ASSESSMENET OF VCT UTILIZATION AMONG ATTENDEES OF FAMILLY PLANNING, ANC, AND DELIVERY CARE SERVICES, BUTAJIRA, SNNPR, ETHIOPIA

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

August 2006

Addis Ababa

Ethiopia

Declaration

I the undersigned declare that this is my original work, has never been in this or any other university, and that all recourses and materials used herein, have been duly acknowledge.

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AKNOWELEDGEMENT

I am very grateful to my advisor Dr. Yilma Melkamu of the department of community Health, Faculty of Medicine, Addis Ababa University for his unreserved guidance and constructive suggestions and comments, from the stage of the research proposal up to the thesis write up.
I am also grateful to Department of Community Health for its full financial support for this thesis.

My heartily thanks also goes to the people of Butajira who volunteered for this study, for the of Butajira hospital and health center staffs, for the supervisors and data collectors.

My thanks also go to Dr. Misganaw Fantahun and Professor Yamane, for their advice to settle the topic and valuable comments on the proposal.

I also thank all my teachers, staffs in the department, and librarians.
I would like to extend my thanks also to UNAIDS and Library staff of AIDS Resource Center for their material support.

My specials thank also goes to my uncle Ato Adugna Abateneh, my father and mother and my friends who assisted me in one or the other way.

Lastly, Glory to the Lord and His mother ST. VERGIN MARY, for being with me all the time.

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Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
BCC	Behavioral Change Communication
BSS	Behavior Surveillance Survey
FP	Family Planning
HAPCO	HIV/AIDS Prevention and Control Office
IEC	Information, Education and Communication
MOH	Ministry of Health
PMTCT	Prevention of Mother-to- Child Transmission
UNAIDS	Joint United Nations Program on HIV/AIDS
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

Abstract

To date all efforts that are aimed at developing a drug that completely clears HIV infection and a vaccine that prevents it have ended up in no conclusive outcomes. The disease is overwhelmingly spreading and it is resulting in huge tolls of morbidity and mortality of human kind all over the world. The only option to avert the spread of the infection is changing behavior through proper behavior change communication. In this study, Knowledge, Attitude and practices related to HIV test and counseling and its link with FP, ANC, and Delivery care services were assessed on those mothers coming to health facilities for the later services.

A cross - sectional study was carried out from Jan10-Feb 15, 2006 among attendees of FP, ANC, and Delivery care Services at Butajira Hospital and Butajira Health center. A total of 405 women participants involved using quota sampling technique. Quantitative and qualitative methodologies used. Questions addressed socio-demographic characteristics, VCT related knowledge, attitude and practices, and the linkage between VCT and FP, ANC, and Delivery care services. Data collected using an interviewer administered Amharic version structured questioner, non-participant observation checklist for the process of service delivery, and in-depth interview with service providers. Trained interview teams administered the questioner. Finally the data were analyzed for the target group as appropriate.

Overall, 52.8% of the study subjects have sufficient knowledge score and 81.2% have favorable attitude and 44% have good VCT practice. There was a significant difference between ANC and FP attendees, respectively, level of knowledge 53% & 50%, favorable attitude 86%& 77%, and good VCT practice 86% and 29% ($p<0.05$). Generally, VCT service linkage with FP, ANC and Delivery care services was weak. Specifically the linkage

with FP was very weak. FP services were not available in VCT settings. Similarly, on both sides almost no referral. Respondents from ANC and delivery were better informed and referred for PMTCT.

The study revealed that participants have high level of knowledge and also favorable attitude but low VCT practice. To increase utilization of services need to strengthen the PMTCT programs, VCT providers should refer their clients to MCH (FP&ANC) and vice versa to minimize missed opportunities and service delivery guideline to integrate especially FP with VCT is required.

1. INTRODUCTION AND STATEMENT OF THE PROBLEM

VCT has not been seen as a priority and not highly promoted in HIV prevention and care programs in many developing countries. And often it is not widely available. In areas where VCT services are available, mostly uptake of services is poor due to poor IEC/BCC approaches, lack of funding and integration, infrastructure and trained and designated staff, clear policies on staffing and service sustainability. For VCT to have an important role, several possible common barriers which are lack of perceived benefits, stigma and discrimination, gender inequalities must be addressed. If VCT can be linked with medical care, FP, ANC and delivery care, and effort is made to improve knowledge, attitude, and practice of clients' and the integration of services, this will help to reduce those barriers (1, 2).

There is high degree of overlap between the population at risk for unintended pregnancies and those at risk for HIV/AIDS. As the AIDS pandemic has spread, it has assumed a "women's face'' with almost six out of 10 new HIV infection. Many women make contact with the health care system to seek care for their children, during the course of pregnancy, and for FP services. These visits present valuable opportunities to reach women with information and services that can empower them to reduce their own risk for infection and the risks to their partners and children (3).

VCT has shown promoting behavioral change and become part of a holistic approach to promote sexual and reproductive health among individuals, couples and the community at large. It makes sense, therefore, that VCT programs be linked into family planning and other MCH settings to see behavioral change among women , especially in high prevalence countries such as Ethiopia(4).

2. LITRATURE REVIEW

Overview of VCT

HIV voluntary counseling and testing is the process by which an individual undergoes counseling which would enable him or her to make an informed choice about being tested for HIV. This process also is aimed at helping them to cope with stress and to make decision related to HIV/AIDS (5, 6).

The primary aim of VCT is preventive which is to help people change their sexual behavior so as to avoid transmitting HIV to sexual partners if sero-positive, and to remain sero-negative if tested negative (7). Since VCT has a vital role to play within a comprehensive range of measures for HIV/AIDS prevention and support, it should be encouraged (8). For example, women who test sero-positive can have early access to a wide range of services, including medical care, ongoing emotional support and social support. Women who test sero-negative can have counseling, guidance and support to help them remain negative (1).

VCT in Ethiopia

VCT is included as one of the strategies of HIV/AIDS prevention in the recently approved HIV/ AIDS policy of the country. It is considered as a priority intervention area and entry point for several HIV prevention activities through creating more personal awarness (8).

The 2000 Ethiopian Demographic Health Survey (DHS) revealed that only 2% of men reported being tested, which means many people with HIV/AIDS in the country do not know their sero status. From the DHS report the following were survey findings as factors affecting VCT utilization: educational status, urban resident, male sex, and age younger than 40 years and never married. However, now due to its benefits, after the test result either for positives or negatives, there is indeed a growing demand from the general public (8, 9).

Significance of VCT on Maternal Health

VCT services for women attending FP services: FP programs now reach millions of people in developing nations, though scores of millions still lack access to services. By definition, FP programs serve those who are sexually active. A significant, though unknown, proportion of individuals seeking FP services will be exposed to the risk for HIV infection or are already infected. While HIV/AIDS and FP programs share a55 common goal of healthy sexuality, FP programs have been neglected, by and large, as a vehicle for preventing HIV infection or identifying those who are infected. Redressing this lost opportunity would create an important new channel for expanding the battle against HIV/ AIDS (3).

During FP counseling the client- provider interaction can provide an opportunity to incorporate HIV and VCT massages. The benefits of VCT and birth spacing can be discussed regardless of their sero status. However, studies shown that services provided in FP and other MCH clinics often make only a small contribution (10).

A study done on projects that combine FP and HIV prevention in East Africa revealed that FP counselors often failed to ask clients important questions about risk behavior and STIs. Counselors expressed embarrassment about raising such issues with clients, even though the clients themselves rarely object to talking about them. In addition, counselors often assumed their FP clients were not at high risk of infection which was not necessarily the case (11).

Effective FP counseling can help clients and couples to explore, express, understand, and accept feelings and process information in order to foster informed decision making to reduce risk of and vulnerability to HIV. To do this, FP and other MCH service providers must go beyond mere risk prevention and may need to address male to female sexuality and gender power relations that underscore sexual behaviors that contribute to HIV risk and vulnerability (4).

On the other hand, in FP there remains substantial unmet need for services while funding streams have either been straight- lined or reduced. In many countries, country program managers and field missions wish to integrate FP and VCT including other HIV programs in an effort to achieve program synergies and improve efficiency. In other areas, traditional vertical program approaches are the norm, which can sometimes mean missed opportunities to reach important populations with vertical information and services. The evidence concerning FP and VCT linkage continues to unfold as we look at how to maximize efficiencies and achieve a broad health impact without sacrificing quality of services and care (10).

Programming for FP and VCT integrated approaches must be tailored to the specific country context. In countries with generalized epidemics, like Ethiopia, integration efforts may occur across a range of interventions, with FP integrated in to HIV activities and HIV activities integrated into FP activities. In practice, integrated services are not always offered under one roof, but when they are required to ensure that clients receive the high quality services that they deserve. For example, in Zimbabwe where HIV prevalence is very high and existing FP infrastructure is strong, there are valuable opportunities for integration. A model has been tested in Zimbabwe using communities- based distribution agents for FP to provide HIV information and referral to VCT services (10, 11).

VCT Services for a pregnant woman:

Given the rapid spread of HIV infection worldwide and more so in Ethiopia, all pregnant women can be considered at risk of acquiring HIV infection. Thus, VCT enable pregnant women to make informed decision about and whether or not to have children. It is also a valuable entry point for provision of VCT to their partner and the wider community (12).

VCT helps a pregnant mother to weigh up the risks and advantages of pregnancy and make choices about FP and preventing future HIV infections. For a pregnant woman who tested HIV-negative, counseling helps her to understand and maintain safe behavior to avoid further infection and breastfeed for the greatest health of her infant. And a pregnant woman who tested HIV-positive, counseling helps her to decide with whom to share her HIV test result, to be benefited from ART and may be to terminate the pregnancy where safe and legal (13).

Moreover, knowing the positive HIV- test result helps to learn about HIV infection and its implication so that she could access supporting groups and health services. In addition VCT helps partner of the pregnant woman to get the test and the couples could support each other to feed their infant, make decision about future fertility and to choose behaviors that reduce the risk of contracting or spreading HIV (13).

Inspite of the above mentioned benefits, baseline survey findings from six regions in Ethiopia showed that there is a major gap in the quality of ANC, particularly with respect to HIV counseling, PMTCT and in the provision of preventive therapies. Knowledge of participants about MTCT/ PMTCT was quite low. Both knowledge of the availability of VCT and VCT uptake among pregnant woman were low and only 19 % of women said it was possible to get VCT in their kebele, and only 18% of woman reported having been tested. This is also the same

percentage of woman who reported receiving counseling on VCT/PMTCT during their ANC visit. Among those tested for HIV, the majority consulted a health worker (14).

On the other hand, according to the study done on pregnant and lactating mothers in Jimma town, Ethiopia, 38.8% had sufficient knowledge about MTCT (during pregnancy, labor and breast feeding), and 41.8% about PMTCT. About sixty three percent had favorable attitude towards VCT and 35.7% used VCT services during their last pregnancy from 84.5% who visited health institutions for ANC (15).

Early in the epidemic there were no effective PMTCT interventions of HIV and women were sometimes advised by health care providers not to have children. But now in many countries, VCT is offered within the antenatal setting or close links are formed with VCT services. It is important that women receiving VCT in this setting have adequate time to discuss their own needs and not just those concerned with PMTCT, and that there are links with services which can provide ongoing support and care fore women with HIV (1, 12 and 14)

For the pregnant women to be beneficial, there is a need to increase the accessibility of VCT by integrating with MCH services and providing comprehensive program intervention focusing on primary prevention of HIV infection among women and their partners including prevention of unintended pregnancies among HIV infected woman, provision of VCT services, treatment, care and support for woman living with HIV and AIDS, their children and families. Therefore, by integrating PMTCT services in to essential ANC services, health care programs can improve care for pregnancy, and its outcomes (14).

VCT Services for a women during Labor / Immediate Postpartum Care:

HIV testing during or after delivery can assist women, who are HIV positive to initiate post-exposure prophylaxis for the infant, and choose safer infant feeding options and also family planning**.** Knowing HIV sero-status is particularly important and for those HIV positive women help to deliver in a health facility by a trained health provider in order to reduce the risk of MTCT during delivery (10-20%) and reduce obstetric and postpartum complications. In addition, HIV positive women who receive neverapine can be monitored for adherence and side effects in a health facility by a trained provider. Further, infants of HIV positive women who deliver at a health facility are more likely to receive the infant dose of neverapine, and the mother infant feeding counseling (13).

When providing postpartum care to women infected with HIV, health care providers may follow routine protocols, but several areas require additional duties; continuing care and FP. Women whose HIV status is unknown should also receive the same program of post partum care (12).

Orphans and Vulnerable Children (OVC):

One of the worst consequences of AIDS is the fact that it creates a number of AIDS orphans, children whose parents die from AIDS. And Mother- to- Child Transmission is the single most important source of HIV infection in children (16). Studies have shown that in the absence of any intervention between 25-45% of HIV positive woman living in resource poor settings transmit HIV to their babies during pregnancy, delivery, or through breastfeeding (14). The combination of high total fertility rate in Ethiopia, 5.9 children per woman (DHS 2000) and rate of MTCT is clear evidence that the number of infants born HIV-positive is alarming. The loss of a parent has profound significance for a child. The death of a mother, in particular, has dramatic psychosocial consequences (16).

The most effective interventions to reduce transmission from mother to child depend upon a woman knowing of her HIV status, and that, in turn, depends upon accessibility of VCT and related information to a woman. Reducing consequences is possible by integrating PMTCT programs in the essential services of MCH services. MCH Services encompasses a broad range of educational and clinical services that help mothers, their children and their families to lead a healthy life (12).

