FACTORS RELATED TO VOLUNTARY HIV COUNSELING AND TESTING AMONG 15-49 YEARS URBAN COMMUNITY OF ETHIOPIA

By

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Factors related voluntary HIV and counseling and testing in an Urban Community of Ethiopia

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LIST OF ABBRIVATIONS

AIDS.....Acquired Immune Deficiency Syndrome

CSA.....Central Statistics Authority

ENARP.....Ethio- Netherlands AIDS Research Program

FGD ..... Focus group discussion

HBM.....Health Belief Model

HIV. .....Human Immuno-deficiency Virus

IEC.....Information Education and Communication

MOH.....Ministry of Health

OR.....Odds Ratio

QDC.....Qualitative Data Collection

RHB.....Regional Health Bureau

SD.....Standard Deviation

SLT.....Social Learning Theory

SPSS.....Statistical Program for Social Science

SSA.....Sub-Saharan Africa

STD.....Sexually Transmitted Diseases

TRA.....Theory of Reasoned Action

UNAIDS.....United Nations AIDS

USA.....United States of America

VCT.....Voluntary Counseling and Testing

OPERATIONAL DEFINITION

The following operation definition is used in this study:

- ***HIV counseling***:- is a confidential dialogue between the client and the counselor aimed at enabling the person to cope with stress and to make personal decisions related to HIV/AIDS (WHO/GPA,1994) .
- ***Voluntary Counseling and Testing (VCT)***:- is the process by which an individual undergoes counseling enabling him or her to make an informed choice about being tested for HIV (UNAIDS, VCT Technical update, May 2000).
- ***Intention of having VCT***: - The individuals plan to practice voluntary HIV counseling and testing in the near future (next two month).
- ***Intention of asking partner to get VCT***: - An individual's plan to ask a partner to seek for Voluntary HIV counseling and testing in the near future (next two month).
- ***Attitude***: - An individual's predisposition to respond in a favorable or unfavorable manner toward a target. (i.e. of having VCT for him/her self or for his/her partner/s).
- ***Subjective norm***:- The individual's perception that significant others think him to do the behavior under study (VCT) as normative action.
- ***Salient belief***: - The individual's most important belief about the benefits of having VCT for him / her self or for his/her partner(s).
- ***Evaluation of consequences***: - The individuals subjective evaluation of the consequences of having VCT for him/her self or for his/her partner/s.
- ***Perception of referents support:*** -The individuals perception of social support from specific reference others for performance of having VCT or asking partner/s to get VCT.
- ***Motivation to comply***: - The individuals motivation to comply with the specific referents' wishes about performing HIV/ AIDS preventive behavior.

ABSTRACT

A cross-sectional study was carried out from March 2000 to April 2000 among the age group of 15-49 year population of Harar town, to determine the factors related with intention of Voluntary HIV counseling and testing (VCT). A multi-stage sampling method was used to select 720 study subjects from residents of Harar town. Both quantitative and qualitative data collection methods were utilized.

More than three-fourth (85.4%) of the study subjects claimed to have intention of having VCT; and about three-fourth (73.9%) had intention of asking partner(s) to seek for VCT. On multi-variate analysis condom use (OR=2.3), not initiating sexual practice (OR=2.4), positive attitude (OR=1.4) and salient belief (OR=1.2) towards VCT were positive predictors of intention of having VCT. Being never married (OR=1.9), positive attitude (OR=1.2), subjective norm (OR=1.3) and salient belief (OR=1.3) towards VCT were positive predictors of intention of asking partner(s) to get VCT. On gender based multi-variate analysis being never married (OR=2.3) was significant predictor only among male subjects and not initiating sexual practice (OR=4.7) was significant predictor only among female subjects. Confidential HIV-testing and face-to-face counseling by physicians, trained persons and religious leaders were found to be the most preferred method of service delivery. Majority of subjects could afford to pay less than 10 birr for the VCT service. The major reasons identified for not having intention of VCT were fear of positive result and stigma attached to AIDS.

As cultural norms and attitude towards VCT have significant impact on acceptance of VCT, program implementers should address the issue by involving community leaders and using community and cultural gatherings to advocate benefits of VCT, to reduce fear of positive result and stigma attached to AIDS. To expand the service to the community at large cost issue should be well addressed.

INTRODUCTION

Since the pandemic of HIV/AIDS began a total of 50 million people have contracted HIV. By the end of 1999 nearly 34 million people in the World were living with HIV/AIDS (1/3 in the ages10-24years) and 16 million adults and children had already lost their lives.[1] More than 95% of all HIV-infected people now live in the developing world, which has experienced 95% of all deaths to date from AIDS.[1] The Sub-Saharan Africa (SSA), that is home to only 10% of the world's population, contributes to 70% (23.3million) of global total of HIV-positive people. UNAIDS estimated that by the end of 1999 a cumulative total of around 23.4 million women had been infected with HIV worldwide, and out of those, nearly 7.7 million women had died of AIDS.[2] Since the beginning of HIV/AIDS epidemic, globally, 3.6 million children have died and 1.2 million children are living with HIV. About 5.6 million people (570,000 children aged 14 and younger) became infected with HIV and 2.6 million died due to AIDS during the year 1999[1]. Despite these alarming figures, AIDS is still blighting the lives of another 16,000 people worldwide every day, mainly targeting women, babies, and young people.[3, 4]

The UNAIDS report of 1999, revealed that the average adult prevalence of HIV for all the SSA was found to be 8%. According to the World Bank report of 1997, among the SSA countries, with the first and second rank were Zimbabwe (25.8%) and Botswana (25%). Ethiopia was found at a 16th rank with 9.3% adult prevalence rate.[5]

HIV probably started to spread in Ethiopia in the early 1980's. The first evidence of HIV infection was found in 1984, while the first two AIDS cases were reported in 1986 from the capital Addis-Ababa.[1,4] According to the Ministry of Health report, prevalence of HIV in adult population, during 1984, was estimated to be 0.0% increased to 1.0% in 1989, to 3.2% in 1993,

and to 7.4% in 1997: being 3% to 7% in rural and 15% to 19% in urban areas.[6] These figures showed that, in Ethiopia, prevalence of HIV in adult population is much higher in urban than in rural areas. By December 1999, the MOH Estimated that 3.2 million Ethiopians were living with HIV.[7] There are roughly an equal number of male and female cases. According to a study done by ENARP, in Addis-Ababa during 1996, the prevalence of HIV was highest in the age group of 25 - 29 year's.[8] In our study area, Harar Town, the rate of HIV infection in 1997, was 7.4% among the blood donors, which rose to 7.6% during 1998.[9]

In developing countries HIV/AIDS will have an impact on health, agriculture and industrial sectors. This is by consuming considerable proportion of health budget and reducing the number of health care workers; by eroding the productive force of the agriculture sector thus jeopardizing the food security of the surviving members; by increasing absenteeism it lower productivity and higher health-care cost in industry and business sectors.[2] Epidemic of HIV infection has also considerable impact on education sector: it is eroding the supply of teachers and thus increasing class sizes; death of parents or long-term illness reduce available money for school fees resulting high drop-out of school.[2] There fore the developing world, specially SSA, promising economic potential will be undermined by the tragic loss of generation.[11]

HIV can be transmitted through contaminated blood and blood products; from a mother to her offspring (during pregnancy, child-birth, breast-feeding); or through sexual contact.[10] In the Sub-Saharan Africa, it is important to note that the main mode of transmission in the adult population is heterosexual contacts while over 90% of infections in children resulted from mother to child transmission. Women contribute for 55% of all HIV-positive adults.[1]

Until now there is no vaccine or curative drug for HIV/AIDS,[6] therefore, strategies for prevention of sexual transmission should include reducing the number of sexual partners, assuring that partners who are chosen are of the lowest risk possible, and reducing the efficacy of sexual transmission through use of condom and control of STDs.[11]

Early in the epidemic, people believed that they could not become infected from healthy looking sexual partners. Even after many people got the knowledge that healthy person could be a carrier, choosing non-risky partner is difficult without HIV-testing.[6,11] On the other hand in most African countries the barrier method, the male condom, that has practical usefulness to protect against HIV and other STDs has its own limitation such as, religious disapproval, perceived reduce sexual satisfaction, distribution and storage problems.[6]

Therefore, mutual monogamy with a known sero-negative partner is the most effective way to avoid risk of sexual HIV transmission. Thus Voluntary HIV Counseling and Testing (VCT) should be available for those groups unwilling to use condoms so that the societal norm should be changed towards this practice.[11] Different intervention programs implemented in developing countries including few African countries revealed that ongoing HIV-counseling and testing was positively associated with risk-reduction behaviors, both in infected and non-infected individuals.[12,13,14] Intervention programs implemented to reduce Mother to Child Transmission of HIV; VCT could be an entry point to make antiviral therapy available for HIV-positive pregnant women and also helps to avoid unintended pregnancy.[1315,16] Voluntary HIV counseling and testing could also be an important step towards normalizing the attitude and remove the stigma to HIV/AIDS.[13]

Despite the high concentration of HIV-1in the SSA, few people currently have access to VCT service, which have been shown to reduce HIV transmission.[17] In Ethiopia, VCT for HIV is included as one of the strategies of HIV/AIDS prevention, in the recently approved HIV/AIDS Policy.[18] Until recently, a total of 75 HIV testing centers and 1907 counselors were registered, nearly 70% with in government health institutions. HIV-Voluntary Counseling and testing was virtually non-existent in the country but just starting in government hospitals and private clinics in Addis Ababa.[19]

LITERATURE REVIEW

Review of VCT related research

Since the test of antibody to human immuno-deficiency virus (HIV) was first made widely available in 1985, public health authorities have faced an evolving dilemma of how to use this toll to prevent the spread of HIV and ultimately slow down the epidemic of acquired immune-deficiency syndrome (AIDS). Initially there was a concern about accuracy of the test and the potential for false positive results. But as the epidemic evolved, testing quality was improved due to emergence of highly sensitive and specific testing reagents use of different testing algorisms. Counseling procedures was also improved with emphasize of confidentiality of the test result. [19] Later on a broad consensus emerged that, expect in a few well-defined circumstances, people should be tested only with their informed voluntary and specific consent.[20] Subsequently, during the late 1980's, counseling and testing for HIV had become a corner stone for comprehensive prevention programs and also helped treatment efforts in most industrialized countries.[19]

Later on, different interventions showed that HIV-counseling and testing based on knowledge of their antibody status; enables individuals to make informed choices; helps them to change behaviors that may put themselves or others at risk for HIV infection, take action to prevent peri-natal transmission once persons learn they are infected, and also to seek early medical care if they are HIV-positive.[19,21,22,23] VCT may also enable people to cope with anxiety, because early detection of HIV-infection may lead to an effective psychological support.[24] Susan Allen, in her study among 1456 childbearing women in Kigali, Rwanda, reported that a confidential HIV-VCT Program was associated with increased use of condoms and reduced rates of Gonorrhea and HIV in urban Rwandan women.[25] From another study done in Kigali, Rwanda,

Voluntary HIV-Counseling and Testing of couples has also been reported to be more acceptable and resulted in beneficial long-term effects on condom use and HIV-related communication.[26]

Different studies showed that acceptance rate of HIV-counseling and testing service varies in a wide range. In the developed world, acceptance rate of 79% was reported from a study done on STD clinic patients, in South Carolina in 1989.[27] From study done in New York among pregnant women, out of 17,731 pre-test counseled women, 6768 (38%) agreed to test of which 6104 (90%) actually tested.[33] According to the results of a multicentre study done in London during 1995/96,uptake of antenatal HIV-testing ranges from 3.4%- 51.2%.[28] In the developing countries, study done among pregnant women in 13 urban centers (Burkina Faso, Côte d'Ivoire, Kenya, Tanzania, Malawi, Zambia, Zimbabwe, South Africa and Thailand), showed that acceptability of VCT varied between 33 - 95%.[17] In Tanzania, 54% acceptance rate was reported from a study done among rural community. [29] From a study done in 1991 among pregnant women of Nairobi, it was found that 54% of pregnant women requested for HIV-testing.[30] A 37% willingness to accept HIV-testing, out of which 9.3% practice of HIV-testing, was reported from study done among urban and rural community of Zambia.[31]

According to a decade review of HIV-testing and counseling practices in USA, factors that influence acceptance or refusal of VCT could be characterized as socio-demographic, cognitive and behavioral, and organization of the VCT service delivary.[19]

Socio-demographic variables

From three different studies done on prenatal population of developed world, acceptance of routine HIV-VCT has been associated with being less than 25 years age.[32,33,34] In the Abidjan study among pregnant women, refusal of testing was associated with older age greater than 35

years.[35] In Uganda, majority (53%) of VCT users were in the age group of 20 to 29 years.[36] Lowest acceptance rate of VCT was reported in adolescent age group of 15 to 19 years from a Zambian community based study.[31] Significant association of acceptance of VCT was found with marital status, being single and level of education below grade-12 among pregnant women of Atlanta in1989.[32]

Knowledge, attitude and behavior variables

Various studies have shown that acceptance of VCT is influenced by attributes such as good knowledge of HIV-transmission and prevention, positive attitude towards HIV-testing and high-risk sexual practice. Significant association of acceptance of HIV-testing and counseling with good Knowledge of HIV transmission and prevention was reported from study done among male factory workers in Ethiopia and pregnant women in Abidjan and Bubo.[35,37] Other researches have demonstrated that having high awareness of the benefit of HIV-testing among pregnant women in Edinburgh,[34] positive attitude towards HIV-testing among pregnant women in Atlanta and STD Patients in South Carolina,[27,32] perception of being at high-risk from the Zambian Community based study and among Ethiopian male factory workers,[32,37] and perception of partner being at high-risk among pregnant women in Atlanta[32] were reported to be significant correlates of testing behavior. Acceptance of testing was significantly associated with higher number of sex partner in the past in Zambian community based study[31] with past history of risky sex among obstetric clients in the Californian study.[33] Significant association of test refusal with having HIV-positive result was also reported among pregnant women of Abidjan[35] and STD clinic patients of South Carolina.[27]

Organizing VCT service delivery

Ronald O. Valdiserri reported that the organization of a testing system described as the process one goes through to acquire testing services, the type of diagnostic test used, the process required to receive test results as well as the place where the test is offered can influence HIV test-seeking behavior and test-receiving outcomes.[19]

According to Ronald O. Valdiserri's review, in the USA, the importance of keeping HIV counseling and testing both voluntary and confidential have been of paramount public health importance since the antibody test first became available.[19] From a population-based survey in urban and rural Zambia in 1995, concerns about confidentiality and length of time waiting for test result contributed to the low utilization rate of HIV-testing.[31]

Modalities such as rapid testing, which can increase service utilization by eliminating the need for a subsequent visit for test result, have been successfully implemented both in developed and developing world settings.[19,38] A VCT interventional study on rapid HIV testing method done among married couples in Lusaka, Zambia, revealed that there was significantly increased number of persons who learned their test results and was associated with less fear; as it was compared with study done in married couples who received HIV-test result in a subsequent post-test counseling visit.[38] From study done during 1993 in Texas among anonymous HIV-testing and STD clinic service clients, it was reported that rapid testing resulted in an increase in the number of persons learning their sero-status (4% and 16% increases for uninfected and infected clients respectively) and a cost saving of US $11 (10%) per test and US $280 (74%) per person receiving results and counseling .[39]

Reducing the price of VCT for those who cannot pay could increase utilization of HIV-testing and counseling.[40] In Uganda, where clients pay fees for HIV testing, "free day" program resulted in increased utilization of VCT service by young people, women, and couples.[41] On the same line, demand for testing could be increased by offering testing services in accessible location. To make HIV counseling and testing service user-friendly, it should be packaged to meet the need of specific client groups. In Uganda, HIV testing service for low-income women was integrated with readily available child-care service.[41]Y.M. Kim from his research on quality of counseling of young clients in Zimbabwe mentioned that young people might avoid or fear to seek advice at health facilities because of legitimate concerns about privacy and providers attitudes.[42] From a review of different studies done during the previous decade in the SSA countries: Zambia, Uganda, Malawi, Mozambique, South Africa and Central African Republic; involving traditional healers and religious leaders in HIV Counseling after giving enough training showed significant result to expand VCT service in a given community.[43]

Conceptual framework

After HIV antibody testing and counseling became available in 1985, Initially the major concern was about accuracy of test and the potential for false positive results. But as the epidemic evolved, counseling and testing qualities and procedures were improved, the acceptance of testing was increased and the service was widespread.[23,44] However, findings of different studies showed that for various reasons the acceptance rate of VCT among selected population groups varied in a wide range.

