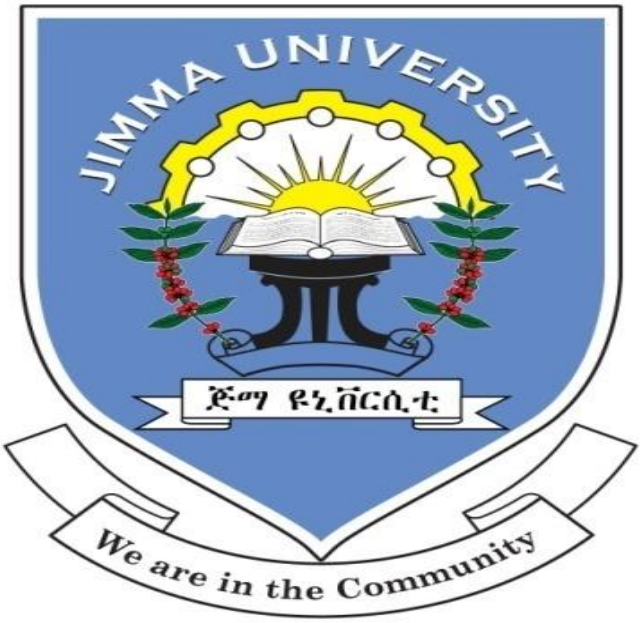
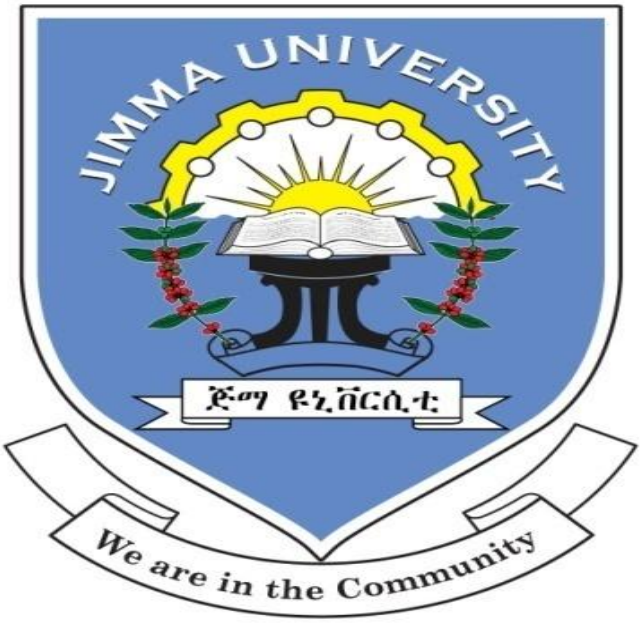


ASSESSMENT OF HIV COUNSELLING AND TESTING AMONG PREGNANT WOMEN IN ETHIOPIAN NATIONAL DEFENCE FORCE REFERRAL HOSPITALS, ETHIOPIA

BY

AMAZE ABEREHA (BSC)

A thesis submitted to Jimma University collage of public health and Medical science, Department of Health service Management for the partial fulfilment of the Requirement for Master in Health care and Hospital Administration (MHA)



ASSESSMENT OF HIV COUNSELLING AND TESTING AMONG PREGNANT WOMEN IN ETHIOPIAN NATIONAL DEFENCE FORCE REFERRAL HOSPITALS, ETHIOPIA

By

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Jimma, Ethiopia, April 2012

ABSTRACT

Back ground: Human immunodeficiency virus (HIV) epidemic continues to take a heavy toll on women and children worldwide. In 2009, 33.4 million individuals were living with HIV, of whom 15.7 million were women and 2.1 million were children under 15 years of age. Globally, since nearly all HIV infections in children are acquired from their mothers, the global epidemiology of HIV in children reflects that of HIV in women.

Objective: To assesses uptake of HIV counseling and testing among pregnant women who attend antenatal care at five Defense referral hospitals, 2012, Ethiopia.