Determinants of VCT utilization

Up take of VCT services varies greatly between settings and countries. There are several societal and service delivery associated factors like:

Lack of access to VCT and promotion: for VCT services to be promoted and developed it is important to document their usefulness in reducing HIV transmission, improving access to medical and social care, facilitating MTCT interventions, and coping for people with HIV. Since HIV epidemic does not affect all sectors equally, or in the same way within countries or cities making access based on the needs of specific client groups is very essential. Some groups are particularly vulnerable to HIV for a variety of reasons including age, sex, profession or specific risk groups. Community mobilization, improving the quality of services and integrating VCT with services like MCH services can increase the uptake (1).

Stigma and discrimination: In many communities HIV remains a stigmatizing problem and VCT is not recognized as being an important part of HIV prevention and care. In some countries also people with HIV are subjected to discrimination at work or in education. The need for protection and support of vulnerable woman who test sero-positive must be considered when developing VCT services to address the issue of gender inequalities. To reduce these problems strengthen the IEC/ BCC approach is also highly required (1, 17).

3. OBJECTIVES

General objectives:

To assess knowledge, attitude, and practice towards VCT utilization among attendees of FP, ANC and delivery care services and how services are linked.

Specific objective:

1. To assess FP, ANC & delivery care clients' knowledge, attitude and practice on VCT,
2. To describe the linkage between FP, ANC, and delivery care and VCT services.

4. METHOD AND MATERIALS

Study design and period:

The study was cross-sectional by design and used multiple approaches to gather relevant information. Qualitative and quantitative data collection methods were employed. The qualitative data was conducted using structured non-participant observation checklist for client-provider interaction and in-depth interview for health service providers and the quantitative was collected using a structured survey questioner. The data had been triangulated to achieve the objective of the study and was carried out from Jan. - Feb. /2006.

Study area:

Guraghe Zone is one of the 13 Zones in the Southern Nations, Nationalities and Peoples, Regional Government. Its capital, Wolkite is located 156km south west of Addis Ababa along Jimma road. The Zone is divided into 12 administrative woreda with an estimated total population of 1.44 million of which 48.6% are females. The zone is dependent on subsistence farming mainly "Enset" as stable diet. The zone is also characterized by high population growth and density and migration of men to bigger towns as a result HIV/AIDS infection is estimated to be high. Health facilities and services are inadequate with poor sanitation coverage and wide spread communicable diseases are common (18). The total population of the district is estimated to be 283,900(projected from reported 1997 population with rate of Natural increase of 2.7%), among which 21% are women of 15-44 years.

In the district there are 12 health posts, 3 health stations, 2 malaria control centers, 2 health centers and one hospital. According to the Meskan and Marko woreda health office report for 1996 E.C. ANC and attended deliveries were 26.4% and 13%, respectively (19).

The study was conducted in Butajira Hospital and Butajira Health Center, Meskan and Mareko district of the Guraghe Zone. In both facilities the VCT service started functioning 3-5 years back and now on average 100 clients per month get the service from each facility (monthly report of Butajira Health Center and Butajira Hospital)

Source population:

All females in reproductive age (15-49 years) who reside in the catchment's area of the two health facilities.

Study population:

The study population includes females, who were resident in the catchments area of the health facilities, which were coming to FP, ANC, and delivery care services to the hospital and health center during the study period.

Sampling technique

Using quota sampling technique study participants coming for FP, ANC, and delivery care services within the study period and who were willing to participate voluntarily and also able to respond i.e. Who were free from pain and discomfort were included in the study.

Sample size

To calculate sample size for the exit interview the following single population proportion formula was used

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

Assumption: to reach the desired sample size (N), I have taken (P) knowledge of the availably of VCT (i.e. 19% of woman said it was possible to get VCT in their kebele) (14). And the margin of error was assumed to be 0.04, a sample size of 368 at 95% confidence interval was calculated and considering a non - response rate of 10%, additional 37 women were taken giving a total sample size of 405.

Methods of data collection:

Quantitative:

A structured questioner which had questions on socio demographic, knowledge on VCT, attitude and practice towards VCT and linkage of services was administered.

Data quality:

To assure the quality of the data, the following activities were accomplished:

Six female data collectors who were 12 grade complete, unemployed and had experience in the past in similar studies were selected to conduct interview with the clients. For one day intensive and problem oriented training was given to data collectors on the objectives of the study and techniques of data collection. On the next day two supervisors who were nurses by profession had got also the training.

The structured questioner was formulated from standardized BSS questioner. Its English version was translated to Amharic (i.e. almost all can communicate) version and again back to English so as to ensure its consistency.

Pretest of the instrument was done in similar population attending private for profit clinics in the town. Supervisors were counter checking the quality of the data collected by data collectors and data was daily checked for completeness by the principal investigator.

Data collection procedures:

Amharic version of the questioner was used during the interview with the clients.

The interview was conducted at a private place to ensure good discussion site between the trained data collectors and clients. The two supervisors were checking the collected data for its completeness, clarity and consistency; corrections were made accordingly with each data collector, communicating with the principal investigator. The principal investigator was communicating with his advisor, supervisors and data collectors through all available means of communication to follow the progress.

Qualitative

Observation and individual in-depth interview techniques were used. Observation is said to be useful to document health service provider-client interactions and delivery of health services. It is particularly useful for cross-checking information collected in interviews about quality and delivery of services. The individual in-depth interview is also useful to get detailed information of experiences in service delivery sites.

In this study, considering time and cost we have conducted observation on 12% of the total exit interview at both health facilities.

Observation was conducted using a checklist which had two major sections:

1/ General assessment of the IEC/ BCC approaches: materials availability and its dissemination

2/ Direct observation of FP counseling, ANC focusing on the interactions between providers and clients with emphasis on how frequently they bring up the issue of HIV/AIDS in general and VCT in particular.

The individual in-depth interview was conducted with VCT, PMTCT, ANC, FP and delivery care service providers. The VCT counselors were asked to document their experience with regard to counseling VCT clients for services such as FP, ANC, & delivery care services and in receiving clients from the other clinics for VCT services. Health care providers from FP, ANC, and deliveries were also interviewed to document how they are linking their services with VCT.

Operational definitions

Sufficient VCT knowledge: - Respondents scoring above average on VCT knowledge related questions

Insufficient VCT knowledge:-Respondents scoring below average on VCT knowledge related questions

Favorable attitude towards VCT: - Respondents scoring above average on VCT related attitude questions

Unfavorable attitude towards VCT: - Respondents scoring below average on VCT related attitude questions.

Good VCT practice:-Respondents scoring above average on HIV test practice related questions

Poor VCT practice: - Respondents scoring below average on HIV test practice related questions

Rural: - catchments of Butajira hospital and Butajira health Center out side Butajira town

Urban: - Butajira town

Data entry and analysis

Data processing was done using SPSS computer software. The data from the observation and in-depth interview was transcribed and analyzed thematically. For different variables, frequencies, crosstabs, odds ratio, 95% confidence intervals was computed to assess the presence of degree of association between variables. Logistic regression was used to assess the relative effect of various explanatory variables.

5. Ethical Consideration

Ethical clearance was obtained from Addis Ababa University Medical Faculty- Department of community Health Ethical Committee. Official letter of cooperation was also written to Butajira Hospital and to Butajira health center. Informed consent was obtained from each study participants after clear explanation about the purpose of the study. Confidentiality of the information assured by omitting names of the study subjects from the questioner and maximum effort made to maintain privacy of the respondents during the interview. No question was asked about their sero-status. Information was provided about the availability of VCT services in both health facilities and its benefits to the respondents during the interview. Individuals who were not volunteer to continue from the beginning or from any part of the interview had been respected their right to do so.

Dissemination and utilization of results

The findings of this study will be communicated to governmental and non-governmental organizations, institutions or individuals that have direct or indirect input in the study and in the prevention of HIV/AIDS in Ethiopia, and other interested groups. This can be accomplished through submission of reports, presentation of findings at appropriate meetings and workshops and through publication on scientific Journals.

Benefits to the study subjects

Questions and doubts about HIV/AIDS and in particular about the importance of VCT were discussed freely with respective interviewers. The expected outcomes include:

- A detailed report on knowledge, attitude, and practice of clients towards VCT,
- A set of recommendations that lead to appropriate linkage between MCH and VCT service

6. Results

6.1. RESULTS OF THE QUANTITATIVE STUDY

All the 405 mothers who were eligible to take part in this study were volunteered to give their responses. Exit Interview was done with clients attending FP, ANC and delivery care services in both health facilities .Two hundred fifty two (62.2%) of the respondents were from the health center while the remaining 153 (37.8%) were from the hospital. Among the total clients coming to the health facilities 210 (51.9 %) were for FP, 183 (45.2%) were for ANC and the remaining 12 (3%) were for delivery services.

Socio- demographic characteristics

The mean age of the mothers was 26.0 years (±SD=6.03) and their age ranges from 15 to 45 years. Regarding the marital status, 378(93.3 %) were married, 8 (2%) were single, 18 (4.4) were divorced and 1(0.2 %) was widowed. Two hundred seventy nine (68.9 %), of the respondents gave 1-4 live births, while 15 (3.7 %) were nulli -Para and 111(27.4 %) were grand-multi para (Table 1).

Around fifty percent of the attendees were Muslims, (40 %) were Orthodox Christians, (9%) were Protestants and the remaining were others. Almost all of the study participants were Guraghe 369 (91.1%) by ethnic group, while 28 (6.9%) were Amhara and the remaining were others (Table 1).

Significant proportion of the study participants were housewives 164(40.5 %), rural farmers 101(24.9 %) and 65 (16 %) were petty traders by occupation (Table1).

Fifty one percent of the respondents (208) were unable to read and write and 5.2% were able to read and write, while 13.3% were under grade 4 and 17.5% had completed grades 5 to 8 and others 6.7% have completed 9-10 grades. The remaining, 5.9% were above grade 10 (Table1).

Table 1: Socio- demographic characteristics of participants, Butajira Town, Ethiopia, Jan –Feb. 2006

VARIABLES	MOTHERS			
	FP(N=210) No. (%)	ANC (n= 183) No. (%)	Deliveries (n=12) No. (%)	Total (n =405) No. (%)
Age Group (years)				
15-19	13 (6.19)	16 (8.74)	2 (16.7)	31(7.7)
20-24	64 (30.48)	72 (39.34)	4 (33.3)	140(34.6)
25-30	88 (41.9)	66 (36.1)	4(33.3)	158(39)
> 30	45 (21.4)	29 (15.8)	2(16.7)	76(18.8)
Residence				
Rural	112(53.3)	79 (43.2)	3 (25)	194(47.9)
Urban	98 (46.7)	104 (56.8)	9 (75)	211(51.9)
Marital status				
Single	6(2.9)	2 (1)	0	8 (2)
Married	197(93.8)	170(93)	11(92)	378(93.3)
others	7 (3.3)	11(6)	1(8)	19 (4.7)
Parity				
0	12 (5.7)	3 (1.6)	0	15 (3.7)
1-4	127(60.5)	142 (77.6)	10 (83.3)	279(68.9)
_> 5	71 (33.8)	38 (20.8)	2 (16.7)	111(27.4)
Religion				
Orthodox	88(41.9)	71 (38.8)	4 (33.3)	163(40.2)
Muslim	104 (49.5)	90 (49)	8(66.7)	202(49.9)
Protestant	15 (7.1)	21 (11.5)	0	36(8.9)
Others	3 (1.4)	1 (0.5)	0	4 (1)
Ethnicity				
Guragae	190 (90.5)	168(91.8)	11 (91.7)	369(91.1)
Others	20 (9.5)	15 (8.2)	1 (8.3)	35 (8.6)
Educational status				
Illiterate	109(51.9)	92 (50.3)	7 (58.3)	208(51.4)
read and write	12 (5.7)	9 (4.9)	0	21(5.2)
Grades1-4	25 (11.9)	26(14.2)	3 (25)	54(13.3)
Grades 5-8	36 (17.1)	34(18.6)	1 (8.3)	71(17.5)
Grades 9-10	21 (10)	6 (3.3)	0	27(6.7)
Above 10	7 (3.3)	16(8.7)	1(8.3)	24(5.9)
Occupation	43 (20.5)	54(29.5)	4(33.3)	101(24.9)
Farmer	46 (22)	23(12.6)	2(16.7)	71 (17.5)
Petty traders	85(40.5)	77(42)	2 (16.2)	164(40.5)
Housewife	5(2.4)	10 (5.5)	1(8.3)	16 (3.95)
Organization employee	31(14.8)	19 (10.4)	3 (25)	53 (13.1)
others				

Knowledge on VCT

FP, ANC and delivery care attendees were asked several questions related to HIV testing. These include questions assessing their knowledge on existence of VCT, about VCT service importance and availability in the nearby health facilities. Out of the 405 surveyed participants, 287(70.9%) have heard about the existence of VCT service in their vicinity. Close to ninety four percent of them mentioned government health center, 67.6 percent mentioned hospital and 22% mentioned private health facilities as sources of VCT service in their vicinity. However, only 56 (13.8%) participants reported that the test provided in their area is confidential HIV test. Regarding the benefits of the test 99.5% of respondents who said the test is useful mentioned that it is helpful to know for sure about ones own sero-status. Around 95.5% of participants said that useful to taking care for future with sexual partners and 91.4% said to protect others. Those who said to carefully plan their future life and used before marriage were 69.7%, 46.2 % respectively (Table 2).