The limitation of prior studies to explain a great deal of the variation in HIV-testing behavior has been the lack of appropriates theories and models of utilization.[44] Therefore, conceptual models are needed that incorporate the range of factors related to HIV-testing behavior, including psychological, the socio-demographic and the role of policy incentives.[44] Other researchers also mentioned that psychologists have been seeking to understand AIDS-risk and AIDS-preventive behavior since the beginning of the AIDS epidemic, but psychological research on these topics has often relied on informal and ad-hoc conceptualization. Thus a systematic application of formal psychological theory in this area is essential.[45]

Most theories underlying the models and frameworks used in HIV/AIDS prevention were derived from social psychology and concepts of communication.[46,47] For this particular study , which mainly aims to assess intention towards a specific behavior, the cognitive models were found to be more appropriate. Cognitive theorists emphasize the role of subjective hypotheses or expectations held by the subject. Behavior, in this perspective, is a function of the subjective value of an outcome and of the subjective probability or expectation that a particular action will

achieve that outcome.[48] Thus explanation for behavioral change all focus on things that go on inside people's heads: their knowledge, beliefs, attitudes and perceptions of others.[46]

While there are many varieties of such theories of cognitive models, the four theories of health protective behavior, which emphasize on beliefs about health hazards and health protective behaviors are probably used more frequently than any other type of models in research on health behavior.[49] These are the Health Belief Model, the Theory of Reasoned Action, Subjective Expected Utility Theory and Social Learning Theory.[49]

The Health Belief Model (HBM) is a commonly utilized socio-cognitive model of behavior. According to this model, preventive health behavior is a function of perceived severity of illness, perceived benefits for taking and barriers for engaging in a health action.[49,50] Comparison of Social Learning Theory (SLT) with the HBM shows that the two theories have much in common except that SLT incorporate the self-efficacy concept into the model.[48]

The Theory of Reasoned Action (TRA) differs from the HBM and Social Learning Theory by considering a much wider range of consequences of continuing the current behavior and by considering a wider range of consequences of the alternative behavior under consideration.[49] On the same line, other researchers also pointed out that the "Theory of Reasoned Action is a highly developed theory. It not only identified and defines key variables that affect a person's intentions to act but also identifies the sequence of variables and their interrelationships that predict the behavioral intentions".[51] The Theory of Reasoned Action (by Ajzen & Fishbein) is utilized by the current research to guide investigation of the psychological determinants of individual's HIV/AIDS preventive behaviors and behavioral intentions. (See figure-1)

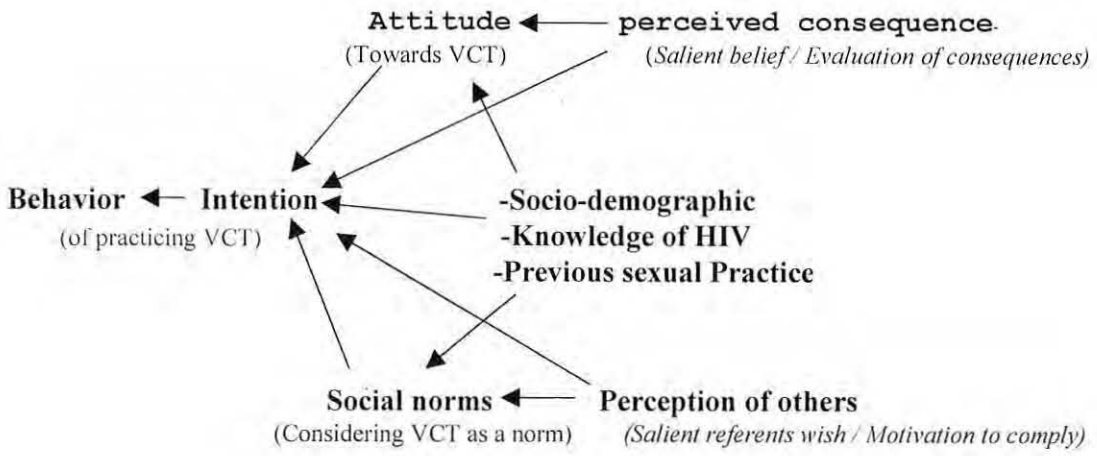

Figure 1. Conceptual Model used in the study

According to this theory, first behavior is a function of individual's behavioral intention to perform a particular preventive act. Second, behavioral intentions in turn are assumed to be a function of the individual's attitude and perceived social norms toward performance of a particular action. According to the theory, an individuals attitude towards performance of a particular AIDS preventive behavior, Voluntary Counseling and Testing for HIV in this particular study, is a function of the individual's beliefs about the consequences of performing the behavior, multiplied by his or her evaluations of these consequences. In parallel fashion, the model holds that an individual's subjective norm is a function of his/her perception of social support from specific reference others for performance of a preventive behavior, multiplied by his a her motivation to comply with these referent wishes.[45] Recently UNAIDS reported that HIV/AIDS preventive behavior not only depends on cognitive variables but also on contextual factors like government policy, culture, socio-economic status, gender issues and spirituality.[47] Hence in addition to the theorized cognitive variable, the conceptual model of the study incorporates as contextual factors: socio-demographic, knowledge about HIV and sexual practice variables to look for relationship with the outcome variable.

From the study done by Fisher and his colleagues intentions did predict the behavior of personally getting an HIV blood testing in every case in which this relationship was studied. [45] The findings Fisher and his colleagues strongly confirmed the theoretical relationship of behavior and intention, that is, AIDS preventive behaviors where predicted by behavioral intentions in vast majority of the prospective tests of this relationships. Analysis of attitude and subjective norm on intention indicated that intention to engage in nearly every AIDS-preventive behavior under study were a function of both attitude towards the act and subjective norms and attitude and norms accounted for a considerable proportion of the variance in intentions across the behaviors and population under study.[45]

In Ethiopia, VCT service is not available to the community at large and it beginning in the capital Addis Ababa in some public hospitals and private clinics. Yet, very little is known about factors that influence utilization of VCT service. This study is carried out mainly to estimate the intention and to provide an insight to those factors associated with Voluntary HIV-counseling and testing, among the age group of 15-49 years urban community of Ethiopia

OBJECTIVES OF THE STUDY

General

The objectives of this study are to assess the intention of having VCT and requesting a partner to get VCT, and factors associated with, among the age group of 15-49 years population of Harar Town.

Specific

- To estimate the proportion of study population who has intention for voluntary HIV-counseling and testing.
- To describe the knowledge about HIV/AIDS transmission and prevention and assess previous sexual practice of the study population in relation to intention of having VCT and asking partner to seek for VCT.
- To assess the attitude towards VCT and the level of perception of VCT as a social norm by the study population and factors related with attitude and perception.
- To identify socio-demographic and cognitive factors related to intention of practicing VCT and asking partner to seek for VCT.
- To identify the voluntary HIV counseling and testing delivery schemes preferred by the study population.

METHODS AND SUBJECTS

Study design

This is a cross-sectional study carried out to assess intention of having VCT and asking partner to seek for VCT and factors related with these intentions, among the 15-49 years age group population of Harar town, from March to April 2000.

Study area

Background information

Harar is one of the oldest and historical cities of Ethiopia located 525 km. East of Addis-Ababa. It is the capital of Harari Region with an area of 17.2 sq. km and altitude of about 1800 meters above sea level. Harari Region is situated in the eastern highland of Ethiopia.[9] According to 1994 census, the population of the Region as of July 1999 is estimated to be 154,974 of which 93,113(60.2%) is urban (the town of Harar) and 61,681 (39.8%) is rural. Out of the total residents of Harar Town 54, 940 (59%) are those in the age group of 15-49 years. The major ethnic groups based on population size of the town are Amhara, Harari, Oromo, Guraga, Somali and Tigrea. During 1994 census 80% of above 5 year population were claimed to be literate.[52,53] Currently, the town is divided into 19 kebeles (lowest administrative area). (Annex-1). There are 5 hospitals, 8 health stations(3 are factory clinics) and 5 NGO clinics.[9]

Study population

The source population consisted of all residents of Harar Town and the study population was residents of the town aged 15-49 years. The inclusion criteria used for enrolment of eligible respondent were, being in the age group between 15-49 years and those who resided in Harar

town for 6 months prior to the study date or intended to live for more than 6 months beginning the date of interview.

Sample size

The sample size was estimated considering, an estimate of 50% demand rate for VCT among the age group of 15-49 years, giving any particular outcome to be with in a 4% marginal error, and with a 95% confidence of certainty (alpha =0.05). Based on these, the actual sample size was calculated using the formula for cross-sectional studies, that is: -

$$N = \frac{(Z\alpha/2)^2 \; P\,(1-P)}{d^2}$$

where, P = the prevalence of intention of testing (0.50)

d = marginal error between the sample and the population (0.04)

$Z\alpha/2$ = critical value at 95% certainty (1.96)

The calculated sample size was 600, adding a 20% contingency; the overall required sample size was **720**.

Sampling procedure

Selection of study subjects was done using a multi-stage sampling procedure from the study population (see figure-3). To accommodate the major ethnic group in the town, the town was divided in to three strata using the previous government high administration unit called "Keffitegna". Three kebeles from each stratum (totally 9 kebeles) were identified using simple lottery method. The sampling fraction from each selected kebele was determined proportional to the total population of each kebele. [54] Second, systematic sampling method was employed to select the household from each kebele, where the sampling interval was the total number of

house-holds in each kebele (H) divided by the corresponding number of house-holds to be interviewed in each kebele (h) (Annex-2). The first household to be interviewed was identified from kebele house-number using simple random numbers. The next household was identified systematically [$(H/h)^{th}$ household] by going clock-wise direction. If more than one eligible respondent are identified in the selected household, only one subject was chosen by simple random selection process using lottery method. In case no eligible subject was identified in the selected household, the interviewer went to the next household in clockwise direction, until he/she will get a gender matched eligible person.

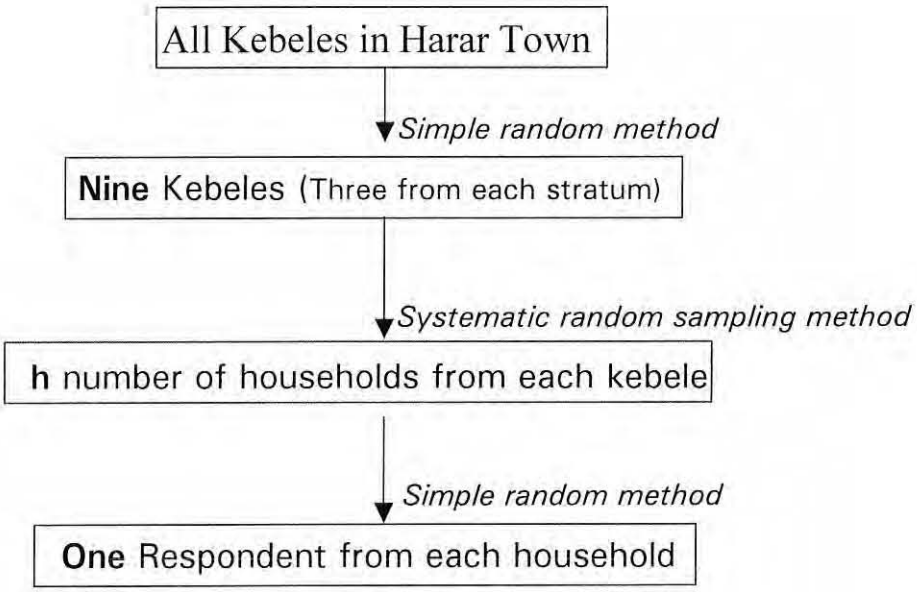

Figure 3. Sampling procedure of study subjects.

Variables

The following variables were used to fulfill the objectives of the study:-

Dependent variables:-

- Intention of having VCT
- Intention of asking partner/s to get VCT

Independent Variables: -

These are *Socio demographics:* age, marital status, ethnic group, religion, educational level, and employment status; *Cognitive variables:* the individual's knowledge about HIV/AIDS, attitudes towards VCT, the individual's perception of VCT as normative action, salient belief and evaluation of consequences VCT, perceiving VCT as salient referent's wish and motivation to comply with those wishes. Initiation of sexual contact, number of partners during the past one year and use of Condom during the past one year were practice variables. *System Related variables:* methods of test entry, by whom to be counseled, method of result delivery, level of payment ability were used to assess preference of service delivery systems.

Qualitative data

Focus Group Discussion (FGD):- As a qualitative survey, a total of 10 FGDs were carried out. Selection of FGD participants was made using a non-probability or convenient method. One group of health workers from 5 hospitals and one group of religious leader were formed from different religious group in the town. The rest eight FGDs were carried out among 15-49 year age selected from those kebeles not used for quantitative data collection (QDC). Grouping was made based on age (15-24 and 25-49 year) and gender, two groups formed for each category. Previously experienced moderator and note-keeper conducted all FGDs using topic guide (see Annex-3). The purposes of the FGDs were to obtain an in-depth information on the knowledge,

attitude and perception about VCT, to have an insight on preference methods of service delivery, reasons for accepting or refusing VCT service and to identify cultural and religious practices in the study population that could be utilized towards VCT service expansion. (Description of the Focus Group Discussion and keynotes presented on annex-4)

Data collection instrument

Quantitative data was collected using standardized structured questionnaire (see annex-5). The questionnaire was first prepared in English and then translated to Amharic and retranslated to English by different individuals to check for conceptual equivalence.

The Amharic version questionnaire pre-tested on respondents in the same age group to the study subjects, among Kebeles not included in the study. The questionnaire was tested for clarity, acceptability, flow, repetition and time required interviewing one respondent. Based on the pre-testing result minor modification of wordings and phrases was made on the questions pertaining previous sexual practice and intention of having and asking partner for VCT (see annex-6).

Management of data collection

Eighteen interviewers (9 male and 9 female) whom were 12^{th} grade complete and had previous experience of data collection were recruited from the study area. All interviewers were trained for 4 days by the principal investigator on the administration of the questionnaire and field supervision was made by three supervisor recruited from the Harari RHB. The entire Questionnaires were edited after data collection by the supervisors, correct ones were submitted to the principal investigator for final checking. The incomplete ones were returned back to the

specific interviewers to be corrected by revisiting the respondent. Three repeated visits were made in cases of unavailability of the selected person.

Data entry and Analysis

Data was entered into a computer using SPSS Version 6and 10 software program. After cleaning the data set, frequency distribution was obtained for each variable. Mean and median scores were calculated for knowledge about HIV/AIDS, attitude, perception and belief variables and distribution of normality was tested using computer program. For each knowledge question one point given for correct and zero point for incorrect response. For the rest of the behavioral variables, Likert-scaled statements that required respondents to indicate if they strongly disagreed, disagreed, undecided, agreed, or strongly agreed were given 1to 5 points respectively. A sum of score was obtained for those variables assessed by more than one statement. Proportion of preference of service delivery systems was described. Odds ratio were used to look for statistically significant association between categorical explanatory variable and out-come variables. Since the distributions of the cognitive variable scores were skewed, a non-parametric Mann Whitney-Willcoxen test was performed to compare median score of cognitive variables and Spearman's rank correlation test was carried out on continuous variables. Multi-variate analyses using logistic regression model were carried out on the two dependent variables. The analysis of the relationship of all variables with the outcome variable had been performed for male, female and total study subjects.[55]

Ethical consideration

Ethical issues were seen during the research proposal and approved by the ethical clearance committee of the Addis Ababa University Medical Faculty. The Regional Health Bureau has permitted the conduct of the study and wrote formal letter to all selected kebeles. All

interviewers were trained how to obtain informed consent from each respondent. Prior to each interview took place; a written consent form was read to each respondent to obtain his/her agreement (annex-4). All interviews took place privately at place and time chosen by the respondent. Respondents were not required to tell their name and giving a false promise to the respondents was strictly forbidden. To keep maximum confidentiality of the information obtained, all collected data was kept in locked and secured cabinet.

Benefit to the study population

After completing the data collection community sensitization program was launched by the study team with the collaboration of the Regional Health Bureau. The Information given was about HIV/ AIDS transmission, prevention, benefits of VCT and community based HIV-prevention intervention programs. The Regional Health Bureau and other involved groups benefited by getting the result of the study and by being involved in the research activity.

RESULTS

A total of 720 study subjects (equal number of males and females) were identified from all 15 to 49 years age residents of Harar Town, using a multi-stage sampling procedure.