Methods: A cross-sectional study was conducted using structured and pre-tested interviewer-administered questionnaire, among 422 pregnant women who are attending at five Defense command referral hospitals and In-depth interview was conducted among counselors (N=5) from March 21 to April 20, 2012. The survey questionnaire was administered by counselors of Prevention of mother to child transmission service who are in charge at time of interview. Data analysis was made by using SPSS version 19.0-computer database and Cross tabulations was used to calculate, p-values and $X^{2,}$ following this multi-variate analysis using the logistic regression model was made by the specific objectives. Ethical approval and clearance was obtained from collage of public Health and medical science of Jimma University, Defense Health General Directorate and Full informed consent from all participants. The result will be disseminated to Jimma University, Defense force Health Main directorate.

Result: Out of 422 pregnant women 403(96%) had heard of HIV transmission. Of these 354 (88.8%) were undergone counseling and testing. Regarding waiting time, less than or equal to 39 minute at clinic were 2.5 times more likely to be tested than those who were waiting more than 39 minute [AOR (95%CI) =2.56(1.40-4.67). Self-perceived to get HIV were 2.3 times more likely to be tested than those who are not self-perceived to get HIV [AOR (95%CI) =2.37(1.26-4.44

Conclusion and Recommendations: Uptake of counseling and testing among pregnant women at National defense referral hospitals is high. There are factors that affect pregnant women's to be counseling and testing as per national target. Of these long waiting times in the health facility, less time contact with health care provider. Perceive risk of getting HIV were important predictor. Defense health main directorate, should undertake further study and work place intervention regarding awareness creation.

II.ACKNOWLEDGMENT

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AFRH	Air force referral hospital
AFRTH	Armed Force Referral and Teaching Hospital
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
AOR	Adjusted Odds Ratio
ART	Antiretroviral Therapy
ARV	Antiretroviral Drug
BSS	Behavioral Surveillance Survey
CDC	Center For Diseases Control and Prevention
CI	Confidence Interval
ECRH	Eastern Command Referral Hospital
EDHS	Ethiopian demographic Health Survey
EFHAPCO	Ethiopian Federal HIV/AIDS Prevention and Control Office
ENDF	Ethiopian National Defense Force
FGDs	Focus group Discussions
HIV	Human Immune Deficiency Virus.
HIV+	HIV positive
MARPs.	Most at risk populations
MTCT	Mother to Child Transmission of HIV
NCRH	Northern command Referral Hospital
OR	Odd Ratio
PLWHA	People Living with HIV/AIDS
PMTCT	Prevention of Mother to Child Transmission of HIV.
SPSS	Statistical Package for Social Science Research
STI	Sexually Transmitted Infection
UNAIDS	United Nation Program on HIV/AIDS united Nations
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing of HIV
WHO	World Health Organization

CHAPTER ONE: INTRODUCTION

1.1 Back ground

The human immunodeficiency virus (HIV) epidemic continues to take a heavy toll on women and children worldwide. Globally, HIV is the leading cause of death in women of reproductive age. Since nearly all HIV infections in children are acquired from their mothers, the global epidemiology of HIV in children reflects that of HIV in women (1).

Global AIDS epidemic update on November 2009, to 32.8 million [30.9 million–34.7 million].Sub-Saharan Africa still bears an inordinate share of the global HIV burden. In 2009, that number reached 22.5 million [20.9 million–24.2 million], 68% of the global total. Sub-Saharan Africa has more women than men living with HIV. It estimated that 1.3 million [1.1 million–1.5 million] people who died of HIV-related illnesses in sub-Saharan Africa in 2009 comprised 72% of the global total of 1.8 million [1.6 million–2.0 million] deaths attributable to the epidemic. The epidemics in sub-Saharan Africa vary considerably, with southern Africa stills the most severely affected. An estimated 11.3 million [10.6 million–11.9 million] people were living with HIV in southern Africa in 2009, nearly one third (31%) (2).