Table 2. Knowledge of VCT among participants receiving FP, ANC, and Delivery care services Butajira Town, Ethiopia, Jan-Feb. 2006

VARIABLES	MOTHERS			
	FP (N=210) No. (%)	ANC (n= 183) No. (%)	Deliveries (n=12) No. (%)	Total (n =405) No. (%)
Have you heard about VCT?				
Yes	133(63.3)	142(77.6)	12 (100)	287 (70.9)
No	77 (36.7)	41 (22.4)	0	118 (29.1)
Where do you find VCT service? (n=287)				
Government hospital	95(33.1)	88(30.7)	11(3.8)	194(67.6)
Government health center	126(67.4)	132(46)	11 (3.8)	269(93.7)
Private health institution	27 (9.4)	30 (10.5)	6 (2.1)	63(22)
Others	2 (0.7)	4 (1.4)	1(0.3)	7(2.4)
Is confidential HIV test available in your area?				
Yes	23(11)	30(16.4)	3(25)	56 (13.8)
No	161(76.7)	132(72.1)	9(75)	302(74.7)
Don't know	26 (12.4)	21 (11.5)	0	47 (11.6)
Importance of VCT (n =396)				
Help to protect others	187(47.2)	166 (1.9)	9 (2.3)	362(91.4)
Know self sero status	203(51.3)	180 (45.5)	11(2.8)	394 (99.5)
Taking care for future	198 (50)	168 (42.4)	12(3)	378 (95.5)
In order to plan	145 (36.6)	120 (30.3)	11(2.8)	276 (69.7)
Premarital counseling	97 (24.3)	80 (20.2)	6 (1.5)	183 (46.2)
Others	1 (0.3)	1(0.3)	2 (0.5)	2 (0.5)

Attitude towards VCT

Questions were asked to know the respondents attitude towards VCT. These were the respondents' agreement to VCT uses and their interest to be tested. Three hundred ninety six of the respondents (97.8%) think that the service is useful. Among them 178 (45%) were tested previously and 218 (55%) were not tested. One hundred fifty two (70%) of the non- tested respondents who said VCT is useful are interested to be tested. Among those interested to be tested 45.6% were FP clients, 22% ANC and 0.8% were delivery attendees (Table 3 &4).

Table3. Attitude towards VCT among participants receiving FP, ANC, and Delivery care services Butajira Town, Ethiopia, Jan-Feb. 2006

VARIABLES	MOTHERS			
	FP(N=210) No. (%)	ANC (n= 183) No. (%)	Deliveries (n=12) No. (%)	Total (n =405) No. (%)
Do you think VCT is useful?				
Yes	204(97.1)	180(98.4)	12 (100)	396(97.8)
No	6 (2.4)	3 (1.2)	0	9 (1.7)
Not tested, interested to be tested in the future (n= 226)				
Yes	103(45.6)	50(22)	2(0.8)	155 (68.6)
No	47(20.8)	22(9.7)	2(0.8)	71(31.4)

Table 4. Distribution of participants who think VCT is useful versus HIV tested and non-tested, Butajira Town, Ethiopia, Jan-Feb. 2006

VARIABLES	Think VCT is useful	
	Yes (%)	No (%)
HIV-Tested (n=405)		
Yes	178 (45)	1(0.2)
No	218(55)	8(1)
Interested to be tested (N=226)		
Yes	152(70)	3(1)
No	66 (29)	5(2)

Utilization of VCT Services.

Key indicators used to know their practice in this study included the proportion of respondents reporting that they had undergone HIV voluntary counseling and testing and the proportion that had obtained the HIV-test result.

In general, 179 (44.2%) reported ever having had an HIV test. Data indicated that 60.7 % of ANC attendees, 28% of FP clients and 66.7% of attended deliveries had ever had an HIV test. Of those tested, 96.6% said the test was taken voluntarily. Almost all respondents who report having undergone HIV voluntary counseling and testing obtained their test result. The majority 79% of respondents who had taken an HIV test reported that their most recent VCT was undertaken within the past 2 years (Table 5).

Table 5. VCT utilization among participants received FP, ANC, and Delivery care services Butajira Town, Ethiopia, Jan-Feb. 2006

VARIABLES	MOTHERS			
	FP(n=120) No. (%)	ANC (n=183) No. (%)	Deliveries (n=12) No. (%)	Total (n=405) No (%)
Ever had HIV test				
Yes	60 (28.6)	111(60.7)	8 (66.7)	179 (44.2)
Not	150 (71.4)	72 (39.3)	4 (33.3)	226 (55.8
The taste was (n=179)				
Voluntary	59(33)	106(59.2)	3 (1.7)	173(96.6)
Provider initiative	1 (0.6)	5(2.8)	0	6 (3.4)
Did you obtain HIV Test result? (n= 179)				
Yes	60 (35.5)	110(61.5)	8(4.5)	178(99.4)
No	0	1 (0.6)	0	1 (0.6)
Most recent HIV test (n= 179)				
One year back	25 (14)	69 (38.5)	5(2.8)	99(55.3)
Two years back	13 (7.3)	27 (15.1)	3 (1.7)	43(24)
2-4 years back	18 (10)	9 (5)	0	27(15.1)
Before four years	4 (2.2)	6 (3.4)	0	10(5.6

Knowledge, Attitude and practice of participants on VCT

Average score of knowledge was taken after coding and scaling from total score of 10 from the variables on VCT. Accordingly the average score for knowledge was 7, study participants with score of 7 and above were considered knowledgeable. The same was done for attitude towards VCT to obtain the respective average score. The average score for Attitude was 2, study participants with score of 2 and above were considered to have good attitude towards VCT.

Participants' knowledge about VCT was scored by asking questions, whether they have heard about VCT, where to find the service, and importance of VCT. In the same way, questions were asked to assess the presence of favorable (good) or unfavorable (bad) attitude among mothers towards VCT. Finally questions were also asked to assess VCT practice. Then the mothers were categorized as having "sufficient "or "insufficient" knowledge, " favorable" or "unfavorable" attitude and "good "or "poor" practice about the issues under consideration based on their response to the questions and the definitions of the terms described under the heading " operational definitions" in this thesis.

Table 6: score of mothers' knowledge, attitude and practice of VCT Butajira, SNNPR, Ethiopia Jan-Feb.2006.

VARIABLE		MOTHERS			
	SCORE	Total (%)	FP (%)	ANC (%)	DELIVERIES (%)
Knowledge	Sufficient	214(52.8)	106 (50.5)	97 (53)	11(92)
	Not sufficient	191(47.2)	104 (49.5)	86 (47)	1(8)
Attitude	Favorable	329(81.2)	161(77)	158(86)	10(83)
	Unfavorable	76 (18.8)	49(23)	25 (14)	2 (17)
Practice	Good	178(44)	60(29)	110(60)	8 (67)
	poor	227(56%)	150 (71)	73 (40)	4 (33)

* May not added up to give 100 percent horizontally

About 53 % of all the respondents have sufficient knowledge about VCT. From the service received 51% were FP, 53% were ANC and 92% were deliveries that have sufficient knowledge. Moreover, 81.2% of respondents among all interviewed, 77 of FP clients, 86 of ANC attendees and 83% of delivery service utilizing women were having favorable attitude towards VCT. Of all respondents 44% were assessed and found out to have good practice of VCT, 29% were FP clients, 60%ANC attendees and 67% were delivery mothers (Table 6).

Linkage of related services

FP, ANC and delivery care attendees were asked various questions related to efforts undertaken by health facilities to link VCT with FP, ANC, and Delivery care services. These include questions assessing their knowledge of existence of HIV test in the study facilities with the source of information; VCT related information obtained from the health service providers, availability of messages in the facilities about VCT.

Key indicators to assess the extent of the link between services in the health facilities were the presence of referrals within the facilities, respondents' exposure to the messages on VCT during current visits in the facilities, and weather they were informed by health service providers about its availability and utilization.

Among 405 attendees, 46.9% had been informed about VCT during their current visits by the health care providers in the facilities. The ANC service was found to have better linkage (62.8% were from ANC attendees) as compared to their FP counterparts (32.4%) and the difference was statically significant (p=0.000) (Table 7).

Among 190 (46.9%) respondents who have been informed by the health care providers about VCT at recent visit, 183(96.3%) said that they had been informed about the existence of the service in the health facilities, 75(39.5%) said they had been informed that the service is available else where, and 144 (75.8%) of the respondents stated that they were informed about the benefits of VCT (Table 7).

Amongst those who had been informed about VCT by the health care providers at recent visits, a smaller proportion of FP (34.7%) than ANC (58.4%) were informed about VCT service existence in the health facilities but the difference was not statically significant.

In addition, a greater proportion of ANC (22%) than FP (14%) had been informed about the availability of VCT service else where other than government owned health facilities and chi-square test showed a significant difference (p=0.032).Though the difference is not significant, similarly less percentage of FP (27.4%) than ANC (45.3 %) had also been informed about benefits of VCT. But the proportion of delivery attendees who were informed in all three cases was identical (3.2%) (Table7).

Only 159(39.3%) of the total respondents said that they were advised during service delivery to get VCT services. Out of which 140(88.1%) participants were referred to VCT and PMTCT services located in the facilities. The respondents who had been advised were 57.9% ANC attendees and 22.4%FP clients which showed a statistical significant difference (p=0.000). Similarly, the referrals to VCT centers were 62.9% ANC attendees and 22% FP clients for which the difference is significant (p =0.000) (Table 7).

Only 17.3% of respondents watched TV at MCH waiting room, 12.8% have listen Tape or Radio and 25.2% read printed materials from MCH. The exposure to VCT massages during visits, the percentage of FP and ANC attendants who respond to the question of source of information was almost similar and showed no significant association (Table 7).

Table 7.Percent participants Received FP, ANC, and Delivery care services versus efforts of Service linkage, Butajira Town, Ethiopia, Jan-Feb. 2006

VARIABLES	MOTHERS			
	FP (%)	ANC (%)	Delivery (%)	
Informed about VCT in your recent visits				
Yes	68 (32.4)	115(62.8)	7 (58.3)	x^2 =37**
No	142 (67.8)	68 (37.2)	5(41.7)	P =0.000
What did the health worker tell you about VCT? (n = 190)				
Availability of VCT in the facilities	66(34.7)	111 (58.4)	6 (3.2)	x^2=1 p=0.527
Availability of service else where	27(14.2)	42 (22)	6(3.2)	x^2=6.92** p=0.032
Service is useful	52 (27.4)	86(45.3)	6(3.2)	x^2 =0.6 p= 0.759
Advised to get HIV test?				
Yes	47 (22.4)	106(57.9)	6 (0.5)	x^2=52**
No	163 (77.7)	77(42.1)	6 (0.5)	p=0.000
Referred to VCT center (n= 159)				
Yes	35 (22)	100(62.9)	5(3.1)	x^2=12.4**
No	12 (7.5)	6 (3.8)	1(0.6)	p=0.002
Watched TV on VCT at MCH				
Yes	42(20)	26 (14.2)	2(1.7)	x^2 =2.3
No	165(78.6)	154(84.2)	8 (66.7)	p=0.317
Listened to Tape/Radio on VCT at MCH clinic				
Yes	30 (14.3)	21 (11.5)	1(8.3)	x^2=0.9
No	178(84.8)	161(88)	9(75)	p=0.633
Read printings on VCT at MCH clinic				
Yes	54 (25.7)	46 (25.1)	2 (16.7)	x^2=0.5
No	156(74.3)	137 (74.9)	8 (66.7)	p=0.781

** show significant difference

Relationship between VCT knowledge and socio-demographic characteristics

Respondents' attending site was found to have a significant association with their knowledge about VCT. As the multivariate analysis of Table 8 shows that those who attend in the health center were more knowledgeable compared to hospital attendees (Table 8).

Unlike the bivarate analysis, the multivariate analysis indicated that age, residence, marital status and parity has no significant association with respondents' knowledge about VCT when other socio-demographic variables were controlled. As shown in Table 8, respondents in the age group 25-30 were more likely to be knowledgeable than age group 15-19. Similarly, urban residents were more knowledgeable than their rural counterparts. And married participants were more knowledgeable than unmarried. Respondents whose parity five and above were also more knowledgeable than parity less than four. Regarding to religion no significant association with knowledge about VCT was observed (Table 8).

Knowledge of VCT shows variations across educational categories where the adjusted OR were 1.2,1.5 and 2.0, respectively, for those with educational level of read and write, primary and secondary & above as compared to those unable to read and write (Table 8).

Similarly, respondents from ANC and delivery care services were more knowledgeable than those attendees of FP (Table 8).

As the bivarate and multivariate analysis of table 8 shows petty trader and organization employee by occupation has significant association with VCT knowledge. Where as being housewife has no association when adjusted for other socio-demographic variables and daily laborer has no any.

Petty-traders and organizational employees were more knowledgeable than farmers. Similarly, housewife respondents were more knowledgeable than farmers (Table 8).

Knowledge with listening to Tape/Radio on VCT at MCH clinic is not showing any significant relationship. On the other hand, respondents who read printings on VCT at MCH were more knowledgeable than those who didn't read, but not significant when adjusted (Table 8).

As shown in table 8, it is found that watching TV on VCT at MCH, having been informed about VCT in their recent visits have significant association with respondents' knowledge about VCT when analyzed using bivarate or multivariate analysis. Those who haven't watched TV, not informed in recent visits respectively were less knowledgeable than those who watched or informed.