Socio-demographic characteristics

The socio-demographic characteristic of the sample population is summarized in Table-1. The majority of the study subjects 364 (70.2%) were between 15-29 years of age. The mean age (1SD) was 26 (8.2) years and the median was 24 years. Majority of the study subjects 462(64.2%) were from Orthodox religion and Amhara ethnic group 443 (61.5%). Most of the study subjects 453 (63%) had attended high school education, and 280 (38.9%) of the respondents were employed.

Knowledge about HIV/AIDS

A total of ten true-false questions were included assessing the knowledge status of the study population about HIV/AIDS transmission, prevention and misperception. Proportion of the study population that responded correctly to each Knowledge questions compared by educational status is presented on Table-2. There was a significant difference with regard to knowledge status about transmission of HIV via breast milk, unsterile surgical instrument and sharing of razors or toothbrush. There was also a significant difference on the knowledge status of being an HIV carrier without being AIDS patient and the misperception that mosquito could transmit HIV. Out of the total 720 study subjects, 334 (46.4%) gave correct answer to all and 303 (42.1%) to two out of three questions pertaining about HIV prevention; 528 (73.3%) gave correct answer to all and 171(23.8%) to three out of four questions pertaining to routes of HIV

transmission, 358(49.7%) of the respondents gave correct answer to all 282(39.2%) to two out of three HIV misperception questions. The mean score (1SD) for the total ten knowledge questions about HIV/AIDS was found to be 8.40 (1.34), with a median score of 9.0 within the range of 0 to 10. The median total knowledge score for male subjects is 9 and for females 8, with statistically significant difference (P <0.001) (table 4).

Table 1. Socio-demographic characteristics of total study subjects and by sex. Harar town, March 2000.

Characteristics	Total (n=720)		Male (n=360)		Female (n=360)		P-Value
	Freq.	(%)	Freq.	(%)	Freq.	(%)	
Age (years)							
15-19	180	(25.0)	93	(25.8)	87	(24.2)	
20-24	184	(25.6)	100	(27.8)	84	(23.3)	
25-29	148	(20.6)	68	(18.9)	80	(22.2)	
30-34	72	(10.0)	30	(8.3)	42	(11.7)	NS
35-39	63	(8.8)	30	(8.3)	33	(9.2)	
40-44	43	(6.0)	20	(5.6)	23	(6.4)	
45-49	30	(4.2)	19	(5.3)	11	(3.0)	
Marital status							
Never married	352	(48.9)	210	(58.4)	142	(39.4)	<0.001
Currently married	326	(45.3)	137	(38.0)	189	(52.5)	
Divorced /widowed /Separated/	2	(5.8)	13	(3.6)	29	(8.1)	
Ethnicity							
Amhara	443	(61.5)	217	(60.3)	226	(62.8)	
Oromo	114	(15.8)	60	(16.7)	54	(15.0)	
Harari	87	(12.1)	48	(13.3)	39	(10.8)	NS
Guragea	41	(5.7)	18	(5.0)	23	(6.4)	
Others	35	(4.8)	17	(4.7)	18	(5.0)	
Religion							
Orthodox	462	(64.2)	240	(66.7)	222	(61.7)	
Muslim	187	(26.0)	94	(26.1)	93	(25.8)	NS
Others	71	(9.8)	26	(7.2)	45	(12.5)	
Educational status							
Illiterate/write/read	68	(9.4)	5	(1.4)	63	(17.5)	
Grade 1-4	19	(2.6)	9	(2.5)	10	(2.8)	
Grade 5-8	151	(21.0)	63	(17.5)	88	(24.4)	<0.000
Grade 9-12	453	(63.0)	256	(71.1)	197	(54.7)	
Above 12 grade	29	(4.0)	27	(7.5)	2	(0.6)	
Employment status							
Employed	280	(38.9)	193	(53.6)	87	(24.2)	<0.000
Unemployed	440	(61.1)	167	(46.4)	273	(75.8)	

* NS – P-Value ≥ 0.05

Table-2 Result of knowledge about HIV/AIDS by education status among study subjects in Harar Town, March 2000.

Knowledge item	Number and percent of study subjects responded correct answer			
	Total n=720 n (%)	Grade 0-8 n=238 n (%)	Grade 9+ n=360 n (%)	P-Value
1.HIV could be transmitted by Pregnant- women to unborn baby	690 (95.8)	226 (95.0)	464 (96.3)	NS
2. HIV could be transmitted by breast- milk to infant.	522 (72.5)	134 (56.3)	388 (80.5)	0.000
3.HIV could be transmitted by Unsterile-surgical instrument	425 (59.0)	106 (44.5)	319 (66.2)	0.000
4.HIV could be transmitted by Sharing of razors or tooth-brush	578 (80.3)	180 (75.6)	398 (82.6)	0.035
5.Abstinence prevent sexual- transmission of HIV	509 (70.7)	157 (66.0)	352 (73.6)	NS
6.Condom could prevent sexual transmission of HIV	555 (77.1)	186 (78.2)	369 (76.6)	NS
7. A person could be a carrier of HIV without having AIDS.	330 (91.7)	211 (88.7)	467 (96.9)	0.000
8. Mosquitoes could transmit the HIV	355 (98.6)	230 (96.6)	479 (99.4)	0.012
9.HIV could be transmitted by hand-shake	355 (98.6)	233 (97.9)	475 (98.5)	NS
10. Sharing of household utensils have no risk of HIV transmission.	332 (92.2)	219 (92.0)	455 (94.4)	NS

Sexual practice

Out of 720 study respondents, 512(71%) reported previous history of sexual contact (255 males and 257 females). Among these 512 respondents, who had previous sexual intercourse, 260(50.8%) claimed to have the first sexual contact between the ages 15-18 years. The mean age (1SD) of sexual initiation was 18.73 (3.2) years (median: 18 years and the range: 9- 37 years). Females had significantly lower mean age (18.21 years) compared to that of males (19.26 years). Among those with history of previous sexual contact 431 subjects (214 male & 217 female) had sexual contact during previous one year. Among these 431 subjects, 79 (18.3%) claimed to use condom always, 77 (17.9%) used condom sometimes and the rest 275 (63.8%) never used condom. Further more 60 (13.7%) subjects (52 male & 8 female) reported that they had more than one sexual partner and 371 (86.3%) reported that they were limited to one sex partner. The difference in the rate of condom use and number of partners by sex was statistically significant. (Table-3).

Intentions of Voluntary Counseling and Testing

Out of the total 720 study subjects, 615 (85.4%) had intention of having VCT; which was about 86%of the male and 84.4 % of the female study subjects. Out of the total study subjects, 530 (73.6%) had intention of asking partner/s to get VCT; which was 73.3% and 73.9% of the male and female subjects respectively. There is no significant difference in the proportion of both intenders of having VCT and intenders of asking partner to get VCT between the two sexes. But the median score of majority of cognitive variables of the two sexes have statistically significance difference (Table -4).

Table-3 Previous one-year sexual practice of sexually active study population among the total and by sex. Harar Town, March 2000.

Characteristics	Total n=431 Number (%)	Male n=214 Number (%)	Female n=217 Number (%)	Crude Odds Ratio (95% CI)
• Condom use				
-Never	275 (63.8)	100 (46.7)	175 (80.7)	1.00
-Sometimes	77 (17.9)	52 (24.3)	25 (11.5)	3.34 (2.07-6.50)
-Always	79 (18.3)	62 (29.0)	17 (7.8)	6.38 (3.44- 2.25)
•Partners without condom				
-None	87 (20.2)	58 (27.1)	29 (13.4)	1.00
-One	326 (75.6)	143 (66.8)	183 (84.3)	0.39 (0.23-0.66)
-Two or more	9 (2.1)	7 (3.3)	2 (0.9)	1.75 (0.30-8.21)
-No response	9 (2.1)	6 (2.8)	3 (1.4)	
•Number of partners				
-Had one partners	371 (86.3)	162 (75.7)	209 (96.3)	1.00
-Had ≥ 2 sexual partners	60 (13.7)	52 (24.3)	8 (3.7)	8.39 (3.8-20.9)

Table-4 Median score of cognitive characteristics among total study subjects and by sex. Harar Town, March 2000.

Cognitive Characteristics	Range of score	Total (N=720)	Male (n=360)	Female (n=360)	W-test[a] P-value
Total Knowledge about HIV	0 – 10	9	9	8	0.000
-Transmission	0 – 4	4	4	4	0.002
-Prevention	0 – 3	2	3	2	0.000
-Misperception	0 – 3	2	3	2	0.000
Towards having of VCT[b]					
Attitude	3 – 15	14	14	14	0.768
Subjective norm	1 – 5	2	2	2	0.000
Salient Belief	5 – 25	21	21	21	0.010
Evaluation of consequence	5 – 25	24	24	24	0.179
Salient referents wish	4 –20	9	9	9	0.181
Towards asking partner VCT[b]					
Attitude	3 – 15	13	13	14	0.01
Subjective norm	1 – 5	2	2	2	0.399
Salient Belief	3 –15	15	15	15	0.065
Evaluation of consequence	3 – 15	15	15	15	0.009
Salient referents wish	4 – 20	9	9	10	0.439
Motivation to comply towards Safer sex [c]	6 –30	28	29	27	0.000

[a] W-test for the comparison of median score of cognitive variables of male and female subjects

[b] Scores for each questions under each variable range from +1(Vary bad/ untrue or strongly disagree) to +5(Vary true/good or strongly agree). The number of questions under each variable ranges 1 to 6.

[c] Safer sex is sex after marriage and after HIV-test result of partner or sex with condom.

Preferences of the study subjects to different types and methods of VCT service delivery systems.

Among 720 study respondents, 443 (61.1%) preferred confidential-linked, 250 (31.6%) anonymous and 13 (1.8%) suggested to get the VCT service openly or non-confidentially. With regard to by whom to be counseled, out of 1093 responses, 567 (51.9%) choose physician, 318 (29.1%) any trained counselor, 115 (10.5%) religious leader and 86 (7.9%) choose nurse counselor.

Out of 804 responses to the question of "which method of hearing test result you prefer", majority 555 (69.0%) preferred face to face method, 176 (21.9%) confidential letter, 37 (4.6%) wanted to hear the test result through telephone, 30 (3.7%) through friend or relative and 6 (0.8%) wanted to hear the test result openly or on public area.

Out of the total 720 study subjects, majority 505 (70.1%) (259 males and 246 females) were willing to pay for VCT service. Out of the above 505 respondents, 309 (61.2%) were willing to pay 1- 10 birr, 91 (18.0%) 11-50 birr, 81 (16.0%) 51 – 100 birr and 24 (4.8%) claimed to be willing to pay 101 to 250 birr. (Figure-3)

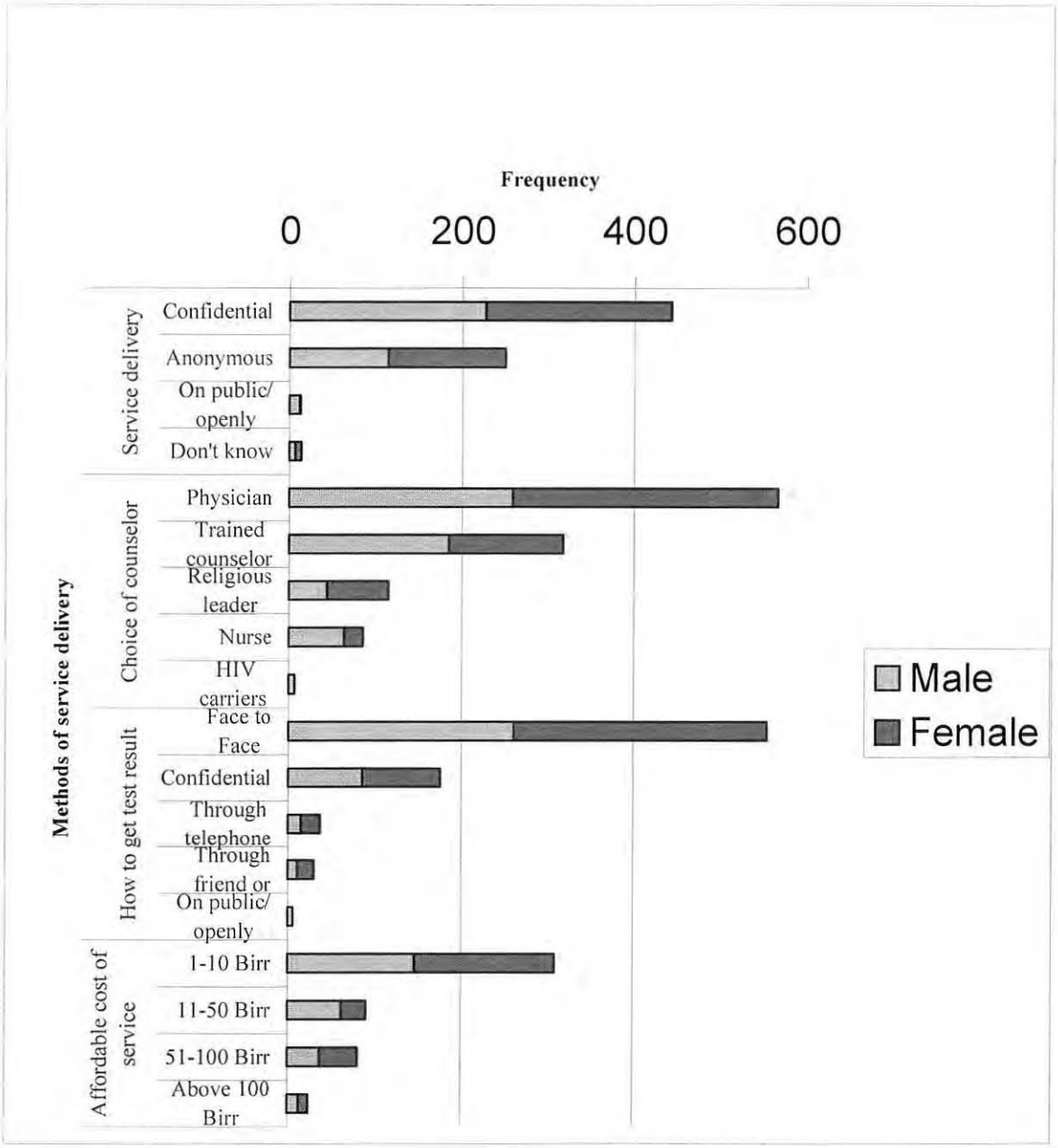

Figure 3. Preference of the study population towards different methods of VCT service delivery system. Harar Town, March 2000.

Intentions of VCT in relation to socio-demographic and sexual practice variables.

Among total study subjects, the likelihood of being in the religion group other than Orthodox and Muslim, [OR (95%CI); 0.48(0.26, 0.95)] and use of condom [OR (95%CI); 2.09 (1.12, 4.07)] was about two times more among intenders of having VCT. The odds of being older than 25 years was 0.6 times less [OR (95%CI); 0.56(0.39, 0.80)], being never married was 2.6 times higher [OR (95%CI); 2.58(1.78, 3.75)], and not having previous sexual contact was 2.45 times more [OR (95%CI); 2.45(1.59, 3.87)] among intenders of asking partner/s to get VCT compared to non-intenders (Table-5).

Among male study subjects, intention of having VCT had significant positive association with use of condom [OR (95%CI); 2.74(1.10, 7.22)] compared to none users.; while among the female study subjects, intention of having VCT had significant positive association with not having previous sexual contact [OR (95%CI); 2.73 (1.21, 6.92)] compared to those who had previous sexual contact. In both sexes, no significant association between intention of having VCT and other socio –demographic variables was observed.

Among male study subjects, intention of asking partner/s to get VCT had significant positive association with not having previous sexual contact [OR (95%CI); 1.80 (1.01, 3.33)] compared to those who had previous sexual contact and with being never married [OR (95%CI); 2.30(1.37, 3.85)] compared to currently married. Among the female study subjects intention of asking partner to get VCT had significant positive association with not having previous sexual contact [OR (95%CI); 3.55 (1.80, 7.51)] compared to those who gave history of previous sexual contact; being never married [OR (95%CI); 3.16(1.78, 5.78)] (OR=3.16) and being in other

categories [OR (95%CI); 2.11(1.05, 4.51)] compared to currently married; and had significant negative association with age greater than 25 years [OR (95%CI); 0.47(0.46, 0.79)] compared to age 25 years or younger.

Intentions of VCT in relation to cognitive variables

As can be seen on table-6 not only attitude towards VCT and perceiving VCT as a norm was associated significantly with intention of tasting but also the mean score of salient belief, evaluation of consequences, and perception of referents support to VCT of intenders and non-intenders of having VCT and asking partner/s to seek for VCT differ significantly among the total, male and female study subjects ($P<0.05$). But in male subjects there was no significant difference in the median score of motivation to comply for referents of intenders and non-intenders' of asking partner for to get VCT. Knowledge about HIV/AIDS showed significant association with intention of asking partner(s) to get VCT only in male sub-group ($P<0.05$).