With a population of 80 million, Ethiopia is the second most populous country in Sub-Saharan Africa. The 2009 HIV point prevalence estimate of 2.4% is lower than many other Sub-Saharan countries, there are still over 1.1 million people living with HIV in Ethiopia, the third highest number of PLHIV in East Africa. Ethiopia's low-level generalized epidemic has wide urban: rural differences in prevalence (7.7% vs. 0.9%, respectively). The high urban prevalence results in 60% of PLHIV living in cities/towns. Prevalence is significantly higher in women than in men (2.8% and 1.8%, respectively). Of Ethiopia's estimated 5.4 million orphans, 855,720 were orphaned due to AIDS. A National Prevention Summit held in April 2009 refocused national efforts to target MARPs and highly vulnerable populations, including commercial sex workers, migrant workers, long-distance drivers, uniformed services, men who have sex with men, and discordant couples. Common settings for MARPS include construction sites, urban areas, small market towns, and transport areas (3).

Current Ethiopian overall adult HIV prevalence in Ethiopia has remained low. The HIV prevalence among adults age 15-49 in the 2011 EDHS is 1.5 percent (confidence interval 1.2-1.7 percent), and it was 1.4 percent (confidence interval 1.1-1.8 percent) in the 2005 EDHS. To under-

stand the epidemic in more detail, further in depth analysis on existing data and other data sources is recommended (4).

Army is one of the MARPS group and it has a high mobility. This makes the high risk group to HIV/AIDS. There are estimated 62,230 HIV positive pregnant women, 16,932 HIV positive births (62% of the country projection) and a total of 270,821 AIDS orphans in the region which region. PMTCT is considered an effective means to address this segment of the HIV epidemic and a number of PMTCT programs have been implemented worldwide during the past decade. The uptake of PMTCT services, however, varies greatly (1)

PMTCT has become a priority for the government, which has launched a campaign against HIV/AIDS with the goal to offer HIV counseling and testing to 90% of pregnant women and to provide prophylactic interventions to 100% of those testing HIV-positive. The WHO recommends a four pronged comprehensive strategy for PMTCT in women of reproductive age group. This comprehensive and broad strategy incorporated the different prevention levels. The first is prevention of HIV infection among the mothers to be, the second is prevention of unintended pregnancies among HIV infected women, the third is prevention of per partum transmission from infected women to their infants, the fourth is treatment, care and support of HIV infected women, their infants and their families (3).

HIV/AIDS prevalence is higher among women (2.6 percent) than men (1.8 percent). According to the Ethiopia Ministry of Health Single Point Estimates for 2010, in urban areas, women are 1.5 times as likely to be infected as men (9.2 percent and 6.2 percent prevalence, respectively) (5).

Providing prevention of mother-to-child transmission (PMTCT) services in Ethiopia, the proportion of HIV-positive pregnant women who receive antiretroviral drugs (ARVs) for PMTCT remains low. In 2009, only 8 percent of HIV-positive pregnant women received ARV prophylaxis. Ethiopia exhibits marked variation in prevalence rates between urban and rural populations, with prevalence of 7.7 percent and 0.9 percent, respectively, according to the Ethiopia Single Point Estimates for 2010. Children are also profoundly affected by HIV/AIDS: In 2009, an estimated 72,945 children under age 15 were living with HIV, and 855,720 children under 18 had lost at least one parent to AIDS, according to the 2010 UNGASS report. Care for orphans' falls primarily on their extended family or the community, yet grandparents and other extended family often lack the capacity to care for these children. Prevention of mother-to-child transmission (PMTCT) is a commonly used term for programs and interventions designed to reduce the risk of mother-to-child transmission of HIV (MTCT). Counseling and Testing, as a crucial intervention component

of HIV/AIDS prevention, care and support; the services need to be made available to all women of childbearing age because PMTCT interventions depend upon a woman knowing her HIV status (6, 7, and8).

1.2 Problem Statement

The national ANC coverage is 66.3% source of information???, whereas coverage of skilled birth at a health institution is at 24.9%, which both influence the utilization of PMTCT. Generally the progress around PMTCT services remained very slow and the coverage has been extremely low. The major gaps and challenges identified in the implementation of PMTCT in the country includes limited expansion of the service; inadequate use of PMTCT service even where it is available; poor early infant diagnosis, poor integration of PMTCT with ANC services. According to the 2008 Health Impact Evaluation report, among all women aged 15-49 that gave birth within the two years preceding the survey, 28.3% received HIV counseling during antenatal care and only 9.2% received test results. Military personnel are among most at risk population to acquisition and transmission of HIV. Also, their placement is away from their family and community. Most of them are young and tends to take risky behavior; this will be inclined during war. Counseling and Testing, as a crucial intervention component of the HIV/AIDS prevention, care and support. Annual defense performance report shows that, among pregnant women vested ANC service during 2003E.C, 82% of them was tested for HIV. This is lower from the expected national target (100%). As counseling and testing is a major component of PMTCT service (7, 8).

