቻኝም።						
443	የማቀወ ሰው የኤች አይ ቪ ምርመራ በታ ካሌ ለመርምር በጣም ይጨንቀኛል						
444	የኤች አይ ቪ ምርመራ የምያደርግ የጤና ባለሙያ የምርመራውን ውጤት በምስጥር አይጠብቁም						

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**በራስሰለ መተማመን የተመለከቱ ጥያቄዎች
ከወሰብ ታቅቦ ስለ መቆየት ያሌ ራስ መተማማንን በተማላካቱ**

ቁ	ጥያቄዎች	በጣም አልሰማም(1)	አልሰማም(2)	ሀሳብ የለኝም(3)	አሰማለሁ (4)	በጣም አሰማለሁ(5)	መልሱ የሌም
445	ሰዎች አልከል ጠጥቶ ከሰካሩ ወይም እጽ ከተጠቃሙ ለወሲብ ልነሳሱ ይችላሉ። እኔ እርግጠኛ ነኝ ጠጥቼ ብሰክር እንኳን ከወሰብ ታቅቤ ይቆያለሁ።						
446	የፍቅሬታዎን የኤች አይ ቪ ሁኔታ ሳላቅ የግብር ስጋ ግንኙነት አላደረግም።						
447	እኔ የፍቅሬታዎ ወሲብ ጥያቄ እንቢ ይላሌወኝ ምንም እንኩሉን ብያሰጋድዴኝም/ቢታሰጋድዴኝም።						
448	ምንም እንኳን ጓደኞቼ ወሲብ ብፋጽሙም ከወሰብ ታቅቤ ቆያለሁ።						

ከአንድ የፍቅር ጓደኛ ጋር ለመቆየት ያሌ ራስ መተማማንን በተማላካቱ

449	በእርግጠኝነት እስከ መጨረሻ ከአንድ የወሲብ ጓደኛ ጋር ይቆያለሁ።						
450	በወርቅ ቁፋሮ ቦታ ቆይታዬ ፍቅሬታዎን እስካገኝ ድረስ ያለ ግብር ስጋ ግንኙነት መቆየትን እርግጠኛ አይደሌወም።						
451	ጠጥቼ ብሰክር እንኳን ከፍቅሬታዎ ወጭ ወሲብ እንድልልፈጽ እርግጠኛ ነኝ።						
452	የወርቅ ቁፋሮ ቦታ የሰራ ሁኔታ የኔን ለፍቅሬታዎ ታማኝ መሆን ልከላከሌኝ አይችልም						

ኮንዶም ለመጠቃም ያሌ ራስ መተማማንን በተማላካቱ

453	በእርግጠኝነት ኮንዶምን ሁሌ እጠቃማሌወ ምንም እንኳን በመጣጥ ብሳክረም።						
454	በእርግጠኝነት ኮንዶም በፋላኩባት ግዜ ከሱቅ ሄጄ እገዛለሁ።						
455	ኮንዶም መጠቃም የኤች አይ ቪ መተላለፍ መከላከሉን እርግጠኛ አይደሌወም።						
456	በእርግጠኝነት ሁሌ በወሲብ ግዜ ኮንዶም አጠቃማለሁ						

የኤች አይ ቪ ምርመራ ለማድረግ ያሌ ራስ መተማማንን በተማላካቱ

457	በምያስፋል ግዜ በእርግጠኝነት እመረማራለሁ።						
458	የኤች አይ ቪ ምርመራ ወጤት ፖዘቲቭ ሆኖል ብዬ መርመረን አልፈራም።						
459	ሰዎች የጸራ ኤች አይ ቪ መድሀንት መጠቃምን ልፋሩ አችላሉ። እኔ ቫይረሱ በዳሜ ወሰጥ ብገኝ በግልጽኝ የጸራ ኤች አይ ቪ መድሀንት እጠቃማለሁ።						
460	ቫይረሱ በዳሜ ወሰጥ ብገኝም በነጻነት ቋም በየቃኑ ስራዬን ይቃጥላሌወኝ።						