Table –5. Socio-demographic and practice variables in relation to intention for having VCT and asking partner to get VCT in study subjects of Harar Town, March 2000.

Variable / Category	Having VCT				Asking partner for VCT			
	Inten[a] (n=615)	Nonint[a] (n=105)	OR	(95%CI)[b]	Inten[a] (n=530)	Nonint[a] (n=190)	OR	(95%CI)[b]
Sex Male	311	49	--		264	96	--	
Female	304	56	0.86	(0.55, 1.32)	266	94	1.03	(0.73, 1.45)
Age ≤ 25 years	311	53	-----		288	76	--	
> 25 years	304	52	1.00	(0.64, 1.54)	242	114	**0.56**	(0.39, 0.80)
Marital Status								
-Curr. Married	273	53	1.00		210	116	1.00	
-Never married	306	46	1.29	(0.82, 2.03)	290	62	**2.58**	(1.78, 3.75)
-Others	36	6	1.16	(0.45, 3.55)	30	12	1.38	(0.66, 3.08)
Religion								
-Orthodox	401	61	1.00		349	113	1.00	
-Muslim	160	27	0.90	(0.54, 1.53)	134	53	0.82	(0.55, 1.23)
-Others	54	17	**0.48**	(0.26, 0.95)	47	24	0.63	(0.36, 1.14)
Ethnicity								
-Amhara	379	64	1.00		330	113	1.00	
-Oromo	96	18	0.91	(0.51, 1.72)	78	36	0.74	(0.46, 1.20)
-Harari	75	12	1.06	(0.53, 2.26)	62	25	0.85	(0.50, 1.48)
-Others	65	11	1.00	(0.49, 2.21)	60	16	1.28	(0.70, 2.49)
Education								
-Grade 0-8	200	38	---		168	70	---	
-Grade 9+	415	67	1.18	(0.74, 1.85)	362	120	1.26	(0.87, 1.80)
Employment								
-Employed	242	38	---		201	79	---	
-Unemployed	373	67	0.88	(0.55, 1.38)	329	111	1.18	(0.82, 1.67)
Previous sexual								
contact -Yes	432	80	---		354	158	---	
-No	183	25	1.36	(0.82, 2.29)	176	32	**2.45**	(1.59, 3.87)
Sexual partners[c]								
-One	311	60	---		253	118	---	
-Two & above	51	9	1.09	(0.50, 2.66)	47	13	1.69	(0.86, 3.53)
condom use[c]								
No	222	53	1.00		184	91	1.00	
Yes	140	16	**2.09**	(1.12, 4.07)	116	40	1.43	(0.91, 2.29)

[a] Intenders / Nonintenders [b] 95% Confidence interval

[c] During the previous one year, Intenders n=362 and Nonintenders n= 69

Table-6. Median score of cognitive variables with intention of having VCT and asking partner to get VCT among total, male and female study subjects. Harar town, March 2000.

Intention of having VCT

Variable	Total			Male			Female		
	Intens[a] (n=615)	Nonints[a] (n=105)	P-value[b]	Intens (n=311)	Nonints (n=49)	P-value[b]	Intens/Nonints (n=304)	(n=56)	P-value[b]
Attitude	14.5	11.5	0.000	15	11	0.000	14	12	0.002
Perceiving as a norm	2	2	0.003	2	2	0.045	2	2	0.030
Salient belief	21	20	0.000	21	20	0.000	21	19.5	0.023
Evaluation of Consequences	24	22	0.000	24	21	0.000	24	23	0.036
Perception of referent support	9	8	0.025	9	8	0.010	9	8	0.001
Motivation to comply referent	28	26.5	0.004	29	28	0.020	27	25	0.047
Knowledge of HIV/AIDS	9	9	0.455	9	9	0.261	8	8	0.892

Intention of asking partner to get VCT

Variable	Total			Male			Female		
	Intens (n=530)	Nonints (n=190)	P-value	Intens (n=264)	Nonints (n=96)	P-valu	Intens (n=266)	Nonints (n=94)	P-value
Attitude	13.5	10.3	0.000	13	9	0.000	14	11.5	0.000
Perceiving as a norm	2	2	0.000	2	2	0.002	2	2	0.000
Salient belief	15	13.5	0.000	15	13	0.000	15	14	0.000
Evaluation of Consequences	15	15	0.000	15	15	0.002	15	15	0.000
Perception of referent support	9.5	8.5	0.000	9	8	0.000	10	9	0.012
Motivation to comply referent	28	26.5	0.025	29	28	0.080	27	25	0.022
Knowledge of HIV/AIDS	9	9	0.246	9	8.5	0.021	8	8	0.534

[a] Intenders and non-intenders
[b] P-value of W-test

Factors related with attitude and normative perception of VCT

As can be seen from table-7, both in male and female study subjects, attitude toward having VCT and asking partner/s for VCT had significant positive correlation with beliefs about the consequences and evaluation of the consequences practicing VCT ($P<0.001$). Subjective-norm concerning the behavior under study also had significant positive correlation with perception of salient referents wish ($P<0.02$). However motivation to comply with these referent wishes had shown significant positive correlation with perceiving having VCT as a subjective norm only in female study subjects (table-8). Male subjects, attitude towards asking partners for VCT had significant inverse correlation with age ($P=0.003$) and perception towards asking of partner/s for VCT as subjective norm had significant inverse correlation with age ($P=0.039$). Among female subjects, attitude towards having VCT had significant positive correlation with Knowledge status about HIV ($P=0.012$); but perception towards having VCT as subjective norm had significant inverse correlation with Knowledge status about HIV ($P=0.035$).

With regard to socio-demographic factors other than age, as can be seen from table 9; Attitude towards having VCT only ethnicity ($P<0.02$) while perception of having VCT as normative action had significant association with ethnicity and gender ($P<0.005$). Attitude towards asking partner for VCT had significant association with gender ($P<0.02$), marital status ($P<0.05$), employment status ($P<0.05$), and previous sexual practice ($P<0.001$) while perception asking partner(s) for VCT as normative action had significant association with marital status ($P<0.001$) and gender ($P<0.02$).

Table-7. Correlation of age and cognitive factors in relation to attitude toward having VCT and asking partner/s to get VCT, among total, male and female study subjects of Harar Town, March 2000.

Characteristics	Total		Male		Female	
	r*	P-value	r*	P-value	r*	P-value
Attitude towards having VCT						
1.Age	-0.04	0.319	-0.09	0.077	-0.06	0.248
2.Knowledge about HIV	0.11	0.003	0.09	0.090	0.13	0.012
3. Salient belief	0.18	0.000	0.17	0.001	0.19	0.000
4.Evaluation of consequence	0.25	0.000	0.33	0.000	0.17	0.001
5. Perceived consequence **	0.21	0.000	0.26	0.000	0.17	0.009
Attitude towards asking partner/s to get VCT						
1.Age	-0.10	0.006	-0.16	0.003	-0.05	0.327
2.Knowledge about HIV	-0.06	0.125	-0.07	0.179	-0.01	0.905
3. Salient belief	0.32	0.000	0.37	0.000	0.27	0.000
4.Evaluation of consequence	0.20	0.000	0.23	0.000	0.14	0.009
5.Percieved consequence **	0.33	0.000	0.38	0.000	0.28	0.000

* r is Spearman's correlation coefficient.

** The sum of salient belief multiplied by evaluation of the consequence for that specific belief.

Table-8. Correlation of age and cognitive variables in relation to subjective norms toward having VCT and asking partner/s to get VCT among total, male and female study subjects of Harar Town, March 2000.

Characteristics	Total		Male		Female	
	r	P-value	r	P-value	r	P-value
Perception towards having VCT as subjective norm						
1.Age	-0.02	0.560	-0.07	0.165	0.04	0.455
2.Knowledge about HIV	-0.01	0.832	0.03	0.526	-0.11	0.035
3. Salient Referent wish	0.38	0.000	0.46	0.000	0.31	0.000
4. Motivation to comply	0.10	0.009	-0.02	0.695	0.13	0.014
5. Perception of others **	0.32	0.000	0.39	0.000	0.22	0.000
perception towards asking of partner/s to get VCT as subjective norm						
1.Age	-0.08	0.023	-0.11	0.039	-0.05	0.302
2.Knowledge about HIV	-0.05	0.218	-0.03	0.537	-0.07	0.178
3. Salient Referent wish	0.43	0.000	0.52	0.000	0.35	0.000
4. Motivation to comply	0.05	0.206	0.00	0.931	0.07	0.178
5. Perception of others **	0.32	0.000	0.42	0.000	0.21	0.000

* r is Spearman's correlation coefficient.

** The sum of salient referent wish multiplied by motivation to comply for that specific wish.

Table-9. Comparison of Median score of attitude and subjective-norm by socio-demographic variables among the study subjects of Harar Town, Mach 2000.

Characteristics	Total χ^2	Total P-value	Male χ^2	Male P-value	Female χ^2	Female P-value
Attitude towards having VCT						
1. Sex	3.9	NS	----------		----------	
2. Marital status	2.9	NS	4.1	NS	0.64	NS
3. Ethnicity	10.5	<0.02	4.1	NS	5.8	NS
4. Employment status	0.17	NS	0.64	NS	0.04	NS
5.Sexual practice	0.86	NS	4.8	NS	2.5	NS
Attitude towards asking partner/s for VCT						
1. Sex	8.1	<0.02	----------		----------	
2. Marital status	6.05	<0.05	4.22	NS	0.64	NS
3. Ethnicity	0.86	NS	2.66	NS	5.8	NS
4. Employment status	5.2	<0.03	1.2	NS	0.04	NS
5.Sexual practice	13.8	<0.001	10.9	<0.005	3.37	NS
Perception towards having VCT as subjective norm						
1. Sex	11.7	<0.005	----------			
2. Marital status	3.4	NS	1.9	NS	4.5	NS
3. Ethnicity	13.1	<0.005	0.4	NS	4.7	NS
4. Employment status	2.5	NS	1.25	NS	0.04	NS
5.Sexual practice	4.6	NS	3.03	NS	1.99	NS
Perception towards asking partner/s to get VCT						
1. Sex	8.2	<0.02	----------		----------	
2. Marital status	30.0	<0.001	16.4	<0.001	14.6	<0.001
3. Ethnicity	2.2	NS	1.7	NS	2.1	NS
4. Employment status	0.73	NS	0.06	NS	2.3	NS
5.Sexual practice	3.44	NS	1.69	NS	3.09	NS

-*NS* Non-significant P-value (P≥0.05)

-Educational status and religion showed non-significant association with both attitude and subjective norms in all conditions.

Results of Logistic Regression

As it was presented on Table 11, among the total study subjects, use of condom [OR (95%CI); 2.32 (1.12, 4.78)] and not having sexual practice[OR (95%CI); 2.39 (1.17, 4.88)] were significant predictors of intention of having VCT. With regard to cognitive variables, those with having a positive attitude [OR (95%CI); 1.25 (1.15, 1.36)] and positive salient belief [OR (95%CI); 1.17 (1.07, 1.27)] towards having HIV-testing were significantly associated with intention of having HIV-testing among total study subjects and also among the male and female subgroups. Not initiating sexual practice was significantly associated [OR (95%CI); 4.68 (1.55, 14.1)] with intention of having HIV-testing only among the female study subjects. The chance of being in the other group of marital status was by 79% lower [OR (95%CI); 0.21 (0.05, 0.91)] among female intenders compared to that of Nonintenders.

Asking partner/s to get VCT was significantly associated with having a positive attitude [OR (95%CI); 1.18 (1.11, 1.26)] and perceiving of asking partner to get VCT as normative action [OR (95%CI); 1.26 (1.04, 1.52)] and also with their underpinning factor; positive salient belief towards partner VCT, [OR (95%CI); 1.31 (1.04, 1.52)] and motivation to comply for referents wish's [OR (95%CI); 1.06 (1.01, 1.11)]. In the sub-group, attitude and salient belief in males and perceiving of VCT as normative action and salient belief in females were significant predictors intention of partner VCT . The odd of being single was 91% higher [OR (95%CI); 1.91 (1.07, 3.39)] among intenders of asking partner to get VCT compared to nonintenders (significant only in male subjects[OR (95%CI); 2.32 (1.05, 5.12)]). No significant association was observed between the other socio-demographic variables and with both out-come variables.

Table-10. Logistic regression of socio-demographic and cognitive variables, on intention of Voluntary counseling and testing among the study of Harar Town, March 2000.

Characteristics	Intention of Having VCT					
	Total subjects (n=719)		Male subjects (n=360)		Female subjects (n=359)	
	OR	95% CI	OR	95% CI	OR	95% CI
Marital status						
-Currently married	1.00	----	--	--	--	--
-Never married	0.84	0.41, 1.70	0.69	0.25, 1.90	0.89	0.30, 2.60
-Others	0.66	0.20, 2.11	NS[a]	0.0, 3.17∝	**0.21**	0.05, 0.91
Sexual practice [b]						
1-Yes (without	1.00	---	--	--	--	--
condom)	**2.32**	1.12, 4.78	2.75	0.88, 8.61	1.55	0.54, 4.44
2-Yes (± Condom)	**2.39**	1.17, 4.88	2.18	0.71, 6.68	**4.68**	1.55, 14.1
3-None						
Cognitive variables [c]	**1.36**	1.16, 1.36	**1.36**	1.18, 1.53	**1.17**	1.03, 1.33
Attitude	0.96	0.92, 1.41	0.96	0.69, 1.34	1.36	0.99, 1.88
Subjective norm	**1.21**	1.07, 1.27	**1.21**	1.05, 1.39	**1.20**	1.07, 1.36
Salient belief	1.00	0.96, 1.07	1.00	0.90, 1.12	1.02	0.95, 1.09
Motivation to comply						
	Intention of asking of partner/s to get VCT					
	OR	95% CI	OR	95% CI	OR	95% CI
Marital status						
-Currently married	1.00	--	1.00	--	1.00	--
-Never married	**1.91**	1.07, 3.39	**2.32**	1.05, 5.12	1.82	0.67, 4.92
-Others	0.91	0.35, 2.34	0.41	0.08, 2.02	1.29	0.32, 5.14
Sexual practice [b]						
1-Yes (without	1.00	--	1.00	--	1.00	--
condom)	0.94	0.52, 1.71	0.65	0.28, 1.53	1.12	0.43, 2.91
2-Yes (± Condom)	1.03	0.57, 1.88	0.60	0.24, 1.48	1.23	0.47, 3.20
3-None						
Cognitive variables [c]	**1.18**	1.11, 1.26	**1.28**	1.17, 1.40	1.09	0.99, 1.21
Attitude	**1.26**	1.04, 1.52	0.97	0.73, 1.29	**1.47**	1.10, 1.96
Subjective norm	**1.31**	1.17, 1.48	**1.18**	1.02, 1.35	**1.56**	1.28, 1.90
Salient belief	**1.06**	1.01, 1.11	1.06	0.98, 1.15	1.06	1.00, 1.21
Motivation to comply						

* Variables included in the equation are: Age, Ethnicity, Religion, and Education status, Employment status, knowledge about HIV/AIDS, evaluation of consequences of VCT and perception of VCT as a salient referents wish.

[a] Statistically non-significant Big Figure.

[b] 1= Having sexual practice during the previous one year and never used condom, 2= Having sexual practice during the previous one year with use of condom always or sometimes, 3= Not having sexual practice during the previous year or not initiating sexual practice at all.

[c] Cognitive variables are Attitude towards VCT, Perception of VCT as normative action, Salient belief about benefits of VCT and Motivation to comply to the referents wish's.

Focus Group Discussion key findings

Factors related to intention of VCT

Knowledge about HIV testing and counseling: -Most people well informed about the test for HIV. They know it is done in hospitals, by testing blood sample. Young males mentioned that the result could be positive or negative. However, only one young-male pointed the test should be done after some months (6 months) of exposure, which show knowledge of window period. So that the it is possible to say that the knowledge of the public about immumological window period after being exposed is poor.

Attitude towards VCT: Most people think that testing for HIV is good and useful but difficult to decide until many people get accustomed to it. Some thought that testing is dangerous because of the consequences of finding out that one is HIV positive. All groups recommended the need of proper education about benefits of VCT prior to service expansion.