Table 8: Socio-demographic determinants of knowledge about VCT, Butajira Town, Ethiopia, Jan-Feb. 2006

VCT Knowledge: dependent variable

VARIABLES	Sufficient (not sufficient)	Crude OR	ADJESTED OR
Site			
Health center	95(157)	1	1
Hospital	119(34)	0.2(0.1-0.3)*	0.1(0.1-0.2)**
Age Group (years)			
15-19	17(14)	1	1
20-24	81(59)	1.7(0.7-3.9)	1.3(0.4-4.3)
25-30	84(74)	1.9(1.1-3.3)*	1.3(0.5-3.4)
> 30	32(44)	1.6(0.9-2.7)	1.1(0.5-2.6)
Residence			
Rural	124(70)	1	1
Urban	90(121)	2.4 (1.6-3.5)*	1.6(0.8-3.0)
Religion			
Orthodox	83(80)	1	1
Muslim	105(97)	0.6(0.3-1.1)	0.6(0.2-1.6)
Others	26(14)	0.6(0.3-1.2)	0.8(0.3-2.0)
Marital status			
unmarried	21(6)	1	1
Married	193(185)	3.4(1.3-8.5)*	2.3(0.8-6.6)
Parity			
0-4	180(145)	1	1
_> 5	34(46)	1.7(1.1-2.7) *	1.2(0.5-2.7)

Table 8. Continuation…

VARIABLES	Sufficient (not sufficient)	Crude OR	Adjusted OR
Service Received			
FP	106(104)	1	1
ANC	97(86)	1.6(1.3-1.8)*	1.5(1.3-2.5)**
Delivery	11(1)	1.4(1.2-7.0)*	1.2(0.0-81.7)
Educational status			
Unable to read and write	80(128)	1	1
read and write	9(12)	1.2(1.1-4.3)*	1.2(1.1-4.7)**
primary (1-8)	82(43)	1. 5(1.1-2.4)*	1.3(1.1-1.4)**
secondary and above	43(8)	2.0(1.2-3.8)*	1.5(1.2-3.9)**
Occupation			
Farmer	49(52)	1	1
Housewife	78(86)	1.4(1.3-1.9)*	0.7(0.3-1.7)
Petty traders	36(35)	1. 4(1.2-2.8)*	1.3(1.1-3.7)**
Organization employee	15(1)	2.5(2.2-4.9)*	2.3(1.7-5.9)**
Daily laborers	36(17)	7.0(0.9- 58.1)	6.8(0.0-8.3)
Informed about VCT in your recent visits			
Yes	100(115)	1	1
No	114(76)	0.6(0.4,0.9)*	0.6(0.4-0.9)**
Watched TV on VCT at MCH			
Yes	166(169)	1	1
No	48(22)	0.5(0.3-0.8)*	0.3(0.1-0.8)**
Listened Tape/Radio on VCT at MCH clinic			
Yes	182(171)	1	1
No	32(20)	1.6(0.4-1.2)	1.7(0.6-4.8)
Read printings on VCT at MCH			
Yes	136(167)	1	1
No	78 (24)	0.3(0.2-0.4)*	0.6(0.3-1.3)

*shows significance odds ratio unadjusted, P<0.05

** Shows significant odds ratio adjusted, P<0.05

Relationship between attitude towards VCT and socio-demographic characteristics

As regard to attitude towards VCT, it can be observed from table 9 that respondents in the age group 25-30 have more favorable attitude towards VCT compared with age group 15-19, significant when odds ratios adjusted. On the other hand, those in the age group 20-24 have more favorable attitude than age group 15-19, but not significant when adjusted.

Respondents who reside in urban have less favorable attitude than their rural counterparts (Table 9).

Those respondents, parity five and above have more favorable attitude towards VCT than those less than 4 (Table 9).

Farmer have better favorable attitude towards VCT than housewives when the odds ratios adjusted. Conversely, organization employee respondents have less favorable attitude towards VCT than farmers but not significant when adjusted (Table 9).

Table 9: Socio-demographic determinants of attitude towards VCT, Butajira Town, Ethiopia, and Jan-Feb. 2006

Attitude towards VCT: dependent variable

VARIABLES	Favorable (unfavorable)	Crude OR	ADJESTED OR
Site			
Health center	206(46)	1	1
Hospital	123(30)	1.1(0.7-1.8)	0.7(0.4-1.3)
Age Group (years)			
15-19	30(1)	1	1
20-24	125(15)	12.9(1.7-97.0)*	8.7(1.0-77.8)
25-30	98(27)	3.6 (1.8-7.0)*	3.0(1.2-7.7)*
> 30	76(33)	1.6 (0.9-2.8)	1.3(0.6-3.0)
Residence			
Rural	159(35)	1	1
Urban	170(41)	1.0(0.7-1.8)	0.3(0.1-0.7)**
Religion			
Orthodox	133(30)	1	1
Muslim	165(37)	1.3(0.6-3.0)	1.2(0.5-3.2)
Others	31(9)	1.3(0.6-3.0)	1.7(0.6-4.4)
Marital status			
unmarried	25(2)	1	1
Married	304(74)	3.0(0.7-13)	2.5(0.5-11.9)
Parity			
0-4	277(48)	1	1
_> 5	52(28)	3.1(1.6-5.3)*	1.3(0.6-3.0)

Table 9. Continuation …

VARIABLES	Favorable (unfavorable)	Crude OR	Adjusted OR
Service Received			
FP	161(49)	1	1
ANC	158(25)	0.7(0.1-3.1)	1.1(0.2-6.5)
Delivery	10(2)	1.3(0.3-6.1)	2.1(0.4-12.1)
Educational status			
Unable to read and write	159(49)	1	1
read and write	19(2)	0.8(0.4-1.7)	0.9(0.3-2.5)
primary (1-8)	110(15)	2.3(0.5-11.6)	3.1(0.5-19.9)
secondary and above	41(10)	1.8(0.7-4.3)	1.6(0.5-4.5)
Occupation			
Farmer	68(33)	1	1
Housewife	144(20)	0.2(0.1-0.5)*	0.1(0.0-0.3)**
Petty traders	56(15)	0.6(0.2-1.8)	0.7(0.2-2.4)
Organization employee	12(4)	0.3(0.1-0.9)*	0.4(0.1-1.5)
Daily laborers	49(4)	0.2(0.1-1.1)	0.4(0.0-2.3)

* shows significance odds ratio unadjusted, $p<0.05$

** shows significance odds ratio adjusted<0.05

Relationship between practice of VCT and socio-demographic characteristics

Attempt was also made to see the variables that explain individuals' practice of VCT. As shown in Table 10 various factors sought to have effect on it were included in the analysis. But after bivarate and multivariate analysis age, parity, attended site and received services were identified as better explain the dependent variable.

The multivariate result shows that respondents who attend in the hospital have good VCT practice compared with the health center. Similarly, respondents in the age group 20-24, 25-30, and above age 30 have good VCT practice compared to age group 15-19. A marked difference is also indicated among age groups in this regard. Those in the age group (20-30) have good VCT practice compared to the older age groups (>30) (Table 10).

Parity ≥5 has better VCT practice than parity less than 4, but this is not significant when adjusted (Table 10). ANC respondents have also better VCT practice than FP respondents (Table 10)

Table10: Socio-demographic determinants of VCT practice, Butajira Town, Ethiopia, Jan.-Feb. 2006

Practice of VCT: dependent variable

VARIABLES	Good (poor)	Crude OR	ADJESTED OR
Site			
Health center	125(127)	1	1
Hospital	53(100)	1.9(1.2-2.8)*	1.7(1.0-2.9)
Age Group (years)			
15-19	22(9)	1	1
20-24	83(57)	10.0(3.8-26)*	5.6(1.7-18.5)**
25-30	58(100)	5.9(3.1-11)*	4.5(1.9-10.8)**
> 30	15(61)	2.4(1.2-4.5)*	2.2(1.0-5.1)
Residence			
Rural	80(114)	1	1
Urban	98(113)	0.8(0.5-1.2)	0.8(0.4-1.4)
Religion			
Orthodox	80(830	1	1
Muslim	81(121)	1.3(0.6-2.6)	1.3 (0.6-3.0)
Others	17(23)	0.9(0.5-1.8)	0.9 (0.4-2.0)
Marital status			
unmarried	14(13)	1	1
Married	164(214)	1.4 (0.6-3.0)	1.0(0.4-2.6)
Parity			
0 -4	164 (161)	1	1
_> 5	14 (66)	4.8(2.6-8.8)*	1.7(0.8-3.9)

Table 10. Continuation…

VARIABLES	Good (poor)	Crude OR	Adjusted OR
Service Received			
FP	60(150)	1	1
ANC	110(73)	1.2(1.1-1.7)*	1.5(1.3-2.5)**
Delivery	8(4)	0.8(0.2-2.6)	0.5 (0.1-2.0)
Educational status			
Unable to read and write	83(125)	1	1
read and write	12(9)	1.2(0.6-2.3)	1.0(0.4-2.4)
primary (1-8)	65(60)	2.4(0.9-6.9)	2.9(0.8-10.6)
secondary and above	18(33)	2.0(1.0-3.9	1.3 (0.6-2.9)
Occupation			
Farmer	47(54)	1	1
Housewife	77(87)	1.1(0.5-2.0)	1.0(0.5-2.4)
Petty traders	25(46)	1.1(0.6-2.0)	1.2 (0.6-2.5)
Organization employee	5(11)	0.7(0.3-1.4)	1.3 (0.6-3.0)
Daily laborers	24(29)	0.5(0.1-1.8)	0.7(0.2-3.0)

* shows significance odds ratio unadjusted, $p<0.05$

** shows significance odds ratio adjusted, $P<0.05$

6.2 QUALITATIVE RESULTS

Participant's background, training status and experience.

A total of 12 health service providers from hospital and health center were participated in the individual in-depth interview. Ten of them were nurses working in MCH (FP, ANC, and Delivery), VCT, PMTCT and IEC units. The remaining two were Sanitarian and Druggist who were working as IEC coordinator and head of the health center, respectively.

All had at least two years experience in their respective health facilities. Service providers assigned in the VCT and PMTCT units have got specific on job trainings in VCT and PMTCT. Moreover, two nurses who were working in FP & ANC rooms have received training in VCT.

In this section, the results are presented separately for each facilities and units.

Findings from Butajira hospital

A participant in the FP and ANC unit described that he is assigned for the two mentioned activities including EPI, and perform his duties in a narrow room on a single table. Responding to the questions regarding service linkage between his current duties and VCT, he said that there is formal referral system of sending ANC attendees to PMTCT with cards within the facility "internal referral system" but not for FP attendees to VCT. The participant added that generally for a mother coming for her first ANC visit she would be asked weather she has got HIV test and if not, he would inform her about the advantages of the test for her and for her unborn fetus, the availability of the service in the facility and finally promote and /or refer her based on her interest to be counseled and tested. He added that sometimes clients may not agree and health service providers may also miss the clients due to workload and when there

is no assigned person in the PMTCT and thinking that the clients would come back for next follow up.

According to the participant, if she is unable to agree after repeated advice she would even asked to call her husband. However for mothers coming to FP service, frequently not informed about VCT or referred during their visits in the FP receiving room.

The reasons mentioned by the participant were though he agreed VCT is essential for FP attendees there is no formal internal referral system in the facility and hasn't been told to send mothers to VCT like that of ANC. And he added that he is alone to provide all the services of ANC, FP, HIV/AIDS and EPI. He summarized that there is no enough time, room and trained manpower to inform or advise FP attendees to go to VCT. Finally he said that the center itself started functioning about three years back and the PMTCT service started not more than 6 months.

A participant working in VCT room said that two VCT rooms are functional with ART rooms. He described that since it is becoming a culture having a test before marriage in this area; mostly clients for VCT were those who were going to be engaged in marriage. However he explained that he is rarely raising issues of FP services to couples. On average he counseled 40 per day for HIV test. As the participant said this is not recommended, he was supposed to help eight clients per day. However, these peoples were coming to this service motivated by community facilitators from the villages and faced difficulties to send them back home with out giving them the service. Particularly with FP attendees, He revealed that he has noticed only a few mothers visit the VCT.

He claimed that there is weak link between FP and VCT services and they are not providing any FP method in the VCT centers. The reasons mentioned were with FP services no emphasis is given and yet internal referral system hasn't been established as it is done between ANC attendees and PMTCT, The second reason mentioned was, generally there is shortage of manpower in the facility, so that both VCT service providers are busy with additional responsibilities in the wards.

He said including few clients coming from FP, other VCT clients need to wait out side till service providers' finish the duties in the ward and this is highly disappointing the VCT clients. One of the counselor expressed "regularly, we aren't interested to receive clients referred from MCH because of the work burden we have". As he said with this trained at that moment leave alone to receive FP referrals from MCH, they were appointing VCT clients coming from distant areas, or daily they were working five times more than what is recommended. He claimed that this reduces the quality of the service and also at the same time couldn't satisfy their clients need.

Regarding Trainings, material provision and supervision in the VCT the other service provider commented that many health care providers were trained on VCT at least once from different departments " who are not directly concerned in VCT activities and responsibilities" and activities were left for two or three peoples and do less efforts to integrate services especially FP with VCT services. He said getting repeated trainings is becoming source of income than integrating and providing VCT services. He added that vertical or horizontal supervision is not practiced after the training, so they faced difficulties to link the services even though they knew that would become effective. He finally mentioned that on the training they were informed to receive FP and other clients from MCH.

A participant from IEC/BCC revealed that even though a television with few video cassettes and a tape with few cassettes were available, the clients couldn't watch or listen for the last six months. He reason out that since he has been assigned to work in the psycatric clinic and adult OPD in addition to coordinating IEC/BCC he become overburden and get tired to perform IEC/BCC activities. The other reason was he couldn't use the appropriate technology to dessiminate health information simply by monitoring the media in his room rather than putting the television and the tape out side of his room.

In addition he said that although the cassettes that they had contained comprehensive knowledge about HIV/ AIDS, they don't have specific cassettes on VCT in relation to FP and PMTCT. Once or twice a year they distribute pamphlets provided by some NGO's collaborated with MOH but here also no emphasis was given to mothers in the MCH

He said that by using IEC/ BCC approach to link those stated services in the facility is poor.

And finally he said that at the moment HIV/AIDS activities are mainstreamed in different sector offices, on the contrary we are not linking services which are more interrelated, especially VCT and MCH, specifically with FP services.