ከግብረ ስጋ ግኝት ታቅቦ ለመኖር የምመራ የተመለከቱ

ቁ	ጥያቄዎች	ቦጣም አልሰማም(1)	አልሰማም(2)	ሀሳብ የለኝም(3)	እሰማለሁ (4)	ቦጣም እሰማለሁ(5)	መልሱ የሌም
461	ከወሲባዊ ግንኙነት ስለ መታቃብ ከምድያ ነዉ የሰማዉት						
462	ከወሲባዊ ግንኙነት ስለ መታቃብ ከጓደኞቼ ጋር እነጋጋራለዉ።						
463	ከወሲባዊ ግንኙነት ስለ መታቃብ ከፍቅር ጓደኛዬ ጋር እነጋጋራለዉ።						

ከአንድ የፍቅር ጓደኛ ጋር ተማምኖ የመኖር የምመራ የተመለከቱ

ቁ	ጥያቄዎች	ቦጣም አልሰማም(1)	አልሰማም(2)	ሀሳብ የለኝም(3)	እሰማለሁ (4)	ቦጣም እሰማለሁ(5)	መልሱ የሌም
464	ከአንድ የፍቅር ጓደኛ ጋር ተማምኖ ስለ መኖር ከሚድያ ነዉ የሰማዉት።						
465	ከአንድ የፍቅር ጓደኛ ጋር ተማምኖ ስለ መኖር ከጓደኞቼ ጋር እነጋጋራለዉ።						
466	ከአንድ የፍቅር ጓደኛ ጋር ተማምኖ ስለ መኖር ከፍቅር ጓደኛዬ ጋር እነጋጋራለዉ።						

ከንደምን ለመጠቀም የምመራ የተመለከቱ

ቁ	ጥያቄዎች	ቦጣም አልሰማም(1)	አልሰማም(2)	ሀሳብ የለኝም(3)	እሰማለሁ (4)	ቦጣም እሰማለሁ(5)	መልሱ የሌም
467	ስለ ኮነደም አጠቃቀም ከሚድያ ነዉ የሰማዉት ከሚድያ ነዉ።						
468	ስለ ኮነደም አጠቃቀም ከጓደኞቼ ጋር እነጋጋራለዉ።						
469	ስለ ኮነደም አጠቃቀም ከፍቅር ጓደኞቼ ጋር						

	እነጋጋራለው።						
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ለኤች አይ ቪ ምርመራ የምመራ የተመለከቱ

ቁ	ጥያቄዎች	በጣም አልሰማም(1)	አልሰማም(2)	ሀሳብ የለኝም(3)	እስማማለው (4)	በጣም እስማማለው(5)	መልሱ የሌም
470	ስለ ለኤች አይ ቪ ምርመራ ወደ ጤና ድርጅት ከመጎብኘት በፍት ከምድያ ነዉ የሰማዉት።						
471	ለኤች አይ ቪ ምርመራ ወደ ጤና ድርጅት ከከመጎብኘት በፍት ከጓደኛዬ ጋር ስለ ምረመራዉ አዉርቴናል።						
472	ለኤች አይ ቪ ምርመራ ወደ ጤና ድርጅት ከከመጎብኘት በፍት ከፍቅር ጓደኛዬ ጋር ስለ ምረመራዉ አዉርቴናል።						

ቅጥያ 2.1. ተሳታፊዎችን መረጃ ለመጠየቅ የተዘጋጀ ማብራርያ ና ስምምነት

የጥናቱ ርዕስ:-ስለ ኤች አይ ቪ መከላከል ባህሪ ና ተዛማጅ ምክንያቶችን በወረቅ ቁፋሮ ሰራተኞች በሳሊ በሀላዊ ወረቅ ቁፋሮ ቤንች ማጂ ዞን ደቡብ ምዴራብ ኢትዮጵያ