Benefits of VCT mentioned by all groups were: premarital check-up of couples, to know sero-status, to reduce fear of suspect, to prevent infection (from infected person), to avoid pregnancy if positive, to take care in future life. Some participants pointed that practicing VCT bring change of sexual behavior. Possible harms of positive result, mentioned by some of the groups: act of revenge, isolation, Loss of future hope, isolation and abandonment or marital discord.

The main reasons given for why people refuse HIV- testing were: Fear of positive result, lack of knowledge or information about HIV testing and counseling, fear of isolation or discrimination from public. Some people mentioned lack of perception of the risk, cultural barrier (being not

open to seek help), terrorizing methods of AIDS education and lack organization that could help those found to be HIV positives after being tested.

With regard to ideas whom people comply to practice VCT: All people are willing to comply for religious leaders, health workers. Majority agreed to comply for friends and, parents or family. Some agreed to comply for AIDS patients, teachers (young male and females) and known persons like actors, musician (Young male).

Possible use of cultural settings to promote VCT: All groups mentioned the following. Use of churches and mosques cultural gatherings like "eddir", funeral, and wedding ceremonies to advocate VCT towards making it tradition or societal norm and to reduce fear and discrimination. Some of young females pointed making formal request of test result before giving marriage certificate.

Intention of having VCT: Majority of participants claimed to have the intention of practicing VCT in the near furure, some said with full confidence but majority with fear. All religious group and majority of health workers group agreed for testing. Non-intenders mentioned possibility of positive result due to previous exposure and fear of discrimination

Intention of asking partner to get VCT: Almost all participants of female groups majority of males claimed to have intention of asking partner. However of male group participants worried about marital discord, lack of confidence on testing instrument

Preference of service delivery systems

With regard to where the service should be given: All groups mentioned hospitals and kebeles. In addition to these, young males and females preferred schools, clinic, specific center, youth center; older males and females preferred work place and Eddir gathering.

Most people preferred to be counseled by doctors, religious leaders, HIV affected individuals and trained persons. Peer group & good teachers mentioned by religious Leaders

How should the VCT be delivered? People agreed with method of linked confidential testing if only the counselor knows the result. Those, who didn't agree, said that they don't trust on confidentiality so preferred unlinked method.

People preferred face-to-face method of hearing the test result. However they emphasized that VCT should always be accompanied by good counseling. Some mentioned letter could be given if a person requested and giving report through telephone may result in dangers like suicide.

With regard to when to get test result, all preferred to get the test result on the same-day that the sample blood given. By saying; "it reduce my prolonged fear" (Young Female)

" I want to know my sero-status immediately, as soon as possible "(Young Male)

With regard to the cost of VCT service, majority said that if the cost is too high it is difficult to get testing for majority of the public. There should be a way to address those who could not afford to pay such service.

DISCUSSION

This study provided important information regarding intention, attitude and perception about Voluntary HIV testing and counseling among the 15-49 year age group population of Harar Town. The study also assessed the status of the study population with regard to knowledge about HIV/AIDS, previous sexual practice, and preference of type and methods of HIV- testing and counseling service.

The study mainly analyzed factors related to intention of HIV testing and counseling. The finding showed that high proportion (85.4%) of the study subjects claimed to have intention of having VCT and (73.6%) intention of asking partner to get VCT. The FGD result also showed that majority of the participants agreed for VCT. From other studies, 54% request rate for VCT was reported among antenatal care attendants of Nairobi,[30] 37% initial willing and 9.3% actual acceptance of VCT was reported from Zambian community based study [31] and 38% agreement for testing with 90% actual testing was reported among antenatal care attendants of New York.[33] Even though the actual acceptance rate of VCT might not be as high as the intention rate, a prospective study by Fisher et al, showed that intention did predict performing specific HIV-preventive behavior under study.[45] Therefore the finding of the study could be considered as an indication of the need for promotion and expansion of VCT service to the public at large.

In this study it was found that majority of study subjects on the average have considerably a high knowledge score of HIV/AIDS. Similar score of knowledge of prevention of HIV/AIDS was report by Mehret et al from the study done in four big towns of Ethiopia in 1993.[56] Lower score rate was report from Demographic and Health Survey in Ethiopian of May 2000, representing both urban and rural community.[57] Therefore, it is possible to say that the study population had sufficient knowledge of HIV transmission and prevention methods. It is also

found that knowledge of mode of transmission was significantly higher among the study group educated nine and above compared to those grade eight and below. This may indicate that those population groups at low educational status need more health education programs to acquire the necessary knowledge of HIV mode of transmission and also prevention methods.

The finding of the study showed that about 60 (14%) (52 male subjects) of those study subjects who gave history sexual practice during the previous one year claimed to have sexual contact with more than one partners. Mengistu.M. et al reported a 10.5% prevalence of multi-partner sexual relationship from study done among same age group in four big towns of Ethiopia during 1993.[57] Even though the finding this study was higher compared to the previously mentioned study, only small number of our study subjects (only 9 cases) claimed not to use condom with two or more partners. This may show that majority of study subjects who practice multi-partnership developed safer sexual behavior by using condoms.

From the study finding it was shown that considerable number, more than one-third of the study subjects claimed to use condom, either always or sometimes, during the previous year sexual contacts. The proportion is higher compared to other study done by Teklu A. among male urban community of Ethiopia during the early 90's.[58] The difference might indicate that the rate of condom use in the community is on the increase, even though the purpose of using condoms were not pinpointed. The finding of this study showed that preventive behaviors, condom-use and not having previous sexual contact were independent predictor of intention of having VCT. Knut et al reported significant association of willingness for VCT and use of condom.[31] It is possible to assume that practicing one preventive behavior could predict the intention to practice of other behavior. From the FGD, having risky practice was mentioned as one of the reasons for HIV-test refusal. Various studies reported significant association of test refusal with

those who are at risk. [27, 35] This indicates that those who had unsafe sexual practice may perceive that they are at risk of getting HIV and refuse testing. The study result revealed that a person's previous sexual practice did not predict intention of asking partner to get VCT, which might indicate the need for further study with regard to partner(s) risk perception.

From the study result, attitude towards VCT had significant association with the two underpinning cognitive factors (salient belief and evaluation of consequences of VCT); but perception of VCT as a norm had no consistent association with all conditions. Motivation to comply was correlated only with normative perception of having VCT in female subjects. Fisher reported similar finding in university male and female students of Connecticut.[45] Knowledge about HIV/AIDS and socio-demographic factors: age, ethnicity, employment and marital status had significant association only with some of the conditions either in male or female subjects. This finding suggest that interventions directed at modifying attitude and normative perception about having and asking partner for VCT in a population under study may benefit by considering such factors like: gender, ethnicity, marital status and age. Thus identification of such predictor may help to identify population groups that need to be targeted for more extensive HIV education and VCT promotion.

With regard to socio-demographic factors, single marital status, found to be predictor of intention asking partner to get VCT both in bi-variate and multi-variate analysis. This difference was mainly seen in male study subjects. It is possible to postulate that currently married males might think that their partner is not at risk of being infected with HIV or never married persons might have the courage to ask their partner to get for VCT as precondition for marriage or to start sexual contact with out condom. Married FGD participants pointed out that fear of marital discord is the reason for not intending asking partner to get VCT. Michel K. et al

reported significant association of acceptance of HIV testing and counseling with single marital status from study done among pregnant women in Atlanta during 1989. [32]

The findings of multi-variant analysis using logistic regression model, showed that attitude towards VCT and positive salient belief towards VCT was significant predictors of intention of having VCT in both male and female study subjects. Significant association of positive attitude towards VCT with acceptance of testing were reported by Michael K. et al from study done among pregnant women in Atlanta and by Jeffrey L. et al from study done among STD patients in South Carolina. [27,32] Wendy M. Et al reported association of test acceptance with awareness of the benefits of HIV-testing among pregnant women in Edinburgh.[34] Therefore it could be possible to say that intention of having VCT is mainly governed by the attitude of the person towards the action and his/her perception that performing the specific HIV/AIDS preventive behavior, voluntary HIV counseling and testing, in this particular condition has good benefits. Lack of significant association of subjective norm and the underpinning factors with intention of having VCT could be explained by the wide spread stigma towards the HIV/AIDS so that the behavior is not accepted as normative action.

Concerning intention of asking partner to get VCT not only attitude and the underpinning factor salient belief of asking partner to get VCT but also perception of VCT as normative action were found to be predictors of asking partner to get VCT. However the finding was not consistent in both sexes, where by, attitude was predictor in male and subjective norm was predictor in female study subjects. Lack of association between subjective norms and intention of practicing HIV preventive behaviors, particularly asking partner(s) to get VCT, in male subjects was also reported by Jeffrey Fisher from study done on male and female university students.[45] Thus

gender difference of cognitive and socio-demographic predictors of intention of VCT may help VCT program implementers with different promotional approach for the two sexes.

- With regard to VCT service delivery system, majority of the study subjects preferred confidential and named delivery method, which was also supported by majority of the FGD participants. Confidential method has been reported as a good entry point towards attaining behavioral changes.[25] This may indicate that confidentiality could be considered as a key element for implementation of effective and sustainable VCT service.

- Majority of study subjects preferred to be counseled by physician or by any trained counselor, and considerable number of subjects by religious leaders or nurses. Study done in Uganda and Tanzania, involving traditional healers and religious leaders in HIV counseling showed significant result to expand the VCT service.[43] The finding of the study indicate that not only health personnel but also others could be involved in counseling service which might give a wider opportunity to involve community members in the activity of HIV-counseling.

Even though the majority of the study subjects showed willingness to pay, significant proportion claimed that they could afford very minimum. Majority of FGD participants also stressed that VCT service cost could be a hindrance for testing if it is beyond the paying capacity of the public at large. Therefore special program should be thought to address youth, pregnant women those who demand for VCT but could not afford to pay for the service. The Ugandan VCT service at AIDS Information Center, revealed that, "free-day" VCT service program were used to attract young people, women and couples at large scale.[41]

Fear of positive result, stigma attached to AIDS in the public and lack of knowledge about HIV-testing are the major reasons mention by the FGD participants. Similar finding in many developing countries was reported by UNAIDS; emphasizing that a properly carried out VCT program could help to break the vicious circle of fear, stigma and denial.[2]

Strength and limitations

Strength

There is no similar community based study in Ethiopia, hence it gives good information concerning level of demand and determinants of Voluntary HIV counseling and testing in the urban population. Utilizing both qualitative and quantitative method of data collection to get sufficient information can be sited as strength. The sample size, sampling procedure and using of both bi-variate and multi-variate analysis method could also be considered as the strength of the study.

Limitations

The major drawbacks with this cross-sectional study design is that it couldn't show us real practice or acceptance of VCT and also lack of the model to address the effect of different service delivery methods on the level of acceptance. Measurement of sexual practice based on self-reported behavior has limited validity.[58] The paucity of similar study could also be considered as the limitation of this study.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

1. There was high intention rate of VCT (*having and asking partner*) among the 15-49 year age group population of Harar Town.
2. A substantial proportion of the study subjects have sufficient knowledge about HIV/AIDS transmission and prevention.
3. Not having previous sexual practice is predictor of intention of *having VCT* in female subjects and being never married is predictor of intention of *asking partner to get VCT* in male subjects.
4. Intention of *having and asking* VCT mainly predicted by the variables: attitude towards VCT, Salient belief about benefits of having VCT and previous use of condom while subjective norm predict intention of only *asking partner to get VCT* mainly in female subjects.
5. Confidential HIV-testing and face to face counseling preferably by physicians or trained persons, with minimum service cost were found to be more acceptable by majority of study subjects.
6. Major reasons for not having intention of HIV-testing and counseling identified from the study were fear of positive result and stigma attached to AIDS.

Recommendations

1. IEC program to advocate benefits of VCT and to reduce fear of positive result and stigma attached to AIDS is mandatory prior to implementation of VCT programs.

2. As cultural norms have significant impact on acceptance of VCT, mainly in females, program implementers should address the issue by involving community leaders and using community and cultural gatherings.

3. A prospective study of the same age group of urban community by offering voluntary HIV counseling and testing is recommended.

4. Program implementers should design a VCT program that is: fully confidential, easily accessible and by a counselor acceptable by the community. Free-standing or low cost VCT programs should be thought to expand VCT service to the majority of urban community who could not afford to pay; especially for reproductive age group females, youth and other vulnerable groups.

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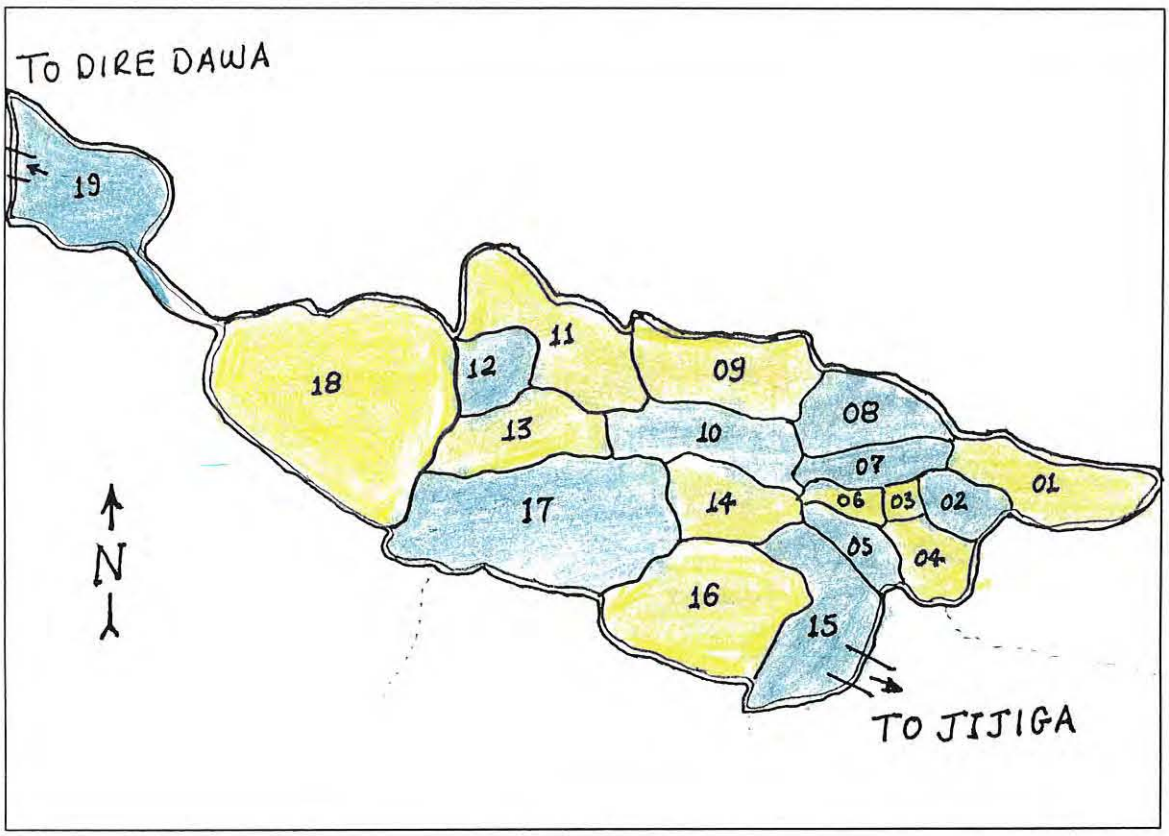
ANNEX-1: SKETCH MAP OF HARAR TOWN



Legend:

04 Name of Kebele

Border of Kebele

Border of town

Kebeles selected for QDC

Kebeles selected for FGD

ANNEX-2: SELECTION OF STUDY AREA

Study area:- Harar town with a population of 93,113 at the end of July 1999.

Study population:- All residents of Harar town aged 15-49 year old.

Number of kebeles:- 19

Total Sample size:- 720

Kebele	Tele. No	Code number (Range)	Total number of households	Type of study	Sample size	Population
01	660729			FG[a]	4	6587
02	-	001- 088	1091	QDC[b]	88	6172
03	660696			F G	4	3012
04	660838			F G	4	4038
05	660686	089 - 168	740	QDC	80	5605
06	660632			F G	4	2527
07	660676	169 - 226	492	QDC	58	4017
08	6607	227 - 314	817	QDC	88	6272
09	660838			FG	4	6468
10	660816	314 - 402	1025	QDC	88	6333
11	660822			F G	4	3092
12	660310	403 - 492	1478	QDC	90	6053
13	660243			F G	4	3482
14	660593			F G	4	4117
15	661374	493 - 552	452	QDC	60	4019
16	662236			F G	4	4739
17	660716	553 - 670	1250	QDC	118	8038
18	661759			F G	4	4597
19	662181	671 - 720	750	QDC	50	3550

[a]Focus Group discussion

[b] Qualitative Data Collection

ANNEX-3: FOCUS GROUP DISCUSSION PROTOCOL, TOPIC GUIDE and TENTATIVE PROGRAM

FOCUS GROUP DISCUSSION PROTOCOL

Good morning / afternoon, and thank you all for coming.