Those participants from PMTCT and deliveries had similar ideas with the above health professionals.

Proposed challenges and solutions to link services were:

The challenges mentioned by health care providers were:

Lack of continues supervision and follow up by respected bodies

Lack of strategies and guidelines for the link or integration of services

Lack of adequate space or rooms

Shortage of committed manpower

As a solution all agreed that linkage of services should be strengthened, providing refreshment trainings which could be targeted to integration of services were also equally important for the improvement of the service. And above all continuous supervision, follow up by respected authorities and strategies were very important. Above all manpower and scarcity of rooms were critical problems need to be avoided for the sake of the work.

Findings from Butajira health center

The participants from MCH (FP and ANC) unit described that usually they were working together for ANC and FP in a single room with separate tables. They said that previously they were counseling ANC attendees in the MCH unit before referring them to PMTCT. In recent times they found out that they are improperly managing it due to lack of silent and adequate space for counseling. In addition they revealed that for FP attendees they are providing only FP but no HIV counseling.

Finally due to the above mentioned challenges; they agreed to refer ANC attendees to PMTCT unit with out counseling. Moreover the participants said that not frequently they sent FP clients to VCT, but those who have interest by themselves, have multiple partners and may be those coming for FP after violence are sent to VCT. They agreed that the village facilitators and CBRHAs are better in sending clients to VCT and at the same time to FP, ANC and delivery care services. Both said that even though it was not yet practiced on the training they were told to refer FP clients to VCT and

they claimed also that they didn't have sufficient time to counsel all clients in their working room.

A participant from VCT unit said that the two VCT trained counselors were working with shift in a single room. The participant said that the service started five years back and the interviewed person had worked for two years. Within his experience of two years occasionally might have seen clients from FP and refer clients to FP.

The participant reminded that after getting HIV test result they didn't come back for further counseling and become difficult to help them with the available contraceptives in the facility.

He mentioned that for the last month more than 187 clients have received the service and 91 of them were females above 15 years old and few were from MCH.

He mentioned also the reasons peoples coming for VCT services that from rural areas almost all were coming for pre–marital HIV-test and students and others to know their sero-status. Few peoples used to come because husbands may live out side their home for different reasons like economic reason and will have VCT when coming back to their home and the positives were mainly those who are married but living separately with their partners.

For all this he appreciated community facilitators who were playing the major role sending clients to VCT more than the health workers in the MCH clinics.

A participant from IEC/BCC unit revealed that even though they had many tape cassettes only one cassette player is available in the health center and was used for VCT clients only. In addition the participant said that they had two televisions placed at the waiting rooms of OPDs and MCH and had also only two video cassettes for

ANC and FP mothers to watch which were regarding contraceptive use and importance of antenatal services.

The participant said also that she is responsible posting monthly health education program for the staff and regularly follows the activities. She claimed that they don't have teaching aids like flip charts, and sometimes would get pamphlets from USAID supported project (HAREGE) to distribute to their clients. She added that in health education program she included HIV/AIDS, VCT and PMTCT issues.

The last participant who is responsible for the management of the facility stated that the internal referral system is not functional between FP and other MCH attendees but there is very weak linkage that was due to generally shortage of manpower, specifically trained manpower and space and there was no as such strong managerial commitment taken to link those mentioned services.

Challenges to link service and suggested solutions were:

Similarly with the challenges seen in the hospital, all the interviewed health care providers said that shortages of class rooms, committed manpower and materials were critical problems on both directions i.e. VCT and MCH units and need to be solved

Therefore to strengthen the existing linkage there should be strict supervision and follow up.

Findings from service delivery observation

A total of fifty client-provider interactions were observed at the FP and ANC clinics.

Health center

FP and ANC services are provided in a single room on separate tables. Both services are mostly provided by a single provider. About six posters are posted at visible site inside and out side the room prepared in English and Amharic, the posters were about PMTCT, HIV/AIDS transmission, ART, gender inequalities and risk of HIV infection. Through out the observation neither health care provider nor the client mention about HIV/AIDS, transmission and prevention methods , HIV test and its importance. And the care giver didn't refer FP clients to VCT center and don't have available IEC

materials on HIV/AIDS or VCT to use on consultation to give for them to read at home. On average the clients stay in the room 3-5 minutes and all observed clients received injectable contraceptives. However, in the head office a poster mention that "Starting from the arrival of the client to health service provider, the time required to get the service is 15 and 20 minutes for FP and ANC, respectively". No one received counseling regarding multiple partnerships, unprotected sex and/ or promote to use condom. The TV at the ANC and FP waiting room repeatedly showed about ANC, FP and Trachoma, no HIV/AIDS and VCT were included to integrate or link services. The client's were discussing about PMTCT at waiting room after watching the TV by themselves.

During the first visit ANC attendees would be referred without counseling. The health service provider were saying "with the card go to room 9" i.e. to PMTCT. ANC attendees were taking 10-15 minutes to get ANC service in the MCH clinic.

Hospital

In a single room using one table the FP, ANC, Immunization activities were done mostly with a single health professional. There were posters inside and outside the rooms prepared in English and Amharic which explained about PMTCT, stigma and discrimination, women's right regarding HIV/AIDS and harmful tradition and HIV/AIDS at visible sites but mothers were not having time to read the posters or the health workers didn't use the posters to teach their clients during counseling. During the observation the FP clients would stay 3_5 minutes to receive the injectable contraceptive method, other methods were not used. As the clients entered to the room

were providing the card, then the health care provider was asking the client, "Which contraceptive do you want" the client were responding "Medeph" and after receiving the injection would tell the appointment date and then second mother will enter.

Either the client or the provider were not mentioning about HIV/AIDS, VCT and didn't observe a client referred to VCT. Totally no mass health education was given on VCT or HIV/ AIDS .Didn't observe any TV or Radio/Tape around MCH, with new ANC clients the health care provider was raising the issue and inform about the importance of VCT and refer to PMTCT and this is for all mothers during observation days. But the nurse assigned at PMTCT was absent for one day and no one trained professional was available to continue the work. Here mothers were observed having more time on the average 10-12 minutes. Relatively ANC clients had time to discuses about HIV/AIDS than FP's.

7. Discussion

Results are discussed in relation to other literatures, qualitative results were used to strengthen and clarify the quantitative findings. The qualitative data show clearly that the extent of service linkage between VCT and MCH (FP& ANC) and delivery care services.

7.1 Knowledge about VCT

Awarness of the existence of VCT service was high (>70%) amongst all target groups, irrespective of socio–demographic characteristics and the purpose coming to visit

health facilities. This finding supports the result of In-depth study of knowledge, attitude, behavior and practice (KABP) of internally displaced persons (IDPS) in Ethiopia towards HIV/AIDS and their health status and medical care assessment (6). This showed high levels of awarness of HIV/AIDS test amongst the Internal Displaced People (87.4%). The BSS result from female sex workers agree with this finding and indicate that all of them were aware of the existence of VCT services (20). ANC and delivery care attendees were more knowledgeable than FP. The qualitative part of this study noted that due to the presence of PMTCT, ANC and delivery care attendees were more advantageous than FP.

VCT services are reported to be available in Hospitals (67.6%), health Centers (93.7%) and private health facilities (22%), which is consistent with the findings of KABP study which indicate that 77% of respondents knew where to be tested (6). But this result disagrees with the findings shown in KABP in that VCT services were reported to be available in hospitals only (6). It could be due to the situation that the current study was conducted three years after widely availability of VCT program in the profitable private health facilities, Health centers and Hospitals. However, only 56 (13.8 %) reported that the service provided in their area is confidential HIV test. This finding agrees with the BSS result among farmers, 11% said it was possible to get confidential HIV test in their community (20).

Out of the 396 mothers surveyed, 91.4 percent of them said that being tested and knew the status is important not to transmit the virus to others, but almost all (99.5%) mentioned that VCT is used to know their sero status. This study result agree with the

finding KABP of IDPS which reported that almost all respondents, the reason why wanting HIV test was to know for sure about their sero-status (6).

This study revealed that high proportion of mothers in the study area had sufficient knowledge about VCT of HIV (52.8%). This result is supported by KABP which says at least 64 % of internal displaced people have satisfactory knowledge about VCT. Similarly, a community based study at Jimma on KAP revealed that 65% of study participant had good knowledge (21). The second study among mothers at Jimma also supports this finding that 41.8% of participants have sufficient knowledge (15). Irrespective of the methodology, findings of this study disagree with the baseline survey that indicates knowledge of the availability of VCT among pregnant women is low (19%) and this result may be reflect the fact that the survey was carried out at the beginning of the PMTCT program (14).

Relationship between VCT knowledge and socio-demographic determinants

Respondents attending site was found to have a positive significant association with their knowledge of VCT. Those from health center were more knowledgeable than the hospital. The qualitative study revealed that in the health center VCT/PMTCT services started earlier than the hospital and the health center staff may provide more information than the hospital to their clients.

This study identified that knowledge about VCT is significantly associated with their educational level. Knowledge of VCT positively increases across education level compared to those unable to read and write. This is observed in Jimma and Uganda AIDS Information Center (15, 22).

A statistical significance relationship was found between informed mothers on VCT during their visits and watched TV at MCH with knowledge about VCT. That is

participants who were not informed about VCT during their visits were having a statistical significant low knowledge about VCT. This finding is similar with BSS in which knowledge increased with exposure to media information sources (20). Similarly, in this study received service has significant association with knowledge. Respondents in the ANC and delivery were more knowledgeable than FP. As the qualitative result reveals due to the presence of PMTCT program integrated with ANC, attendees were more accessible to the service than FP.

Partially occupation has significant association with knowledge about VCT. Petty-traders and organization employees were more likely to be knowledgeable than farmers. Individuals in this occupational category might have better awareness and accessibility of information.

7.2 Attitude towards VCT

About 97.8 percentages of respondents believe in the usefulness of VCT. This result support community based findings of a study in Jimma (99.4%) (21).

However, Percentages of the non-tested (55%) respondents who believe that VCT is useful were higher than tested (45%). This might be due to lack of follow up, care and support for those who knew their HIV status and it needs further study.

Considerable percentages of the non-tested respondents (70%) were willing to be tested. This part of the study is similar with the findings of behavioral surveillance survey findings that is greater than 76% (20) and the studies done on Internal Displaced People (77%) (6) and community based study in Jimma (74.3%) (21).

Conversely, higher proportions of FP (45.6%) were willing to get HIV test than ANC (22%) and deliveries (0.8%). The qualitative data showed that weaker service linkage

between FP and VCT than ANC and Delivery care services that made inaccessible the VCT service to FP attendees. USAID explained that this is a missed opportunity to reach important segment of populations with critical information and services, for whom at risk for both pregnancy and HIV (10). Here, it needs further study on the VCT unmet need of FP attendees.

Significant percentages of respondents (81.2%) have favorable attitude towards VCT. Likewise, a community based study done in Jimma urban & its rural surroundings support this finding (90.4%) and a second study in Jimma town also indicates 62.4 percent of the respondents have favorable attitude towards VCT. The difference with the first study may be, it was done in Jimma town including the rural community which indicates significantly more favorable attitude. At the same time the difference with the second study might be, the second study was done in the town Jimma in which the people have less favorable attitude and the study included detail about PMTCT (21, 15)

A substantial proportion of ANC (86%) and deliveries (83%) have favorable attitude than FP (77%). As the qualitative result of this study reveals this might be due availability PMTCT service in the health facilities for the former attendees.

Relationship between attitude towards VCT and socio-demographic characteristics

Statistically significant positive relationship observed in the age group (25-30) with attitude towards VCT. This might be due to frequent contact with the service and might have better accessibility of the VCT massages.

It has been found out that residence has significant association with attitude. Rural residents were more likely to have favorable attitude than urban counterparts. This might be due to high community involvement in the rural area including CHWs and the contribution of some NGOs working there. On the other hand, this might be due to high rate of multiple partners in the urban area. Occupation, farmer has significant association with attitude towards VCT compared with housewife, organization employees…. This finding was observed in a community based study, Jimma (21). In this result parity five and above has positive significant association with attitude. This might be due to repeated visit of health facilities and accessed to PMTCT services which needs further study.

7.3 Practice of VCT

Some of the study participants (44.2%) reported ever having had HIV test, 96.6% of them said it was voluntarily and almost all have been returned for their test results. This finding is supported by a study done on antenatal attendees and more than 35.7% used VCT service during their last pregnancy visit (15). However findings from Behavioral surveillance survey shown less than 11% had ever been tested for HIV (20). This could be justified as this study is done four years after BSS in which PMTCT is highly initiated, HIV/AIDS intervention activities are to somehow well coordinated and implemented in the health facilities and the participants of this study have frequent visits of these health facilities. Significant proportion of ANC (60.7%) than FP (28%) had ever had HIV test and most recent VCT was taken within the past two years. This might be due to availability of PMTCT service in the health facilities.

Relationship between practice of VCT and socio-demographic characteristics

Respondents' received service was found to have a positive significant association with VCT practice; those from ANC attendees were more likely to be tested than FP. The qualitative study revealed that the presence of PMTCT made ANC attendees easily to get VCT practice.

Statistically significant positive relationship was observed between age categories and VCT practice. However, the likelihood being tested decreases when age increases. This could be the fact that, those middle age respondents were mainly utilizing the PMTCT service than elders.

7.4 Service linkage

In this study only 46.9% participants had been informed about VCT during their current visits by health care providers in the health facilities. This result is supported by an operational research done nine months after the integration of PMTCT program in Kenya ,that examine the integration of HIV related care in the MCH settings. And slow progress has been reported in the attempt to integrate HIV education and counseling into routine FP and ANC services. They found out that only few clients received information on risk reduction, VCT/ PMTCT during routine FP and Antenatal care visits (23).