ለጥናቱ ተሳታፊዎች የሚነበብ

ጤና ይስጥልኝ ሰሜ _____ እባላለሁ። የጤና ባለሙያ ነኝ። አሁን በዚ ወርቅ ቁፋሮ ቦታ የወርቅ ቁፋሪዎችን ኤች አይ ቪ የመከላከል ባህሪ እና ተዛማጅ ምክንያቶችን ለማጥናት መረጃ እየሰበሰብኩ ነዉ። በአሁኑ ጊዜ ኤች አይ ቪ/ኤድስ ዋናዉ የማህረሰብ ጤና ችግር ነዉ። በሚሊዎን የምቆጠሩ ሰዎችም እየሞቱ ይገኛሉ በተለይም ከሳህራ ቦታች በሚገኙ ሀገራት ሀገራችን ኢትዮጵያ ጨምሮ። አሁን ባለዉ ኤች አይ ቪ መከላከል እና መቆጣጠሪ ፕሮግራም ባለም ደራጃም ሆኔ ባገራችን በዋናነት የምያቶክረዉ ከባህሪ ጋር የተያያዙ ነዉ። በዚ ወረቅ ቁፋሮ ቦታ የቆፋሪዉን ኤች አይ ቪ የመከላከል ባህሪን እና ተዛማጅ ምክንያቶችን ማዋቅ በቁፋሮ ቦታ ደራጃ የተሻሌ በሽታዉን ለመቆጣጠር እርምጃ ለመወሰድ ይረዳል። እርስዎም በዚህ ጥናት ብሳተፉ የሚሰጡትን መረጃ ለህግ አውጪዎች ና ሌሎች የሚመለከታቸው አካላት የህ/ሰቡን የጤና ሁኔታ ለማሻሻል በመነሻነት ይጠቀሙት ይችላሉ። አሁን የእርስዎን በዚህ ጥናት መሳተፍ ስምምነት እፈልጋለሁ?

ለመሳተፍ የሚስማሙ ከሆነ በዋናነት የእረሶን ባህሪ ኤች አይ ቪ መከላከል በተመለከተ፡ የእረሶን በኤች አይ ቪ ላይ ያሉትን አመለካከት እና ሌሎች ተዛማጅ ጥያቄዎችን እጠይቆታለሁ። መጠይቁ 20-25 ደቂቃ ሊወስድ ይችላል። እርግጠኛ የምሆንሎት እርስዎ የሚሰጡኝን መረጃ ለዚህ ጥናት ጥቅም ብቻ የሚዉል የሆናል እናም ለሌላ ምክንያት ለሶስተኛ አካል አሳልፈን እንደማንሰጥ። የተወሰኑትን የግል መረጃ ስጠይቆት የተወሰነ አለመመቻት ሊሰማዎት ቢችል ምንም እንኳን ይህ እንዲሆን ባልመኝም ቢሆን ግን በፍፁም ነፃነት መሰል ጥያቄዎችን አለመመለስ ይችላሉ። በማንኛዉም ሁኔታ የእርስዎ ሰም አይፃፍም ይልቁኑ የሚሰጠር መለያ እጠቀማለሁ።

በዚህ ጥናት በመሳተፍዎ ምንም አይነት ቀጥተኛ የሆነ ጥቅም ወይም ክፍያ የለዉም። እንደገና እርግጠኛ የምሆንሎት በዚህ መጠይቅ ሂደት ዉስጥ በመሳተፍዎ በእርስዎም ሆነ በቤተሰብዎ ምንም ዓይነት ጉዳት ሊደርስቦት አይችልም።

የእርሶ በመጠይቁ መሳተፍ በጣም አደንቃለዉ ሆኖም ግን በመጠይቁ መሳተፍም ሆነ አለመሳተፍ በእርሶ ዉሳኔ ላይ የተመሰረተ ነዉ። እኔም የእርሶ ዉሳኔ በጽኑ አከብራላዉ።የሆነ ሆኖ በማንኛዉም ጊዜ የመጠይቁን ህደት ተሳትፎዉን የማቋረጥ ሙብት አሎት።

ለተጨማሪ መረጃ

ዋና አጥኚ:-ሆርዶፋ ጉተማ: ስልክ ቁጥር: +251911791775

የጅማ ዩኒቨርሲቲ ኢትካል ኮሚቴ ቦርድ ጸሐፊ: ስልክ ቁጥር:

ፋክስ +251 471114484 ፖ ሳ ቁጥር:378, ጅማ ዩኒቨርሲቲይ

2.2.

የስምምነት ቅጽ

እባክዎ የ __ ምልክት ያስቀምጡ የተሳታፊዎን በጥናቱ ቃለመጠይቅ መሳተፍን የወሳኔ ሃሳብ ለማመልከት። የጥናቱ ዓላማ ና ለሚሰጠው መረጃ የሚሰጡ አጠባበቅ ሁኔታ ተገዳሪነት በራሴ ስምምነት፡-

ሀ ተስማምቻለሁ _____ ለ አልተስማማሁም _____

የማይስማሙ ከሆነ ቀጥሎ ወደተመረጠ ተሳታፊ ይከዳል

የመረጃ ሰብሳቢው/ዋ ስም በእጅ የተሞላ ቀን ና ፊርማ

_____, _____ / ____ / _____ ቀን/ ወር / ዓ/ም

_____ ፍርማ