My name is _____. My colleague near to me is called _____. We came from the Regional Health Bureau.

Read the following as it is:

"After we conduct some brief introduction, we will be talking about several different issues. We will be asking you questions about your overall experience with the HIV/AIDS in your locality and questions pertaining to the issue of ***Voluntary HIV Counseling and Testing (VCT).*** *We will conclude the session by asking you for your recommendations on how such program might be implemented in your community in any way in the future".*

Potential Use of Data

The gathering of this information is an effort to gain further insight into those aspects of the VCT program as well as searching for ways to improve similar kinds of programs.

Ground Rules

Issues of confidentiality

Please be assured that any information collected here is strictly confidential. The staff of research, community leaders, or other participants will not directly share the information in a way that would reveal an individual's personal identity.

Consent for participation and tape-recording

At this point it is important that we obtain your consent for conducting the session. Understand that this is more for your protection than any thing else.

Read consent form out loud to the group:

"Your remaining in the session indicates that you voluntarily agree to participate in this discussion program. You have the right to refuse to answer any questions and to end the discussion if you find it necessary to do so. For the sake of accuracy and efficiency, we will also ~~be~~ tape recording these sessions, unless any one has any objections"

Role of Moderator / Note Taker

The moderator will be in charge of facilitating the discussion. The moderator will bring the discussion back to the topic at hand should it go beyond the main issues. The moderator will not give any indication (verbal or physical) that would encourage certain types of comments or discourage other types of comments. In short, the moderator will guide the discussion when necessary, being careful not to lead the discussion.

It is our role to facilitate, but your role to tell us what you think. The note taker will have the sole responsibility of capturing the session as accurately as possible. This will include not only participants' responses, but nonverbal actions, physical environment, atmosphere of the session, as well as other vital characteristics of the session.

Importance of Total Group

In this group everybody should feel free to talk. Each and every opinion is important and wanted. It is very important that all the people in the group get a chance to express their opinions.

Agreement to Disagree

In this group there are no right or wrong answers. Everybody should express the opinion or attitude pertinent to him or her. When you express your opinions you are encouraged to be honest in your views of the HIV/AIDS preventive and service programs (especially VCT program). WE want you to focus your comments on the program and NOT toward each other or members of the staff.

FOCUS GROUP DISCUSSION TOPIC GUIDE

THEME 1 Introduction

A. At this point, we would like to ask you introduce your self to the rest of the group. Let's start with the research team. Name, Age, Education, etc..

THEME 2 Warm up questions

Next we'd like to hear a little about your experiences or knowledge about AIDS

B-1 Tell us what is HIV/AIDS?

B-2 We would like you to tell us how people get HIV/AIDS?

PROBES: 1. Would you explain further?

2. Would you give me an example?

3. Has anyone else had similar experiences?

4. Is there any thing else?

THEME 3 Voluntary Counseling and Testing Program

C. Now we would like to ask you about Voluntary HIV-Counseling and Testing (VCT) service.

C-1. What do you know about testing for HIV/AIDS?

C-2. What do you think about testing and counseling for HIV/AIDS?

(Is it good or bad? Pleasant or unpleasant? Easy or difficult?)

C-3. What are the benefits and the harms of VCT?

C-4. Why do people decline HIV testing & counseling?

C-5. To whom do think people comply to accept HIV testing & counseling?

C-6. Is there any cultural and religious practices that could be used to promote VCT?

C-7. Do you intend to use VCT service in the near future? Why? Why not?

C-8. Do you have the intention to ask your partner for VCT? Why? Why not?

THEME 4 Types and Methods of VCT for HIV

D. Now we would like you to share a little bit about how the service of VCT should be delivered to meet the demand of your community?

D-1. What organizations or where do you think appropriate to give such service?

D-2. Whom (what type of people) do you think be involved in counseling?

D-3. How should it be done? (Anonymous-unnamed or confidential-named method) WHY?

D-4. Which way do think more preferable to get the test result?

Example: Face to face, Telephone, Secret letter ...WHY?

D-5. After giving a sample for testing, when do you think preferable to hear the test result?

Example: Same-day, next-day, two to three weeks later

D-6. How much (If at all) people would pay for HIV- Counseling and Testing Service?

THEME 5 Recommendations

Until now we have talked about one of the preventive programs of HIV /AIDS, and how it could be set up. We would like to ask you what other things could be done to make this a better acceptable program.

E. Thinking about the issues we have discussed, what recommendations or suggestions would you make on a VCT program or other related programs?

E-1. What do the rest of you think?

E-2. Would you explain further?

E-3. Would you give me an example?

E-4. Is there any thing else?

* *We would like to thank each of you for your time, and we do appreciate all your comments.*

* ***At this point, is there any thing we forget to ask or any thing you would like to mention before we finish up this session?***

FOCUS GROUP DISCUSSION TENTATIVE PROGRAM

Grouping:- By age and sex

Method of selection: - Community based, convenient selection method

Discussion site:- Harari Regional Health Bureau

Date	Morning		Afternoon		Remark
	Sex	Age(year)	Sex	Age(year)	
March 24/00 March 31/00	Male	15 - 25	Female	15 - 25	Include students
March 25/00 April-1 /00	Male	26 - 49	Female	26 - 49	
April-4 /00			Health workers		
April-8/00	Religious Leaders				

Responsible persons: -

Moderators: - Male groups- Dr. Fahmi Mohammed (Principal investigator)

Female groups- Sr. Nejaha Abdosh (From Regional Health Bureau)

Reporters: - Male groups- Ato Ketema Ayele (From Regional Health Bureau)

Female groups- Sr. Timaj Abdosh (From Regional Population Office)

ANNEX-4: FOCUS GROUP DISCUSSION DESCRIPTION AND KEY QUOTES TO KEY THEMES

DESCRIPTION

Setting, date of performance, number of participants and duration of each discussion.

No.	Characteristic of group	Number of participant	Date	Place	Duration (minutes)
1	Male age group 15-25	8	24/3/ 00	Regional laboratory	95
2	Male age group 15-25	10	14/4/ 00	"	85
3	Male age group 26-49	9	25/ 3/ 00	"	80
4	Male age group 26-49	9	15/ 4/ 00	"	85
5	Female age group 15-25	7	24/ 3/ 00	"	80
6	Female age group 15-25	8	14/ 8/ 92	"	75
7	Female age group 26-49	8	25/ 3/ 00	"	85
8	Female age group 26-49	10	15/ 4/ 00	"	95
9	Health Workers group	10	18/ 4/ 00	"	80
10	Religious Leaders group	10	22/ 4/ 00	"	85

KEY QUOTES TO KEY THEMES

Knowledge of HIV testing and counseling

"We heard that testing for HIV is available for purpose of going abroad and premarital check-up of couples". (Females older age)

"What I know is there is mandatory HIV-testing if you go out side of Ethiopia" (Religious Leader)

" I wouldn't dare to say there is VCT service at present, it is no and off" (Health Worker.)

Attitude towards VCT

"VCT is not difficult if testing is not accompanied with education and if not strictly Confidential" (Religious Leader.)

"I think it is difficult, the public should have enough knowledge about VCT" (Health Workers).

" VCT is good to take care and not to infect other " (Older females)

"VCT is bad, because people will isolate you" (Young females)

" Even though difficult to practice testing is good and better" (Older Males)

"Good but we need education before testing" (Young males)

Benefits of VCT

" Help me to change behavior. Oh! It needs professionals otherwise I would rather die..." (Older male)

"If positive I will teach other how I was infected, if negative it helps me to take care" (Young female)

Possible reasons for test refusal

"Some people refuse due to lack of perception of the risk" (young male group)

"it is a new practice so needs good promotion" (older male group)

"Due to cultural barrier, we are not open to seek help" (older male group)

"Due to terrorizing methods of AIDS education, there is deep fear, which result isolation of affected or suspected...." (Religious Leaders)

" There should be organization to help positives, otherwise..." (Health workers)

" We better teach the youth the value of being virgin until marriage " (Health workers)

Intention for VCT

" I want to do, I have a lot of future plan of life!" (Young female)

"I am willing; but I have a fear inside, anyway, I will do it" (young female)

"I want testing, to know my result and teach public ..." (young male)

"Yes, since we can acquired infection in different ways..." (older female)

"Yes, my husband travels different areas" (older female)

"I will do it, if all my friends agreed to do" (young male)

" Yes, I don't want to infect my partner, I am responsible..." (older male)

"Yes, to get mental rest and remove my fear..." (Older male)

" Yes, it is better to test every one and give certificate" (Religious L.)

"I did before" "I will, to know my status, remove my fear" (Health Worker)

Reasons of intenders of asking partner for VCT:

"Yes, it is a matter of life and death, there is no fear, by any means..." (Young female)

"I will ask and encourage him, even if he test positive, I will give my affection" (Older female)

"Yes, people better test before having sexual contact" (Young male).

"I will, but first I do the test if confidential then..." (Older male).

"Yes, not only my partner but also my children" (Older female)

" I will ask her, to clear my suspicion" (Health worker.)

Cost of service

"Until people accustomed the service it should be free or low price latter on up to 50 birr" (Religious Leaders)

"If I pay for positive result, it is almost double loss" (young female)

" It should be free for students and youth, if not possible, fair price" (young male)

"It should be free, to save the generation" (older male)

"It has a value, that we could not estimate it here, I would pay what ever it cost, think for Pregnant and poor girls who want to be tested " (older female)

ANNEX-5: STRUCTURED QUESTIONNAIRE FOR QUANTITATIVE STUDY

Interviewer's Guideline and informed consent form

1. Guideline to interviewers

When you reach the selected household, introduce yourself after greeting the person you meet first. Introduce the person the purpose of the study by saying that:

"The reason why I came here is to ask some questions related to health. The purpose of the interview is to do scientific research on HIV/AIDS, towards identifying the major problems of the community and preparing recommendations to the concerned organizations."

Then, least down all the household members' age 15 - 49 years of your gender. Give number for each one alphabetically, and then select one individual by lottery method. If there is no individual with above criteria go to next household in clock-wise direction.

2. Informed Consent

For the selected person read the following:

"To help our study, we would like to ask you some questions which may take about 45 minutes. As your participation is very important to the outcome of the study we kindly requests you to give us your sincere and truthful answers. All your words are fully confidential and you need no mention your name."

Do you agree to participate in the interview?

Yes, I agree / / No I don't / /

If a person doesn't agree, try to fill-up House-number and age of the person and return the answering sheet to the supervisor.

Addis Ababa University
Faculty of Medicine
Department of Community Health

ASSESSMENT OF VOLUNTARY HIV COUNSELING AND TESTING INTERVIEW QUESTIONNAIRE

Code number /__/__/__/

Part 1

1. Sex: - 1. Male 2. Female

2. Age:- _____ Years completed

3. Religion:- 1. Catholic 2. Muslim 3. Orthodox 4. Protestant 5. Others, specify____

4. Ethnic group:- 1.Amhara 2.Guragea 3.Harrari 4.Oromo

5.Somali 6.Tigray 7. Others, specify_____

5. Marital status:- 1. Single 2.currently married 3.Separated 4.Divorced 5.Widowed

6. Educational level:- 1.Illiterate 2. Read & write 3. Regular education

6.1 If the answer is "3", Grade completed _____

7. Occupation (Based on SCA classification):-

1. Legislators, senior officials & managers
2. Professionals
3. Technicians & Associate professionals'
4. Clerks
5. Shop & market sales workers
6.Service workers
7. Others, specify____
8. I don't know
9. Refuse to answer
10. Skilled agricultural workers
11. Student
12. Homemakers
13.Disabled
14. Pensioners
15. Unemployed

Part 2

8. 1 Did you start sexual intercourse? *(IF NO, go to Question 11)*

1, Yes 2. No 99. Refuse to answer

→ 8.2 IF YES, at what age you had sex first?

When I was _____ years old.

9. 1 Have you had sexual intercourse in the past one-year? *(IF NO, go to Question 11)*

1.Yes 2.No 99.Refuse to answer

→ 9.2 IF YES, How often you have used condom when you have had sexual-intercourse during the past one-year?

1.Always 2. Sometimes 3. Never

10. 1 With how many different people have you had sexual intercourse during the past year?

The numbe_____

→ 10.2 With how many of your sexual partners were condoms used *all the time*?

The number_____

Part 3

Answer as:- 1.True 2.False

11. A pregnant women who has AIDS can pass the disease to her unborn baby.

12. The AIDS virus can be transmitted by mosquitoes.

13. A person can be infected with the AIDS virus and not have the disease AIDS.

14. You can protect your self from the AIDS virus by not having sexual intercourse.

15. Sharing kitchen utensils or a bathroom with a person with AIDS poses no risk.

16.. Breast milk can pass the AIDS virus from an infected mother to her infant.

17. Condoms can reduce the chance of passing the AIDS virus from one sex partner to the other partner (s) during sexual intercourse.

18.. The AIDS virus can be transmitted by using unsterile surgical instruments or needles.

19. Sharing toothbrushes and razors can transmit the AIDS virus.

20. It is unsafe to shake hands with some body who has HIV/AIDS.

Part 4

The following questions deal with getting an HIV blood testing & counseling (VCT)

(***VCT is getting HIV testing service voluntarily, with pretest and posttest counseling***)

21. What do you think about getting an HIV blood testing & counseling in the near future?

21.1 Is it good or bad? 1.Very good 2.Somewhat good 3.Neither good nor bad
4. Somewhat bad 5.Very bad

21.2 Is it easy or difficult? 1. Very easy 2.Some what easy 3.Neither easy nor difficult
4. Somewhat difficult 5. Very difficult

21.3 Is it pleasant or unpleasant? 1. Very pleasant 2. Some what pleasant
3. Neither pleasant nor unpleasant
4. Somewhat unpleasant 5. Very unpleasant

22. Do you agree that most people whom you respect think that "you should get an HIV blood testing in the near future"?

1.Strongly agree 2.Agree 3.Neither agree nor dis-agreee
4.Disagree 5. Strongly disagree

23. Do you agree that getting an HIV blood test in the near future would let you know for sure whether or not you are infected with HIV?

1.Strongly agree 2.Agree 3.Neither agree nor dis-agreee

4.Disagree 5. Strongly disagree

24. How much good or bad that " knowing for sure whether or not you are infected with HIV" would be?

1.Very good 2. Somewhat good 3.Neither good nor bad

4.Some what bad 5.Very bad

25 How much true is that "getting an HIV blood test in the near future would be reassuring if the test result was negative" ?

1. Very true 2.Somewhat true 3.Neither neither true nor untrue

4.Somewhat untrue 5.Very untrue

26. How much good or bad is that "your being reassured by a negative test result " would be ? 1.Very good 2. Somewhat good 3.Neither good nor bad

4.Some what bad 5.Very bad

27. How much true is that "getting an HIV blood test in the near future would let you start self care and medical care if the test result was positive"?

1. Very true 2.Somewhat true 3.Neither true nor untrue

4.Somewhat untrue 5.Very untrue

28. How much good or bad that "your starting self and medical care if your test result is positive "would be?

1.Very good 2. Somewhat good 3.Neither good nor bad

4.Some what bad 5.Very bad

29. Do you agree that "getting an HIV blood test in the near future would provide safety for your partner" ?

1.Strongly agree 2.Agree 3.Neither agree nor disagree

4.Disagree 5. Strongly disagree

30. How much good or bad that "your providing safety for your partner" would be?

1.Very good 2. Somewhat good 3.Neither good nor bad

4.Some what bad 5.Very bad

31. How likely is that "getting an HIV blood test in the near future might mean you would find out being *test positive*?

1. Very likely 2.Somewhat likely 3.Neither likely nor unlikely

4. Somewhat unlikely 5.Very unlikely

32. How much good or bad that "your finding out being test positive " would be ?

1.Very good 2. Somewhat good 3.Neither good nor bad

4.Some what bad 5.Very bad

(Q33-36) Answer as:- 1. Very true 2.Somewhat true 3.Neither true nor untrue

4. Somewhat untrue 5. Very untrue

How much true or untrue; if we say that:-

33. "Your partner(s) think that you should get an HIV blood test in the near future" ?

34. "Your friends think you should get an HIV blood test in the near future" ?