Among those participants who got VCT related information (46.9%), generally larger percentages were ANC attendees (62.8%) than FP clients (32.4%) and the difference was statistically significant. The qualitative part of this study also reveals that due to the presence of PMTCT service in the facilities for ANC attendees accessibility of VCT related information is higher for ANC attendees than FP. Even the percentage of

ANC is not too much and the health service providers reason out in the qualitative part that, firstly VCT or PMTCT services started in the facilities recently, secondly inadequate space for counseling and shortage of service providers and lack of formal linkage between FP and VCT are the main factors for less accessibility of VCT messages.

According to literatures in most settings throughout the world, FP services and HIV services traditionally have been offered separately, with little or no linkage. But the potential benefits of linking these services are increasingly apparent as ever more women of reproductive age become infected with HIV or are at risk of infection (11).

A study in Ghana indicates that FP providers were already experiencing heavy workloads and staff shortages. These providers were concerned that linking or integration of services would worsen these existing challenges. In addition one of a critical facility level challenge mentioned in the study was lack of adequate space to ensure confidentiality, at a couple of facilities the current FP set-up doesn't provide the level of privacy /confidentiality needed for provision of VCT services(24).

Inspite of the above challenges, for FP attendees it is recommended that providing information, education, and communication about the risks of HIV infection, onsite VCT for HIV for those who request it and refer to VCT services at FP clinics is essential(4). In addition it is recommended that particularly in generalized epidemics, FP sites should provide HIV prevention information, counseling and referral for VCT (10).

Among respondents who have been informed about the existence of VCT service in the facilities (96.3%), even though the difference was not significant, less percentage of FP (34.7%) than ANC (58.4%) knew the existence of VCT service in the facilities.

Assessment done on the operational aspect of the VCT centers in health facilities, Guragae zone, Ethiopia, shows that almost all the assessed VCT centers was categorized by lack of promotion, advocacy about VCT other than morning health education and was considered as crucial service delivery related factor(25).

But studies indicate that strong service linkage of VCT with FP and ANC increased knowledge of VCT or other HIV prevention strategies among women of reproductive age who are at high risk but might not otherwise receive HIV information and counseling (11).

Among 39.5% who got advice to have HIV test in the MCH settings (FP & ANC), larger proportions were ANC (57.9%) than FP (22.4) which showed statically significant difference. Generally, these visits present valuable opportunities to reach women with information and services that can empower them to reduce their own risk for infection and the risks to their partners and children. Specifically FP has been grossly underutilized as a vehicle for addressing the spread of HIV/AIDS (3).

Where as MCH services which have incorporated VCT, the number of women being counseled and tested in conjunction with ANC far exceeds the volume of clients served by other VCT programs (23). Linkages of FP services with HIV/AIDS services are also an essential step in addressing HIV/VCT messages to mothers, effectively maximizing impact and resources to confront the raging AIDS epidemic, elevated maternal mortality and the unmet need for FP worldwide (2).

The qualitative result of this study indicates that no emphasis is given to counsel FP attendees to use the VCT services and vice versa, although FP and HIV/AIDS analysis in Ethiopia shows that at operational level services are linked (26).

But strengthening linkages between FP and VCT services provides an opportunity to make efficient and effective use of available resources to address clients' dual risks of unintended pregnancy and HIV infection (24). Qualitative findings in this study from VCT centers show that mostly no FP counseling and available FP method including condom to VCT clients or referral to FP clinics, although FP is a critical component of the continuum of care and support for VCT clients (10).

A study done in Uganda on the integration of FP and VCT/PMTCT/ART reported that FP is an integral component of their services. Indeed, FP service integration is more evident in VCT and PMTCT settings where counseling, provision of FP methods other than condoms, and information communication (IEC) materials are available in varying degrees. In addition the study shows that in settings where FP has been integrated in to HIV/AIDS services, service providers have been trained in FP service delivery sites and make referrals for specialized FP services. However, the formal referral systems and mechanisms are weak or nonexistent and coordination remains problematic because of the vertical management of FP/reproductive health (RH), VCT, and PMTCT programs (27).

The existing national guideline for VCT in Ethiopia also addresses the provision of FP information and referrals for women of child bearing age that are infected or at high risk of HIV infection and refer HIV-positive and high risk HIV negative persons for necessary medical, preventive, Psycho-social services and home based care in the community (5). However, in terms of FP services literature stated that VCT centers offer a rare opportunity to reach many people with FP needs who may not normally visit a FP clinic (11). Mean while it is recommended that if FP services are not available in VCT settings, FP service referrals should be available and VCT

counselors should inquire about FP methods during pre-test or post-test counseling sessions and make appropriate referrals for FP services based on client's needs (10).

As the qualitative result of this study shows, most of the time during the study period in both health facilities, one health service provider was serving the FP and ANC attendees where both services are given together. Thus the provider has no sufficient time to give FP, ANC including HIV test information for his clients. And time constraint for ANC and FP providers during client-provider interactions continue to be a major constraint to such an integrated approach (23).

It is explained that the introduction of HIV / AIDS prevention and care into the MCH settings has asked the health workers to greatly expand their responsibilities and tasks and has had a mixed impact on motivating health workers in the MCH settings.

Though PMTCT intervention is designed to be part of routine ANC services, create significant additional work for staff already discouraged by long standing problems such as low payment and inadequate medical supplies (23).

In this study after the advice in the MCH (FP&ANC) settings, among those referred (88.1%), large percentages of ANC (62.9%) than FP (22%) have got referral to VCT/PMTCT and this difference is statically significant. Though VCT services are available in health facilities, it was learnt from the in-depth interview that workload, shortage of time for health service providers and lack of formal linkage system specifically for FP clients make the VCT services inaccessible.

The assessment on integrating FP and VCT in Ghana revealed that there were many existing factors that facilitate or hinder the integration of services. These factors were related to the general acceptability of integration, human resource capacity, facilities and logistics, and quality of care. In addition, factors related to stigma and gender

dynamics were described as potential challenges to integrating FP and VCT services (24).

And it has been explained that Services provided in FP or maternal and child health Care (MCH) clinics often make only a small contribution to VCT promotion and utilization and the behavioral change that are all important for HIV prevention (10).

But access to VCT should be a standard part of ANC and FP services. Conversely, VCT services should respond to the FP needs of individuals (3).

The way services are currently structured offers little opportunity to counsel and refer FP attendees to VCT. Most FP & ANC services are overloaded. Demand for VCT often exceeds the supply of trained counselors; there is little or no time for ongoing counseling and support for risk avoidance for FP attendees (23). However, researches from Africa and Caribbean show that integration of FP into HIV/AIDS services and VCT centers is becoming feasible and acceptable (11).

Less percentage of participants has watched TV, listen Tape / radio and read printed materials at MCH settings. The exposure to VCT massages during visits, the percentage of FP and ANC attendees who respond to the question of source of information was almost similar. This finding is supported by the qualitative part of this study that FP and ANC study participants have equal access to messages in the facilities hence both services are given together. In addition qualitative data indicates

that mainly VCT messages were not included in the FP and ANC messages either with Video/ Tape cassettes or printings.

However, incorporating HIV messages into FP services has been an appealing strategy because family planning programs attract clients who generally do not access HIV program activities. And VCT Services or preventive health messages on HIV can also be linked outside clinical settings of FP and ANC through interventions such as behavioral change communication (11).

A project experience from Kenya and Zambia, show that woman first receive a health talk that includes information about VCT. After weighing and blood pressure are taken, the women then receive group counseling and/ or individual pretest counseling. In Uganda, officials of AIC and the Ministry of Health have developed a model to ensure that every health worker in the clinic can assess a client's need for VCT and refer the client appropriately. As a result, clients who come in primarily for other services such as FP frequently augment their visit with HIV counseling and testing (23).

8. Strength and limitation of the study

The study is partially new due to the fact that it is the first of its kind in looking at the linkage between VCT and FP, ANC and delivery care services which is institute based. Thus, it will be a valuable data for planning and implementation of interventions and thereby minimizing missed opportunities.

The structured questioner was adopted from standard questioners of BSS. In addition to this, data collectors were females for exit interview, 12 grades complete and have many data collecting experiences, and also got training. Questioners were tested and necessary corrections were made, and most of the questions of the quantitative studies were closed ended. The qualitative data, observation checklist and Individual In-depth Interview give important supplement to elaborate some findings from the quantitative data and were conducted by the principal

investigator. The field activities of the data collectors and the supervisors were closely observed, was entered, and cleaned thoroughly by the principal investigator. Shortage of literatures particularly studies on similar topics could be mentioned as limitation of this study.

9. Conclusions

This study demonstrated that almost half of the study participants have sufficient knowledge about VCT. Respondents from the health center were more knowledgeable than the hospitals'. Similarly, as education level increases, knowledge about VCT also increases. Those informed participants about VCT during their current visits and /or who were watching TV at MCH were knowledgeable than non-informed. Respondents from ANC were found to have sufficient knowledge than FP. Knowledge of respondents who are petty-traders and organizational employees were found to have sufficient compared to farmers.

Considerable proportions of non–tested respondents were willing to have VCT. Significant proportions of FP attendees were willing to have VCT service compared to ANC and delivery attendees. Around eighty percent of the respondents have favorable

attitude towards VCT. Attitudes of respondents who are attendees of ANC and Delivery care were found to be favorable than attendees of FP. similarly, attitude of those participants in the age group 25-30 was found to be favorable compared to age group 15-19. Respondents in the rural, parity five and above were also observed having favorable attitude compared to urban and parity less five counterparts respectively.

Only forty four percent of respondents were ever having had HIV-test and almost all underwent voluntarily and returned for their result. As usual, ANC respondents were observed having good VCT practice compared to FP respondents. Practices of respondents, who are in the middle age, were found to be good compared to the younger.

VCT service link with FP, ANC and delivery care services in the health facilities was found to be weak. Only forty six percent of respondents were informed about VCT by health service providers during their current visit. Among those informed respondents ANC attendees share the highest proportion, which is mainly due to the fact that PMTCT service is available in the health facilities. However FP attendees were found to be less informed. For this and other reasons, less proportion of respondents from FP knew the existence of VCT service in the studied health facilities.

Similarly, VCT clients were not either referred to FP clinics (MCH) or provided with FP methods at VCT centers in the facilities.

During client-provider interaction in the MCH (FP&ANC) only forty percent of respondents were advised or counseled to have HIV test and majority of them were ANC attendees though some of them were referred with out counseling to PMTCT at MCH setting. Among those who were advised or counseled FP attendees share only

twenty two percent, since there is no formal linkage system established between FP and VCT services. After the advice or counseling, about three fold of ANC attendees were referred to PMTCT compared to FP referred to VCT. Generally the IEC/BCC approach to link those services was also poor with provision of IEC materials and coordination. Some of the challenges were; lack of continues supervision and follow up, guideline to link FP and VCT services, in adequate space and workload on health service providers in the VCT centers and MCH units.

Recommendations

By taking in to account the results of this study the following recommendations are forwarded

1. Strengthening IE/BCC approach
2. Integrate FP and VCT services and minimize missed opportunities
3. Regular supervision, follow up and trainings pertaining integration of services.
4. Develop and implement integration mechanisms and service delivery guidelines

5. Further large scale research on feasibility and cost-effectiveness on integration of HIV/AIDS

with FP, ANC & delivery care services is required.

6. Strengthen the staffing and expand the VCT services

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Annex-1

INTERVIEW QUESIONER ON ASSESSEMENT OF VCT UTILIZATION AMONG ATTENDEES OF FP, ANC, DELIVERY CARE SERVICES

001. Questioner identification number_____

002. Site identification number_____

INTRODUCTION

"My name is …….I am working for the ……..We are interviewing people about VCT related knowledge, attitude, and practice. The purpose of the interview is to assess VCT services utilization, identify the major problems of the community and preparing recommendations to the concerned organizations.