35. "Your family thinks you should get an HIV blood test in the near future" ?

36. "Doctors think you should get an HIV blood test in the near future" ?

37. How likely is that you ***intend to get*** an HIV blood test in the near future? (in2 months)

1. Very likely 2.Somewhat likely 3.Neither likely nor unlikely

4. Somewhat unlikely 5.Very unlikely

The following questions (Q-38 to Q50) deal with asking partner(s) to seek for HIV blood testing and counseling.

38. What do you think about "Asking your partner(s) to get an HIV blood test in the near future" would be ?

38.1 *Is it good or bad*? 1.Very good 2.Somewhat good 3.Neither good nor bad

4. Somewhat bad 5.Very bad

38.2Is it easy or difficult ? 1. Very easy 2.Some what easy 3.Neither easy nor difficult

4. Somewhat difficult 5. Very difficult

38.*3 Is it pleasant or unpleasant* ? 1. Very pleasant 2. Some what pleasant

3. Neither pleasant nor unpleasant

4. Somewhat unpleasant 5. Very unpleasant

39. Do you agree that most people whom you respect think that " you should ask your partner(s) to get an HIV blood testing in the near future"?

1.Strongly agree 2.Agree 3.Neither agree nor dis-agreee

4.Disagree 5. Strongly disagree

40. Do you agree that "Asking your partner to get an HIV blood test in the near future would let you know for sure whether he/she is infected with HIV" ?

1.Strongly agree 2.Agree 3.Neither agree nor dis-agreee

4.Disagree 5. Strongly disagree

41. How much good or bad that " knowing for sure whether or not your partner(s) are infected with HIV" would be?

1.Very good 2. Somewhat good 3.Neither good nor bad

4.Some what bad 5.Very bad

42. How much true is that "Asking your partner(s) to get an HIV blood test in the near future would be reassuring if the test result is going to be negative" ?

1. Very true 2.Somewhat true 3.Neither true nor untrue

4.Somewhat untrue 5.Very untrue

43. How much good or bad that" your being reassured by your partner(s)' negative test result " would be? 1.Very good 2. Somewhat good 3.Neither good nor bad

4.Some what bad 5.Very bad

44. How much true is that "Asking your partner(s) to get an HIV blood test in the near future would mean that you care about the health of your partner(s)" ?

1. Very true 2.Somewhat true 3.Neither true nor untrue

4.Somewhat untrue 5.Very untrue

45. How much good or bad that "Showing that you care about the health of your partner(s)" would be?

1.Very good 2. Somewhat good 3.Neither good nor bad

4.Some what bad 5.Very bad

(Q46-49) Answer as:- 1. Very true 2.Somewhat true 3.Neither true nor untrue

4. Some what untrue 5. Very untrue

How much true or untrue; if we say that:-

46. "Your partner(s) think you should ask him/her to get an HIV blood test in the near future ?

47. "Your friends think you should ask your partner(s) to get an HIV blood test in the near future?

48. "Your family thinks you should ask your partner(s) to get an HIV blood test in the near future ?

49. "Doctors think you should ask your partner(s) to get an HIV blood test in the near future?

50 How likely is that you ***intend to ask*** your partner(s) to get an HIV blood test in the near future? (with in two months)

1. Very likely 2.Somewhat likely 3.Neither likely nor unlikely

4. Somewhat unlikely 5.Very unlikely

The following questions **(Q51-56)** concern your willingness to do regarding safer sex. **.Safer sex defined as (*Sex after test result of self and partner or sex with condom*)**

Answer as:- 1. Very true 2.Somewhat true 3.Neither true nor untrue

4. Somewhat untrue 5. Very untrue

How much is it true that :- Concerning safer sex, in general :

51. "You want to do what your friends think you should do".

52. " You want to do what your family thinks you should do".

53. "You want to do what doctors thinks you should do".

54. "You want to do what your religious leaders thinks you should do".

55. "You want to do what most people thinks you should do".

56. "You want to do what your partner(s) thinks you should do".

Part 5

If Voluntary HIV-Counseling & Testing (VCT) Service is available in your locality,

57. Which method of testing you prefer if both types made available?

1. Confidential, linked testing 2. Anonymous testing 7.Other, specify__.

58. Concerning HIV-counseling, by whom do you prefer to get pre/post-test counseling?

1. By physician 2. By a nurse 3.By any trained counselor

4. By religious leader 5.By trained traditional healer 6. No need of counseling

7. Others, specify_____ 8. I don't know 9. Refuse to answer

59. Which way do you prefer to obtain the HIV test result? Through:-

1.Face to face (verbally) 2. Telephone 3. Secretive letter 4. Relative or partner

7. Others, specify_____ 8. I don't know 9. Refuse to answer

60.1 Would you be willing to pay for HIV counseling & testing , if the service is made available ? 1. Yes 2. No

60.2 If yes, how much could you afford to pay for testing and counseling service ?

Birr /__/__/__/

THANK-YOU FOR YOUR COOPERATION!

ANNEX-6: PRE-TEST RESULT OF QUESTIONER FOR QUANTITATIVE DATA COLLECTION

Total number of questions tested = 63

Total number of respondents =42

Average time required to complete one questionnaire = 41.5 minutes

Testing for	**Number of questions With problem**	**Serial Number**	**Questions measuring**	**Action taken**
Clarity	4	22, 37, 39, 50	Intention / Subjective norm	Modification
Cultural acceptability	2	9, 10	Past sexual practice	Modification
	2	11,12 (Previous number)	Refuse sex without condom Sexual negotiation with partner	Removed
Sequence of questions	None	-------	----------	--------
Repetition	None			

ANNEX-7. AMHARIC VERSION OF STRUCTURED QUESTIONNAIRE FOR QUANTITATNE STUDY.

<u>የኤድስ ምርመራ እና ምክክር አገልግሎት ጥናት</u>

<u>የመጠይቅ መግቢያና</u>

<u>የፈቃደኛነት ማረጋገጫ ፎርም</u>

<u>ለጠያቂው ማስታወሻ</u>

ለጥናቱ የተመረጠው ቤት እንደደረሱ መጀመሪያ ከሚያነጋግርዎ ሰው ጋር ሰላምታ ከተለዋወጡ በኃላ <u>ከሐረሪ ጤና ቢሮ</u> እንደተላኩ ገልፀው የመጡበትን አላማ እንዲህ ብለው ያስተዋውቁ::

> "እኔ እርስዎ ዘንድ የመጣሁት አንዳንድ ጤና እና ማህበራዊ የሆኑ ጥያቄዎችን ለመጠየቅ ነው :: የዚህ መጠይቅ አላማ በኤች አይ ቪ/ኤድስ/ ዙሪያ ሳይንሳዊ ጥናት በማድረግ የዚህን አካባቢ ህብረተሰብ ዋንኛ የጤና ችግር-ለመለየት ብሎም የመፍትሄ ሐሳቦችን ለሚመለከታቸው ክፍሎች ለማቅረብ ነው::"

በመቀጠልም በቤተሰቡ ውስጥ ከ15-49 ዓመት እድሜ ክልል ውስጥ የሚገኙ ሴቶች ወይም ወንዶች መኖራቸውን ያረጋግጡ :: ከዚያም ለእያንዳንዱ ሰው ቁጥር በመስጠት አንድ ሰው /የራስዎ ዖታ ከሆኑት ብቻ/ በእጣ ይምረጡ:: በተመረጠው ቤተሰብ ውስጥ ከላይ የተጠቀሰውን መስፈርቶች የሚያሟላ ሰው ካልተገኘ ለተደረገልህ/ሽ/ ትብብር በማመስገን ቀጥሎ ወደሚገኘው ቤት ይሂዱ ::

<u>የፈቃደኛነት ማረጋገጫ</u>

<u>ለመረጠው ተጠያቂ የሚከተለውን ይበሉ፤</u>

> "ለጥናታችን ይረዳን ዘንድ አንዳንድ ጥያቄዎችን ልጠይቅዎት እፈልጋለሁኝ :: ይህም ምናልባት ከግማሽ ሰአት እሰከ አንድ ሰአት ሊወስድ ይችላል :: የእርስዎ በዚህ ጥናት መሳተፍ ለውጤቱ በጣም ጠቀሚታ ስላለው ለማቀርብልዎት ጥያቄ የሚያውቁትን በግልፅ እና በትክክል መልስ እንደሚሰጡኝ እተማመናለሁ:: እርስዎም ሆኑ ሌሎች ተጠያቂዎች የምትሰጡት መልሶች በጠቅላላ ለጥናቱ ተግባር ከመዋል በስተቀር ለማንም ሰው እንደማይገለፅ፤ ስምዎንም እንደማይጠቅሱ ላረጋግጥልዎት እወዳለሁኝ"::

⇒ በዚህ መጠይቅ ለመሳተፍ ዝግጁ ኖትን?

☐አዎን ☐አይደለሁም

<u>ማሳሰቢያ:-</u> የተመረጠው /ችው/ ግለሰብ ለመሳተፍ ፍቃደኛ ካልሆነ ቢቻል የግለሰቡን እድሜ እና የቤት ቁጥር በመመላት የመልስ መስጫ ወረቀቱን ለሱፐርቫይዘሩ ይመልሱ::

- የተመረጠው /ችው/ ግለሰብ ካልተገኘ ሌላ ቀጠሮ ይያዙ!!

የኤድስ ምርመራና ምክር
ለጥናት የተዘጋጀ መጠይቅ

ክፍል 1

1. ጸታ 1. ወንድ 2. ሴት

2. ዕድሜዎ ስንት ነው?

3. ኃይማኖትዎ ምንድነው?
   1. ካቶሊክ 2. ሙስሊም 3. ኦርቶዶክስ 4. ፕሮቴስታንት 5. ሌላ ይግለጽ

4. ብሔረሰብዎ:-
   1. አማራ 2. ጉራጌ 3. ሐረሪ4. ኦሮሞ 5. ሶማሌ
   6. ትግሬ 7 ሌላ ይገለፅ

5. የጋብቻ ሁኔታ:-
   1. ያላገባ/ች 2. ያገባ/ች 3. የተለያዩ /ያገቡ ግን ከባለቤታቸው ጋር የማይኖሩ /
   4. የተፍቱ 5.ባለቤታቸው የሞተባቸው

6.1 የትምህርት ደረጃ :-
   1. መሀይም
   2. ማንበብን መፃፍ የሚችል
   3. መደበኛ ትምህርት የተማሩ
   6.2 ለጥያቄ ቁጥር 6.1መልሱ ኮድ-3 ከሆነ፤ ያጠናቀቁት የትምህርት ደረጃ /ክፍል/:---------

7. ሥራዎ ምንድ ነው?
   1. ከፍተኛ ባለስልጣን፤ ማኔጀር፤ ስራ አስኪያጅ/እስከ መምሪያ ኃላፊዎች/
   2. ባለሞያ /የጤና ÷ የሕግ ÷ የትምህርት÷ መሀንዲስ÷ ወዘተ.....
   3. ቴክኒሽያን እና ተመሳሳይ ስራ
   4. የቢሮ ፀሐፊ ÷ የጽሕፈትና ተመሳሳይ ሙያ ያላቸው ሰራተኞች
   5. የሱቅ ወይም የጉሊት ስራ /የአሻሻጭ ሰራተኞች /
   6. የአገልግሎት ሰጪ ሰራተኞች
   7. ሌላ ይጠቀስ --------- 8. አላውቀውም 9. መልስ መስጠት አልፈልግም
   10. የሰለጠነ የግብርና እና የአሳ ምርት ሰራተኛ
   11. ተማሪ 14.ጡረተኛ
   12. የቤት ውስጥ ስራ 15. ሴተኛ አዳሪ
   13. አካል ጉዳተኛ

ክፍል 2

8.1 ወሰባዊ ግኑኝነት ጀምረዋል?

8.2 ለጥያቄ ቁጥር 8.1 መልሱ ኮድ -1 ከሆነ : ሲጀምሩ <u>እድሜዎ</u> ስንት አመት ነበር?

_____አመት

→መልሳቸው የለም ከሆነ ወደ ጥያቄ ቁጥር 11 ተሻገር/ሪ/

9.1 <u>ባለፈው አንድ አመት</u> ውስጥ/ከሚያዝያ 91-መጋቢት 92/ ወሲባዊ ግንኙነት ፈፅመዋል?

1. አዎን 2. የለም 9. መልስ መስጠት አልፈልግም

9.2 የጥያቄ ቁጥር 9.1 መልሱ ኮድ -1 ከሆነ ፣ ምን ያህሉን ጊዜ በኮንደም ተጠቅመዋል?

1. ሁሌም 2. አንዳንድ ጊዜ 3. ተጠቅሜ አላውቅም
4. ጥያቄው አይመለከተኝም፣ ምክንያቱም ባለትዳር ስለሆንኩኝ

→ መልሳቸው የለም ከሆነ ወደ ጥያቄ ቁጥር 11 ተሻገር

10.1 በአለፈው አንድ አመት ከስንት ሰዎች ጋር የግብረ ስጋ ግኑኝነት አድርገዋል? በቁጥር----

10.2 ከእነዚህ ሰዎች መሀል ሁሌም በኮንደም የተገናኙዋቸው ስንት ናቸው? በቁጥር ---------

<u>ክፍል 3</u>

አማራጭ መልሶች:- 1. እውነት 2. ሐሰት 3.መልሱን አላውቀውም
4. መልስ መስጠት አልፈልግም

11. ኤድስ : ቫይረሱ ካለባት እርጉዝ ሴት ወደ የሚወለደው ልጅ ሊተላለፍ ይችላል::
12. የኤድስ ቫይረስ በወባ ትንኝ አማካይነት ሊተላለፍ ይችላል::
13. አንድ ሰው የኤድስ ቫይረስ በሰውነቱ ውስጥ እያለበት የኤድስ በሽተኛ <u>ላይሆን</u> ይችላል::
14. ከግብረ ስጋ ግንኙነት መቆጠብ የኤድስ እንዳይዝ ለመከላከል ያስችላል::
15. ከኤድስ በሽተኛ ጋራ በጋራ የምግብ ማብሰያ እቃዎችና የመፀዳጃ ቤት መጠቀም ለኤድስ ቫይረስ ሊያጋልጥ ይችላል::
16. የኤድስ ቫይረስ በእናት ጡት ወተት አማካኝነት ቫይረሱ ካላባት እናት ወደ ልጁ ሊተላለፍ ይችላል፤
17. ኮንደም፣ የኤድስ ቫይረስ በግብረስጋ ግኑኝነት ወቅት ከአንድ ሰው ወደ ሌላኛው ሰው የመተላለፍ እድሉን ይቀንሳል::
18. የኤድስ ቫይረስ ባልተቀቀሉ የህክምና መሳሪያዎች መርፌዎች አማካኝነት ሊተላለፍ ይችላል::
19. የጥርስ ቡሩሽ እና የጺም ምላጭ በጋራ መጠቀም የኤድስ ቫይረስን ሊያስተላለፍ ይችላል::
20. የኤድስ ቫይረስ ካለበት ሰው ጋር መጨባበጥ ለአደጋ ያጋልጣል::

ክፍል 4

ከዚህ ቀጥሎ ያሉት ጥያቄዎች የኤድስ ምረመራና ምክክር አገልግሎትን ይመለከታል። ይህ ማለት በፈቃደኝነት የሚደረግ የኤድስ ምርመራ ሲሆን የቅድመ ምርመራና የድህረ ምርመራ ምክር ማግኘትን ይጨምራል።

የኤድስ ምርመራ እና ምክክር በቅርብ ጊዜ በቅርብ ጊዜ ማድረግን በተመለከተ ምን አስተያየት አለዎት? ማለት፡-

ጥያቄዎች	አማራጭ መልሶች
21.1 የኤድስ ምርመራ ማድረጉ ምን ያህል ጥሩ ወይም መጥፎ ነው ይላሉ?	1. በጣም ጥሩ ነው 2. በመጠኑ ጥሩ ነው 3. ጥሩም መጥፎም አይደለም 4. በመጠኑ መጥፎ ነው 5. በጣም መጥፎ ነው
21.2 የኤድስ ምርምራ ማድረግ መወሰኑ ምን ያህል ቀላል ወይም አስቸጋሪ ነው?	1. በጣም ቀላል ነው 2. በመጠኑ ቀላል ነው 3. ቀላልም አስቸጋሪም አይደለም 4. በመጠኑ አስቸጋሪ ነው 5. በጣም አስቸጋሪ ነው
21.3 የኤድስ ምርመራ ማድረጉ ምን ያህል አስደሳች ወይም አስከፊ ነው?	1. በጣም አስደሳች ነው 2. በመጠኑ አስደሳች ነው 3. አስደሳችም አስከፊም አይደለም 4. በመጠኑ አስከፊ ነው 5. በጣም አስከፊ ነው

22. እርስዎ በጣም የሚያከብሯቸው ሰዎች በቅርብ ጊዜ የኤድስ ምርመራ ማድረግ አለብህ /አለብሽ/ ብለው የሚያስቡ ይመስልዎታል?
    1. አዎን በጣም ይመስለኛል 2. በመጠኑ ይመስለኛል 3. ሊሆንም ላይሆንም ይችላል
    4. አይመስለኝም 5. በጭራሽ አይመስለኝም
23. በቅርብ ጊዜ የኤድስ ምርመራ ቢደረግልዎ የኤድስ ቫይረስ <u>እንዳለብዎት</u> ወይም <u>እንደሌለብዎት</u> በትክክል ለማወቅ የሚረዳዎት ይመስልዎታል?
    1. አዎን በጣም ይመስለኛል 2. በመጠኑ ይመስለኛል 3. ሊሆንም ላይሆንም ይችላል
    4. አይመስለኝም 5. በጭራሽ አይመስለኝም
24. የኤድስ ቫይረስ እንዳለብዎት በትክክል ማወቅ ምን ያህል <u>መጥፎ</u> ነው ወይም ጥሩ ነው ይላሉ?
    1. በጣም ጥሩ ነው 2. በመጠኑ ጥሩ ነው 3. ጥሩም መጥፎም አይደለም
    4. በመጠኑ መጥፎ 5. በጣም መጥፎ መጥፎ ነው
25. በቅርብ ጊዜ የኤድስ ምርመራ ተደርጎልዎት ቫይረሱ በደምዎ ውስጥ ካልተገኘ <u>ጥርጣሬዎን ያስወግድልዎታል</u> ብንል ምን ያህል ትክክል ነው። _
    1. በጣም ትክክል ነው 2. በመጠኑ ትክክል ነው 3. ትክክልም ሀሰትም አይደለም
    4. በመጠኑ ሀሰት ነው 5. በጣም ሀሰት ነው
26. ቫይረሱ በደምዎ ውስጥ እንደሌለብዎት ማረጋገጡ ጥሩ ነው ወይስ መጥፎ ነው ይላሉ?
    1. በጣም ጥሩ ነው 2. በመጠኑ ጥሩ ነው 3. ጥሩም መጥፎም አይደለም
    4. በመጠኑ መጥፎ ነው 5. በጣም መጥፎ ነው
27. "በቅርብ ጊዜ የኤድስ ምርመራ ማድረግ፣ ምናልባት ቫይረሱ በደምዎ ውስጥ ከተገኘ ራስዎን ለመጠበቅ ወይም ህክምና ለመጀመር ይረዳዎታል" ብንል ምን ያህል ትክክል ነው።
    1. በጣም ትክክል ነው 2. በመጠኑ ትክክል ነው 3. ትክክል ሐሰትም አይደለም
    4. በመጠኑ ሐሰት ነው 5. በጣም ሐሰት ነው

28. በምርመራው ውጤት ቫይረሱ ተገኝቶብዎት ራስዎን መጠበቅ ወይም ህክምና መጀመሪያዎ ጥሩ ነው ወይም መጥፎ ነው ይላሉ?

1. በጣም ጥሩ ነው 2. በመጠኑ ጥሩ ነው 3. ጥሩም መጥፎም አይደለም
4. በመጠኑ መጥፎ ነው 5. በጣም መጥፎ ነው

29. በቅርብ ጊዜ የኤድስ ምረመራ ማድረጉ የትዳር/የወሲብ/ ጓደኛዎን ከቫይረሱ ለመጠበቅ የሚረዳዎት ይመስልዎታልን?

1. አዎ በጣም ይመስለኛል 2. በመጠኑ ይመስለኛል 3. ሊሆንም ላይሆንም ይችላል
4. አይመስለኝም 5. በጭራሽ አይመስለኝም

30. የትዳር/የወሲብ/ ጓደኛዎን ከቫይረሱ መጠበቅ ምን ያህል ጥሩ ወይም መጥፎ ነው ይላሉ?

1. በጣም ጥሩ ነው 2. በመጠኑ ጥሩ ነው 3. ጥሩም መጥፎም አይደለም
4. በመጠኑ መጥፎ ነው 5. በጣም መጥፎ ነው

31. በቅርብ ጊዜ የኤድስ ምረመራ ቢደረግልዎ ቫይረሱ በደሜ ውስጥ ሊገኝ ይችላል ብለው ያስባሉ?

1. አዎን በጣም ሊሆን ይችላል 2. በመጠኑ ሊሆን ይችላል 3. ሊሆንም ላይሆንም ይችላል
4. ይገኝብኛል ብዬ አላስብም 5. በጭራሽ አይገኝብኝም

32. የምርመራው ውጤት ቫይረሱ አለብህ መሆኑን ማወቁ ምን ያህል ጥሩ ወይም መጥፎ ነው ይላሉ?

1. በጣም ጥሩ ነው 2. በመጠኑ ጥሩ ነው 3. ጥሩም መጥፎም አይደለም
4. በመጠኑ መጥፎ ነው 5. በጣም መጥፎ ነው

ከዚህ በታች ለቀረቡት ጥያቄዎች /33-36/

አመራጭ መልሶች:- 1. በጣም ይመስለኛል 2. በመጠኑ ይመስለኛል 3. ሊሆንም ላይሆንም ይችላል
4. አይመስለኝም 5. በጭራሽ አይመስለኝም

33. የወስብ ጓደኛም፤ እርስዎ " በቅርብ ጊዜ የኤድስ ምረመራ ማድረግ አለብህ/ሽ/" ብለው የሚያስቡ ይመስልዎታል?	
34. የእርስዎ ጓደኞችስ? " " "	
35. የእርስዎ ቤተሰቦች? " " "	
36. ዶክተሮችስ? " " "	

37. **የኤድስ ምርመራና ምክክር አገልግሎት በአካባቢዎ ቢኖር፤**

በራስዎ ፍቃድ የኤድስ ምረመራ ያደርጋሉ?

1. በእርግጠኝነት አደርጋለሁኝ 2. ምናልባት አደርጋለሁኝ 3. ሊሆንም ላይሆንም ይችላል
4. የማደርግ አይመስለኝም 5. በጭራሽ አላደርግም

<u>የሚከተሉት ጥያቄዎች የትዳር ወይም የወሲብ ጓደኛን የኤድስ ምርመራ እንዲያደርግ መጠየቅን ይመለከታል::</u>

38. የወሲብ ጓደኛዎን የኤድስ ምርመራ በቅርብ ጊዜ እንዲያደርጉ መጠየቅ በተመለከተ ምን አስተያየት አለዎት? ማለትም፤

የኤድስ ምርመራ፤	አማራጭ መልሶች
38.1 እንዲያደርግ/እንድታደርግ መጠየቁ ምን ያህል <u>ጥሩ</u> ወይም <u>መጥፎ</u> ነው?	1. በጣም ጥሩ ነው 2. በመጠኑ ጥሩ ነው 3. ጥሩም መጥፎም አይደለም 4. በመጠኑ መጥፎ ነው 5. በጣም መጥፎ ነው
38.2 እንዲያደርግ/እንድታደርግ መጠየቁ ምን ያህል <u>ቀላል</u> ወይም <u>አስቸጋሪ</u> ነው?	1. በጣም ቀላል ነው 2. በመጠኑ ቀላል ነው 3. ቀላልም አስቸጋሪም አይደለም 4. በመጠኑ አስቸጋሪ ነው 5. በጣም አስቸጋሪ ነው
38.3 እንዲታደርግ/እንድታደርግ መጠየቁ ምን ያህል <u>አስደሳች</u> ወይም <u>አስከፊ</u> ነው?	1. በጣም አስደሳች ነው 2. በመጠኑ አስደሳች ነው 3. አስደሳችም አስከፊም አይደለም 4. በመጠኑ አሰከፊ ነው 5. በጣም አስከፊ ነው

39. እርስዎ በጣም የሚያከብሯቸው ሰዎች "የወሲብ ጓደኛዎን በቅርብ ጊዜ የኤድስ ምርመራ እንዲያደርጉ መጠየቅ አለብህ/ሽ" ብለው የሚያስቡ ይመስልዎታል?

1. አዎን በጣም ይመስለኛል 2. በመጠኑ ይመስለኛል 3. ሊሆንም ላይሆንም ይችላል
4. አይመስለኝም 5. በጭራሽ አይመስለኝም

40. በቅርብ ጊዜ የወሲብ ጓደኛዎ የኤድስ ምርመራ እንዲያደርጉ መጠየቅ ቫይረሱ እንዳለባቸው ወይም እንደሌለባቸው በትክክል ለማወቅ የሚረዳዎት ይመስልዎታል?

1. አዎን በጣም ይመስለኛል 2. በመጠኑ ይመስለኛል 3. ሊሆንም ላይሆንም ይችላል
4. አይመስለኝም 5. በጭራሽ አይመስለኝም

41. የወሲብ ጓደኛዎ የኤድስ ቫይረስ እንዳለበት/ባት/ ወይም እንደሌለበት/ባት/ ማወቁ ምን ያህል ጥሩ ወይም መጥፎ ነው ይላሉ?

1. በጣም ጥሩ ነው 2. በመጠኑ ጥሩ 3. ጥሩም መጥፎም አይደለም
4. በመጠኑ መጥፎ ነው 5. በጣም መጥፎ ነው

42. በቅርብ ጊዜ የትዳር/የወሲብ/ ጓደኛዎን የኤድስ ምርመራ እንዲያደርጉ ጠይቀው በምርመራው <u>ቫይረሱ ካልተገኘባቸው</u> ጥርጣሬዎን ያስወግድልዎታል" ብንል ምን ያህል ትክክል ነው?

1. በጣም ትክክል ነው 2. በመጠኑ ትክክል ነው 3. ትክክልም ሀሰትም አይደለም
4. በመጠኑ ሀሰት ነው 5. በጣም ሀሰት ነው

43. በትዳር/ወሲብ/ ጓደኛዎ ላይ ቫይረሱ እንደሌለባቸው በምርመራ ማረጋገጡ ምን ያህል ጥሩ ነው ይላሉ?

1. በጣም ጥሩ ነው 2. በመጠኑ ጥሩ ነው 3. ጥሩም መጥፎም አይደለም
4. በመጠኑ መጥፎ ነው 5. በጣም መጥፎ ነው

44. "በቅርብ ጊዜ የትዳር /የወሲብ/ ጓደኛዎን የኤድስ ምርመራ እንዲያደርጉ መጠየቅ ስለወሲብ ጓደኛዎ ጤንነት ማሰብ ማለት ነው" ብንል ምን ያህል ትክክል ነው?

1. በጣም ትክክል ነው 2. በመጠኑ ትክክል ነው 3. ትክክልም ሀሰትም አይደለም
4. በመጠኑ ሀሰት ነው 5. በጣም ሀሰት ነው

45. ስለትዳር /ወሲብ/ ጓደኛዎ ጤንነት ማሰብ ምን ያህል ጥሩ ነው ይላሉ?

1. በጣም ጥሩ ነው 2. በመጠኑ ጥሩ ነው 3. ጥሩም መጥፎም አይደለም
4. በመጠኑ መጥፎ ነው 5. በጣም መጥፎ ነው

ከዚህ በታች ለቀረቡት ጥያቄዎች /46-49/

አማራጭ መልሶች:- 1. በጣም ይመስለኛል 2. በመጠኑ ይመስለኛል 3. ሊሆንም ላይሆንም ይችላል
4. አይመስለኝም 5. በጭራሽ አይመስለኝል

46. የወሲብ ጓደኛዎ የኤድስ ምርመራ ለማድረግ እርስዎ እንደሚጠይቅዋቸው የሚያስቡ ይመስልዎታል?
47. የእርስዎ ጓደኞች "የወሲብ ጓደኛህን/ሽን/ የኤድስ ምርመራ እንዲያደርግ/ድታደርግ መጠየቅ አለብህ/ሽ/" ብለው የሚያስቡ ይመስልዎታል?
48. የእርስዎ ቤተሰቦችስ " " "
49. ዶክተሮችስ " " "

50. የኤድስ ምረመራና ምክክር አገልግሎት በአካባቢዎ ቢኖር፡
የወሲብ ጓደኛዎን የኤድስ ምረመራ እንዲያደርጉ ይጠይቃሉ?

1. በእርግጠኝነት እጠይቃለሁኝ 2. ምናልባት እጠይቃለሁኝ 3. ሊሆንም ላይሆንም ይችላል
4. የምጠይቅ አይመስለኝም 5. በጭራሽ አልጠይቅም

<u>የሚቀጥሉት ጥያቄዎች ጥንቃቄ የተሞላው የወሲብ ግኑኝነትን በተመለከተ የማንን ሀሳብ እንደሚቀበሉ ይመለከታል:: /ከ51-56/</u>

አማራጭ መልሶች:- 1. በጣም ትክክል ነው 2. በመጠኑ ትክክል ነው
3. ትክክል ሀሰትም አይደለም 4. በመጠኑ ሀሰት ነው

በአጠቃላይ ጥንቃቄ የተሞላው የወሲብ ግንኙነትን በተመለከተ እርስዎ፤

51. የጓደኞችዎን ሀሳብ ይቀበላሉ ወይም ይፈፅማሉ ብንል ምን ያህል ትክክል ነው ይላሉ?
52. የቤተሰብዎን ሀሳብ ይቀበላሉ ወይም ይፈፅማሉ ብንል ምን ያህል ትክክል ነው ይላሉ?
53. የሀይማኖት መሪዎችን ሀሳብ ይቀበላሉ ወይም ይፈፅማሉ ብንል ምን ያህል ትክክል ነው ይላሉ?
54. የዶክተሮችን ሀሳብ ይቀበላሉ ወይም ይፈፅማሉ ብንል ምን ያህል ትክክል ነው ይላሉ?
55. የአብዛኞዎቹን ሰዎች ሀሳበ ይቀበላሉ ወይም ይፈፅማሉ ብንል ምን ያህል ትክክል ነው ይላሉ?
56. የወሲብ ጓደኛዎን ሀሳብ ይቀበላሉ ወይም ይፈፅማሉ ብንል ምን ያህል ትክክል ነው ይላሉ?

ክፍል 5

የኤድስ ምርመራና ምክክር አገልግሎት በአካባቢዎ ቢኖር፣

57. የኤድስ ምርመራ አገልግሎቱን አሰጣጥ በተመለከተ፣ የትኛውን አሰራር ይመርጣሉ?

1. ስም ተጠቅሶ በምሥጥር የሚያዝበት ምርመራ
2. ስም የማይገለፅበት ምርመራ
7. ሌላ 8. አላውቀውም 9. መልስ ያልሰጡ

58. የኤድስ ምክክር አገልግሎትን በተመለከተ፣ ቅደመ/ ድሕረ ምርመራ አገልግሎት በማን ቢሰጥዎ ይመርጣሉ?

1. በሐኪም/ዶክተር/ 2. በነርስ 3. በሠለጠነ ምክር ሰጪ 4. በሐይማኖት መሪ
5. በሠለጠነ የባሕል መድሐኒት ሐኪም 6. የምክር አገልግሎት አያስፈልገኝም
7. ሌላ /ይገለፅ/ 8. አላውቀውም 9. መልስ ያልሰጡ

59. የኤድስ ምርመራ ውጤትዎን በምን አይነት መንገድ መስማት ይፈልጋሉ?

1. በግንባር (ፊት ለፊት) 2. በቴሌፎን 3. በምሥጢራዊ ደብዳቤ
4. ለዘመድ/ለጓደኛ/በመንገር 7. ሌላ ይገለጽ------- 8. አላውቀውም
9. መልስ ያልሰጡ

60.1 የኤድስ ምርመራ ቢቀርብልዎ የአገልግሎት ክፍያ ለመክፈል ፈቃደኛ ነዎት?

1. አዎን 2. የለም

60.2 ፈቃደኛ ከሆኑ ምን ያህል መክፈል ይችላሉ?_____ብር

ለተደረገልኝ ትብብር በጣም አመሰግናለሁ!

DECLARATION

I, the undersigned, declared that this thesis is my original work, has not been presented for a degree in any other university, and that all sources of materials used for the thesis have been duly acknowledged.

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Place: Addis - Ababa

Date of submission: 01-

This thesis has been submitted for publication with my confirmation as a university advisor.

Dr. Birhanu Demeke

Name of advisor

Signature