INFORMED CONCENT

For the selected mother read the following

"To help our study, we would like to ask you some questions which may take about ------ minuets. As your participation is very important to the outcome of the study we kindly request 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 / /

003. Interviewers: Name _____ Signature_____

004. Supervisors: Name_____ Signature

_____Date_____

005. Date of interview _____/_____/_____

Day month year

Time of start of the interview _____/_____

Time of finish the interview _____/_____

Section I --Socio-demographic

No	Questions	Response	Escape
101	Age in years, completed years.	----------years 1 Don't know 88 No response 99	
102	Place of residence	Town 1 rural village 2 no response 99	
103	In which religion group you are?	Orthodox 1 Muslim 2 Catholic 3 Protestant 4 Others Specify……. 5	
104	Ethnic Group	Guragae 1 Amhara 2 Oromo 3 Tigray 4 Others specify……. 5	
105	Marital status	Single 1 currently married 2 separated 3 Divorced 4 Widowed 5	
106	If currently married, does your husband has other wives?	Yes 1 No 2 Don't know 88 No response 99	
107	Level of education	Illiterate 1 read and write 2	

108	What is your current occupation	Domestic work 1 Rural farmer 2 Employed as Shop/tea/ pastry workers 3 Buying and selling 4 House wife, town 5 Gov' t employee 6 Job less 7 Other specify……. 8	
109	Which service you received with this visit?	Family planning 1 Antenatal care 2 Delivery care 3 No answer 99	
110	From the beginning till now how many pregnancies you had?	No ---------- 1 Not yet pregnant 2 No answer 99	
111	From the beginning how many deliveries you had	No ---------- 1 Not yet delivered 2 No answer 99	

Section II – HIV/AIDS knowledge, attitude related

201	Have you ever heard of HIV/AIDS?	Yes 1 No 2 Don't know 88 No response 99	
202	From where did you hear about HIV/AIDS?	Family 1 Friend 2 Mass media TV, Radio, News paper 3 Health worker 4 Others specify---------- 5 No response 99	
203	Do you think that a healthy looking person including you can be infected with HIV?	yes 1 No 2 Do not know 88 No response 99	
204	Can a person who has HIV/AIDS be cured?	Yes 1 No 2 Don't know 88 No response 99	
205	Do you think that using condom correctly at all times can protect from HIV?	Yes 1 No 2 Don't know 3 No response 4	
206	Do you think that abstaining from sexual intercourse can protect from HIV?	Yes 1 No 2 Don't know 88 No response 99	

207	Do you think that having one faithful partner can protect from HIV?	Yes 1 No 2 Don't know 88 No response 99	
208	Do you think that HIV positive woman can transmit the HIV virus to her unborn child?	Yes 1 No 2 Don't know 88 No response 99	

209	Could the mother use antiretroviral to prevent HIV transmission to her unborn child?	Yes 1 No 2 Don't know 88 .No response 99	
210	Do you think HIV positive mother can transmit the virus to her baby through breastfeeding?	Yes 1 No 2 Don't know 88 No response 99	
211	Are you willing to share meal with HIV positive person?	Yes 1 No 2 Don't Know 88 No response 99	

Section III - VCT knowledge, attitude, and practice related

No	Questions	Response	
301	How can a person find out if he/ she has HIV/AIDS? (Multiple response is possible) probing is needed	Simply by looking 1 By physical examination ,of health personnel 2 using VCT 3 Go to Traditional healers/ testing service 4 Other specify---------- 5 Don't know 88 No response 99	
302	Have you heard of voluntary HIV counseling and testing?	Yes 1 No 2 Don't remember 88 No response 99	
303	If yes, where did you get the information? Multiple response possible	Family 1 Friends 2 Neighbors 3 Radio or TV 4 printed articles 5 Health workers, institutions 6 Others specify… 7	

304	If yes, where did you find the service in you Vicinity? (Multiple response possible)	Hospitals	1	
		Health center	2	
		Private institutions	3	
		Others specify……	4	
		Do not Know	88	
		No response	99	

305	Have you ever been informed about VCT during your current visits by the health service provider?	Yes 1 No 2 Don't remember 88 No response 99	_____306 _____307
306	If yes, Q 305 what was the information? (Multiple response possible)	The service available here 1 The service available elsewhere 2 The service Useful 3 Other specify---------- 4 Don't remember 88 No response 99	
307	If No, Q305 If you have been informed, what you were doing? (Multiple response possible)	Will have HIV test 1 Will tell for others 2 Nothing 3 Others specify----- 4 No response 88	
308	Have you ever watch TV about VCT during your current visits in this health facility?	Yes 1 No 2 Don't remember 88 No response 99	
309	Have you ever listened Tape/Radio about HIV/AIDS test during your current visits in this health facility?	Yes 1 No 2 Don't remember 88 No response 99	
310	Have you ever read printings about HIV/AIDS test during your current visits in this health	Yes 1 No 2 Don't remember 88	

312	If yes, Q311 during counseling did he/she tell you to go to VCT center?	Yes 1 No 2 Don't remember 88 No response 99	
313	In your locality, could people get confidential HIV test?	Yes 1 No 2 Don't Know 88 No response 99	
314	Do you think that VCT is important?	Yes 1_____ No 2 Don't Know 88 No response 99	_315
315	If yes, Q 314 what are the advantages? (Multiple response possible)	Yes No protection for others 1 2 Knowing self 1 2 self care for future 1 2 To plan future life 1 2 To have wife husband / friend 1 2 others specify---------- 1 2 Do not Know 88 No response 99	
316	Don't tell me the result, but have you ever had VCT in the past?	Yes 1_____ No 2_____ Don't Know 88 No response 99	317-321 322

317	If yes, Q316 have you got the test voluntarily or provider initiated	Yes / No Voluntarily 1 / 2 Provider initiated 1 / 2 Don't know 88 No response 99	
318	If yes, Q316 Don't tell me the result, but did you obtain the test result?	Yes 1 No 2 Don't Know 88 No response 99	
319	If yes, Q316 Before you hade HIV test, did you get pre-test counseling?	Yes 1 No 2 Don't Know 88 No response 99	
320	If yes, Q 316 While you were receiving the HIV test result, did you get post-test counseling?	Yes 1 No 2 Don't Know 88 No response 99	
321	If yes, Q 316When was your recent HIV test?	Yes / No Last year 1 / 2 1-2 years back 1 / 2 2-4 years back 1 / 2 Before four years 1 / 2 Don't know	

322	If No, Q316 Do you have the desire to have VCT in the future? As you didn't have it before.	Yes 1_____ No 2 Don't Know 88 No response 99	323 &324
323	If yes, Q 322, By whom do you prefer to have HIV test and the counseling? (Multiple response possible)	Physician 1 Nurse 2 Trained counselor 3 Religious leaders 4 Community leaders 5 HIV/AIDS positive peoples 6 Others specify---------- 7	
324	If yes, Q322 which way do you prefer to obtain the HIV test result?	Face to face 1 Secretive letter 2 Partner 3 Relative 4 Others specify---------- Do not Know 88 No response 99	
325	If you came for FP, which FP method you received	Pills 1 Inject able 2 Condom 3 Norplant 4 IUCD 5 No response 99	

AMHARIC VERSION QUESIONER

የኤች አይ ቪ/ኤድስ ምርመራ ምክር አገልግሎት
የጥናት መጠየቂያና የፍቃደኝነት ማረጋገጫ ቅፅ

001 **የመጠይቁ መለያ ቁጥር** _____/_____/_____
002 **መረጃ የሚሰበሰብበት ጤና ድርጅት** □□_____

<u>መግቢያ</u>

ስም _____ እባላለሁ፡፡ የምሰራው በአዲስ አበባ ዩኒቨርሰቲ □ህብረተሰብ ጤና □□□□□□□ □□□ □□□□□□□ □□ □□□□ ሰዎችን በኤች አይ ቪ ምርመራና ምክክር □ሪያ □ንዳንድ □□□□□□□ አንጠይቃለን፡ የዚህ መጠይቅ አላማዉ በኤች አይ ቪ ምርመራና □ክር አገልገሎት አጠቃቀም መረጃ ለመሰብሰብ፣ □□□□ □□□□□□ □□□□□ □□□□□ □□□□ □□□□

<u>የፍቃድኝነት ማረጋገጫ</u>

<u>ለተጠያቂዎ የሚከተለዉን ይበሉ</u>

ለጥናታችን ይረዳን ዘንድ አንዳንድ ጥያቂዎችን ልጠይቅዎት እፈልጋለሁ፡፡ ይህም ምን አልባት የተወሰኑ ደቂቃዎች □ወስድ ይችላል ፡፡ የእርሰዎ በዚህ ጥናት መሳተፍ በጣም ጠቀሜታ ስላለዉ ለማቀርብልዎት ጥያቄ የሚያዉቁትን በግልፅና በትክክል መልስ እንደሚሰጡ□ □□□ □□□□□□□□□□ □□□ □□□□□ □□□□□□□ □□□□ □□□ □□□ □□□□□□ □□ □□□□□□□□ □□□□□□□□□□□□□

ስለዚህ በዚህ መጠይቅ ለመሳተፍ ፈቃደኛ ነዎት?

- **አዎ**
- **አይደለሁም**

003. የመረጃ ሰብሳቢዉ መለያ ቁጥር ____/____/_____ ስም _____

004. የተቆጣጣሪዉ መለያ ቁጥር _____ ስም _____ ፊርማ _____ ቀን ___

005. መጠይቁ የተካሄደበት ቀን

ጥያቀዉ የተጀመረበት ሰአት_____

ጥያቄዉ የተፈፀመበት ሰአት _____

ክፍል አንድ፡- አጠቃላይ የግለሰቧ መረጃ

ለዚህ ጥናት የሚጠየቁት ለቤተጠብ ምጣኔ፣ ለቅድመ ወሊድ ክትትልና ለወሊድ አገልግሎት ወደ ጤና ድርጅቱ የመጡ እናቶች ብቻ ናችዉ፡፡

ተ.ቁ	መጠይቅ	መልስ	ይለፍ
101	እድሜ□□ ስንት ነዉ?(አስፈላጊ ከሆነ	ዕድሜ በሙሉ ዓመት --------	

	ተቀራራቢ ዕድሜ ገምተሽ ሙይ)	አላዉቅም 88 መልስ የለም 99	
102	መኖሪያ ቦታ (ምርጫዉ ይነበብ)	ከተማ 1 ገጠር 2 አላዉቅም 88 መ/የለም 99	
103	□ያማኖትሽ ምንድን ነዉ?(ምር□ዎች ይ□በቡ)	ኦርቶዶክስ ክርስቲያን 1 እስልምና 2 ካቶሊክ 3 ፕሮቴስታንት 4 ሌላ ይገለፅ ---------- 5 አላዉቅም 88 መልስ የለም 99	
104	ብሔር□□ ምንድን ነዉ?	ጉራጌ 1 አማራ 2 ኦሮሞ 3 ትግሬ 4 ሌላ ይግለፅ ----------5 አላዉቅም 88 መልስ የለም 99	
105	የጋብቻ ሁኔታ	ያላገባች 1 አግብታ አብረዉ የሚኖሩ 2 አግብታ □□ □□□□□□ 3 ተለያይተዉ የሚኖሩ የተፋታች 4 ባለቤቷ የተሞተባት 5	------106 ------106 -------106
106	ባልሽ ሌሎች ሚስቶች አሉትን?	አዎ 1 የለም 2 አላዉቅም 88 መልስ የለም 99	
107	የትምህርት ደረጃ ምን ያህል ነዉ?(ምርጫዎች ይነበቡ) አንዱን ምረጡ	□□□□□ □□□□ የማትችል 1 ማንበብና መፃፍ ብቻ የምትችል 2 ከ1-4ኛ ክፍል 3 ከ5-8ኛ ክፍል 4 ከ9-10ኛ ክፍል 5 ከ11-12ኛ ክፍል 6 ከ12ክፍል በላይ 7 መልስ የለም 99	
108	ስራሽ ምንድን ነዉ?	የቤት ዉስጥ ሰራተኛ ተቀጣሪ 1 ገጠር የግብርና ስራ 2 በሱቅ በሽይ ቤት ተቀጣሪ 3 መግዛትና መሸጥ 4 የቤት እመቤት 5 የመንግስትሰራተኛ(የድርጅት ተቀጣሪ) 6 ስራ የለም 7 ሌላ ይገለፅ ---------- 8	

		መልስ የለም 99	
109	እዚህ ጤና ድርጅት የመጣሽበት ምክንያት ምንድን ነው?	ለቤተሰብ ምጣኔ አገልግሎት 1 ለቅድመ ወሊድ ክትትል 2 ለወሊድ አገልግሎት 3 መልስ የለም 99	
110	ከመጀመሪያ ጀምሮ ስንት ጊዜ □□□□□?	---------- 1 መልስ የለም 99	
111	ስንት ልጆችን ወልደሻል?	---------- 1 አልወለድኩም 2 መልስ የለም 99	

ክፍል ሁለት፡-

ሀ/ስለ ኤድስ በሽታ እዉቀት አስታያየት እና አመላካከት በተመለከተ

ተ.ቁ	ጥያቄ	መልስ	ይለፍ
201	ኤድስ የተባለ በሽታ ወይንም ኤች. አይ ቪ እንዳለ ስምተሻል?	አዎን 1 አልሰማሁም 2 አላስታውስም 88 መልስ የለም 99	---- 202
202	ከየት ስለ ኤች አይ ቪ ኤድስ ሰማሽ?	ከቤተሰብ 1 ከጓደኛ 2 ከተሌቪዝን /ሬድዮ 3	

		ከፅሁፋዊ መረጃዎች 4 ከጤና ባለሙያ 5 ሌላ ይገለፅ ---------- 6 መልስ የለም 99	
203	እዚህ ጤና ድርጅት አሁን ባለሽ ክትትል ስትመላለሺ ስለ ኤች አይ ቪ/ኤድስ ተነግሮሽ ወይንም ተምረሽ ታውቂያለሽ	አዎ 1 የለም 2 አላስታውስም 88 መልስ የለም 99	------- 204
204	□□ □□□ □□□ □□□?	□□□□□□ □□□□ □□ □□□□ 1 □□□□□ □□□ □□□□ 2 □□□□ □□ □□□□□□ 3 □□□□□□□ □□□□ □□□□□ 4 ሌላ ይገለፅ ----------5 መልስ የለም 99	
205	አዎ ከሆነ መልስሽ የተነገረሽ ወይም የ□ማሽው ምንድን ነው?	ልቅ በሆነ ግብረ ሥጋ ግንኙነት እንደሚተላለፍ 1 ከእናት ወደ ልጅ አንደሚተላለፍ 2 በቫይረሱ የተጠቃው በተጠቀመበት ስለታማ ነገር ሌላው ሲጠቀም 3 አንድ ለአንድ በመወሰን መከላከል እንደሚቻል 4 ኮንዶም በመጠቀም መከላከል አንደሚቻል 5 በመታቀብ መከላከለ እንደማቻል 6 ስለ እድሜ ማራዘሚያ መድኃኒት 7 ስለ በጎ ፈቃደኝነት ምርመራ 8 ሌላ ይገለፅ ---------- 9	
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208	ሰዎች ከግብረ ስጋ ግንኙነት ተአቅቦ በማድረግ በኤች አይ ቪ ከመያዝ ይከላከላሉ?(ሌሎች ሕዋሱን ሊያስተላልፍ የሚችሉ ሁኔታዎች በደም መስጠት ስለት ባለዉ መሳሪያ ከሌሎች ጋር መጠቀምን ሳይጨምር?	አዎን 1 አላስብም 2 አላዉቅም 88 መልስ የለም 99	
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210	እርጎዝ እናት የኤች ኤ ቪ አምጪ ህፆስ ወደ ፅንሱ እንዳይተላለፍ ምን ማድረግ አለበት?(ዝርዝሩ አይነበብ) ከአንድ በላይ መልሰ ለስጥ ይችላል ከተጠቀሰ ቁጥር 1 ካልተጠቀሰ ቁጥር 2ን አክብብ	1. የቫይረስ መከላከያ መጠቀም 2. ማስወረድ 3. የጤና ባለሙያ ማማከር 4. ምንም ማድረግ አይቻልም 5. ሌላ ይገለፅ 88. አላወቅም 99. መልስ የለም	አዎን 1 1 1 1 1 1	የለም 2 2 2 2 2 2	
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212	አንድ ጤናማ መስሎ የሚታየን ሰዉ በኤች አይ ቪ ይረስ ተጠቅቶ እንደሚሆን ተሰቢያለሽ?	አዎን አላስብም አላዉቅም መልስ የለም		1 2 88 99	
213	ኤች አይ ቪ ኤድስ በሽታ ያመመዉ ሰዉ ሊድን ይችላልን?	አዎን አላስብም አላዉቅም መልስ የለም		1 2 88 99	

ክፍል ሶስት፡-
ኤች. አይ. ቪ/ኤድስ ምርመራና ምክክር በተመለከተ

ተ.ቁ	ጥያቄ	መልስ		ይለፍ
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302	ስለ ኤች አይ ቪ ምርመራና ምክክር	አዎን አልሰማሁም	1 2	--- 303 --- 304

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303	አዎ ከሆነ መልስሽ መልዕክቱ ከየት ደረሰሽ? (ተጨማሪ ጥያቄ) ከአንድ በላይ መልስ ሊሰጥ ይችላል	ከቤተሰብ 1 ከጓደኛ 2 ከጎረቤት 3 ሬድዬ ወይም ተለቪዥን 4 ፅሁፋዊ መረጃዎች 5 የጤና ሙያተኞች 6 ሌላ ይገለፅ 7 አላስታዉስም/አላዉቅም 88 መልስ የለም 99	
304	አዎ፣ ከሆነ መልስሽ አገልግሎቱን ከየት ማግኘት ይቻላል? (ተጨማሪ ጥያቄ)	ሆስፒታል የመንግስት 1 ጤና ጣቢያ የመንግስት 2 የግል ጤና ድርጅት 3 ሌላ ይገለፅ 4 አላስታዉስም/አላዉቅም 88 መልስ የለም 99	
305	እዚህ ጤና ድርጅት አሁን ባለሽ ክትትል ስትመላለሺ ስለ ኤች አይ ቪ መርመራ በጤና ባለሙያዎች ተነግሮሽ /ተመረህ ታውቂያለሽ?	አዎን 1 የለም 2 አላውቅም 88 መልስ የለም 99	----- 306 ----- 307
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307	አልተነገረኝም ከሆነ መልስሽ ተነግሮሽ ቢሆን ምን ታደርጊ ነበር?	እመረመር ነበር 1 ለሰዎች እነግር ነበር 2 ምንም አላደርግም 3 አላውቅም 88 መልስ የለም 99	
308	ከዚህ ጤና ድርጅት አሁን ባለሽ ክትትል ስትመላለሽ ስለ ኤች አይ ቪ ምርመራ በተመለከተ በቲቪ መልዕክት ተላልፎ ያውቃል?	አዎን 1 የለም 2 አላስታውስም 88 መልስ የለም 99	
309	ከዚህ ጤና ድርጅት አሁን ባለሽ ክትትል ስትመላለሽ ስለ ኤች አይ ቪ ምርመራ በሬድዮ ወይም በቴኘ መልዕክት ተላልፎ ያውቃልን?	አዎን 1 የለም 2 አላስታውስም 88 መቂስ የለም 99	
310	ከዚህ ጤና ድርጅት አሁን ባለሽ ክትትል ስትመላለሽ ስለ ኤች አይ ቪ	አዎን 1 የለም 2 አላስታውስም 88	

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311	ኤች አይ ቪ ምርመራ አንድታደርጊ ክትትል የሚያደርጉልሽ የጤና ባለሙያዎች መክረውሽ ያውቃሉ?	አዎን የለም አላስታውስም መልስ የለም	1 2 88 99		---- 312
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313	በአካባቢያችሁ ሰዎች ምስጢራዊ የኤድስ ቫይረስ ምርመራ ማድረግ ይችላሉ? (ምሰጢራዊ ማለት ሌሎች ሰዎች አንተ ከልፈቀድክ በቀር ውጤቱን የማወቀበት ሁኔታ ማለት ነዉ	አዎን አይችሉም አላስተዉስም/አላወቅም መልስ የለኝም	1 2 88 99		
314	የኤች አይ ቪ ምርመራ ይጠቅማል ብለሽ ታሰቢያለሽ?	አዎን አይችሉም አላስተዉስም/አላወቅም መልስ የለኝም	1 2 88 99		------ 313
315	መልስሽ አዎን ከሆነ ምን ጥቅም አለዉ ትያለሽ?	1. ለሌሎችም ለመከላከል 2. ራሶን ለማወቅ 3. ለወደፈቱ ለመጠንቀቅ 4. ለወደፈት ህይወቱን በማቀድ 5. ጎደኛ ለመያዝ 6. ሌላ ይገለፅ 88. አላዉቅም 99. መልስ የለም	አዎን 1 1 1 1 1 1	የለም 2 2 2 2 2 2	
316	ዉጤቱን አትንገሪኝ ግን የኤድስ ቫይረስ ምርመራ አድርገሽ ታዉቂያለሽ?	አዎን የለም አላስታዉስም መልስ የለም	1 2 88 99		----- 317 ----- 318
317	አዎን ከሆነ መልሱ በፍቃደኝነት ነዉ የተመረመርሽዉ ወይስ ምርመራ እንድታደርጊ ተጠይቀሽ ነበር?	በፍቃደኝነት ተጠይቄ አላስታዉስም/አላዉቅም መልስ የለም	1 2 88 99		
318	ለእኔ አትንገረኝ ነገር ግን ለራስሽ ዉጤቱን አዉቀሻልን?	አዎን አላወኩም አላስታዉስም መልስ የለም	1 2 88 99		
319	በቅርብ ወይም ለመጨረሻ ጊዜ የኤች አይ ቪ	ባለፈዉ አመት 1-2 አመት በፊት	1 2		

	ምርመራ ማረጋገጫ ያደረግሽዉ መቼ ነዉ?	2-4 አመት በፊት 3 አራት አመት በፊት 4 አላስታዉስም/አላዉቅም 88 መልስ የለም 99	
320	የኤች አይ ቪ ምርመራ ከማድረግሽ በፊት ቅድመ ምርመራ የምክክር አገልግሎት አግኝተሽልን?	አዎን 1 የለም 2 አላስታዉስም/አላዉቅም 88 መልስ የለም 99	
321	የኤች አይ ቪ ምርመራ አድርገሽ ዉጤት ስትቀበይ የምርመራ ምክር አገልግሎት አግኝተሽልን?	አዎን 1 የለም 2 አላስታዉስም/አላዉቅም 88 መልስ የለም 99	
322	ከአሁን በፊት ካልተመረመርሽ ወደፊት ለመመርመር ፍላጎት አለሽ?	አዎን 1 የለኝም 2 አላዉቅም 88 መልስ የለም 99	-------- 326 እና 327
323	መልስሽ አዎን ከሆነ በማን የምርመራ ምክክር አገልግሎት እንዲሰጥሽ ትፈልጊያለሽ? (ተጨማሪ ጥያቄ)	በሀኪም 1 በነርስ 2 በሰለጠነ አማካሪ 3 በሀይማኖት መሪ 4 በማህበረሰብ መሪ 5 በቫይረሱ በተጠቃ 6 ሌላ ይግለፁ 7 አላዉቅም 88 መልስ የለም 99	
324	መልስሽ አዎን ከሆነ የምርመራ ዉጤቱ በምን አይነት መንገድ ልታዉቂ ትፈልጊያለሽ (ተጨማሪ ጥያቄ)	ፈት ለፊት በመነጋገር 1 በሚሰጢር ደብዳቤ 2 በትዳርና መሰል ጓደኛ 3 በዘመድ 4 ሌላ ይገለፅ 5 አላዉቅም 88 መልስ የለም 99	
335	□□□□□ □□□□□ □□□ □□□□□□ □□□ □□ □□□□ □□□□□□ □□ □□□□?	የሚዎጠዉ እንክብል ፍሪ 1 በመድ□ የሚሰጠዉ 2 ኮንዶም 3 ክንድ ላይ የሚቀበረዉ 4 በማህፀን ዉስጥ የማቀመጠዉ 5 መልስ የለም 99	

Annex-2

Observation guide for interaction between consenting FP, ANC clients and services providers

Instruction to observer

Obtain the consent of both client and provider before proceeding to observe the interaction between them. When observing, be as discrete possible and on no account became involved in the interaction. Make sure that provider knows that you are not there to evaluate him/ her and that you are not an "expert" who can be consulted during the session. Try to site so that you are behind the client but not directly in view of the provider. Make notes as quality as possible. Use the appropriate section of the observation based on the reason for the

consultation. For each of the questions listed below, circle the code that represents your observation of what happened during the instruction

Region ……Zone……Woreda……

Service delivery visited Name…….

Date of visit: Day……month……Year……..

Name of observer ……

Signature of observer……..

Signature of team leader…….

Time observation begun…….

OBSERVATION CHECKLIST

1. During the consultation does service provider ask the client or does the client spontaneously mention?

1.1 About HIV/ AIDS, transmission , prevention methods 1.Yes 2.No

1.2 Counseling about HIV/AIDS 1. Yes 2. No

1.3 About HIV test 1.Yes 2.No

Who mentioned first? (Tick one) 1. Provider 2. Client

2. Does the provider promote VCT or discuss its importance? 1. Yes 2.No

3. IEC materials used during consultation, tick if used,

1/ Flip chart 1. Yes 2. No

2/ Brochures/ pamphlets 1. Yes 2.No

3/ Poster 1. Yes 2. No

4/ others specify

4. During the consultation, does the provider ask the client the following?

1. Ask about multiple partner 1. Yes 2. No

2. Ask about alcohol use 1. Yes 2. No

3. Ask about unprotected sex 1. Yes 2. No

4. Perform or refer clients for VCT? 1. Yes 2. No

5. Counsel about dual protection 1. Yes 2.No

5. Should be filled only if a group HIV/ AIDS, VCT education is given at the service

5.1 Did a group HIV / AIDS, VCT education given at the service?

1. Yes 2. No

5.2 If yes, how long the education lasts?

…….Minuets/ hours

6. If yes to Q6, do service providers use any of the following IEC materials? Tick if used

1/ TV, Radio 1. Yes 2. No

2/ Flip chart 1. Yes 2. No

3/ Brochures/ pamphlets 1. Yes 2. No

4/ Poster 1. Yes 2. No

5/ others specify

7. Is there any HIV/AIDS educating material posted at visible site (Flip chart or Posters)?

1. Yes 2. No

8. Is there any HIV/AIDS educating material handed out to the client?

1. Yes 2. No

Annex -3

In depth interview questions for VCT service providers

1. How long have you been working in this VCT center?
2. Do you have other assignments other than VCT?
3. Do you receive clients who have been referred from FP, ANC, and delivery care services?
4. Could you tell me how VCT center is linked with FP, ANC, and delivery care services?
5. Do you refer clients to FP, ANC, and delivery services?
6. How many female clients age 15- 49 have been tested and how many of them are referred from FP, ANC, and delivery services?
7. Do you have IEC on HIV/ AIDS and do you use IEC materials to provide information to FP, ANC, and delivery care clients?

8. What are the main challenges you face while linking your service with MCH settings?
9. What could be your opinion to make VCT more accessible to women in general and those coming for FP, ANC, and delivery service in particular in this facility?

In depth interview questions for ANC and FP health service providers

1. How long have you been working in this ANC and FP clinic?
2. Do you have other assignments other than providing ANC or FP services?
3. Do you receive clients who have been referred from VCT?
4. Could you tell me how VCT center is linked with FP, ANC, and delivery care services?
5. Do you refer clients to VCT services? If any on average how many?
6. Do you have IEC on HIV/ AIDS and VCT and do you use IEC materials to provide information to FP, ANC, and delivery care clients?
7. What are the main challenges you face while linking your service with VCT services?
8. What could be your opinion to make VCT more accessible to women in general and those coming for FP, ANC, and delivery service in particular in this facility?

In depth interview questions for IEC/BCC coordinators

1. How long have you been working in IEC/BCC?
2. Do you have other assignments other than coordinating the IEC/BCC?
3. Could you tell me how you use the IEC/BCC approach to link VCT with FP, ANC, and delivery care services?
4. Which kind of IEC materials do you have that contains VCT/PMTCT, ANC and FP?
5. Do you have IEC on HIV/ AIDS and do you use IEC materials to provide information to FP, ANC, and delivery care clients?
6. Who is providing these IEC materials for this health facility?
7. What are the main challenges you face while using IEC/BCC approach to link VCT service with ANC, FP and Delivery?

8. What could be your opinion to make VCT related IEC materials more accessible to women in general and those coming for FP, ANC, and delivery service in particular in this facility?

In depth interview questions for heads or medical directors of health facilities

1. What are the efforts and challenges to link VCT/PMTCT with FP/ANC/Delivery care services? With money, martial and manpower management.