Chapter-Two: LITERATURE REVIEW

There are four main strategies that are essential for achieving maximum effective reduction of MTCT of HIV: primary prevention of HIV among women, prevention of unwanted pregnancy among HIV positives, prevention of HIV transmission from HIV infected females to their infants and transmission from mother to child and enrollment of infected pregnant women and their families in to ART. HIV-positive women will become infected with HIV during pregnancy and delivery and an additional 10 to 20% during breastfeeding. Recently, interventions to prevent transmission of HIV from mother to child have become increasingly available in Africa (6).

Among 25 countries with the highest burden of HIV among pregnant women, testing and counseling coverage Seven countries provided HIV tests to less than one third of pregnant women: Nigeria (13%), the Democratic Republic of the Congo (9%), India (21%), Ethiopia (16%), Chad (6%), Angola (26%) and Sudan (3%). In these countries, considerably greater investments are needed to increase HIV testing and counseling among pregnant women in order to effectively prevent mother-to-child transmission of HIV and to enroll eligible women living with HIV in appropriate care and treatment. Four countries reported providing HIV testing and counseling to over 80% of pregnant women in their countries: South Africa (>95%), Zambia (>95%), Botswana (93%) and Namibia (88%) (9).

In Malawi, USAID programs provided counseling and testing for nearly 400,500 individuals in 2009, including approximately 103,600 pregnant women; the country's PMTCT program has been scaled up to reach 90 percent of pregnant women nationwide and provided 9,000 HIV-positive pregnant women with ARV prophylaxis in 2009. In Tanzania, USAID-supported PMTCT programs provided more than 1 million pregnant women with HIV counseling and testing services and delivered ARV prophylaxis for PMTCT to 39,200 of them (9).

Utilization of PMTCT Services in Tanzania In 2007, 467 out of 2,509 health facilities provided PMTCT, which was about 12 percent of the total facilities from the 11 designated regions. The number of infected children below 15 years is constantly increasing and this shows the uptake of PMTCT services is at a low rate. Antenatal care (ANC) from a trained provider is important to monitor the pregnancy and reduce morbidity and mortality risks for the mother and child during pregnancy and delivery. The 2011 EDHS results show that 34 percent of women received antenatal care from a trained health professional at least once for their last birth. Antenatal care is

most common among women with higher than secondary education (91 percent) and those living in Addis Ababa (94 percent).

In 2007 a study conducted at Hawassa Health facility shows that among 1677 New ANC attendants 652(38.9%) of them are got pretest counseling, 644 (38.4%) were tested, 644 (98.8) tested for HIV from pretested counseled, 640(99.4%) of them are posttest counseled. A study conducted at Dire-Dawa, East Ethiopia with a total of 234 pregnant women response rate shows 100%. Among those One hundred eighty six (79.5%) of the study participants 97.4% had good knowledge about HIV, MTCT and VCT (10, 11).

According to the 2008 Health Impact Evaluation report, among all women aged 15-49 that gave birth within the two years preceding the survey, 28.3% received HIV counseling during antenatal care and only 9.2% received test results. Women from rural areas, uneducated, and from the lowest wealth index category were less likely to be counseled and receive test result and annual coverage for 2010 was 24.7% (17, 18). A research that done by Getachew W. June, 2005 Addis Ababa, Ethiopia revealed that, Mothers who had two or more antenatal visits were more likely to be tested than those who had less visits (86.4% and 69.9%)respectively. This study showed that perceived benefit of HIV testing among tested was found (34.1%) (20). Similar study done by Tilahun W. April 2007 Addis Ababa Ethiopia, shows that among two hundred eighty-nine (97.6%) of the pregnant women who underwent counseling were tested for HIV and 274(94.8%) of those who were tested received the test result (7, 12, 13 and 14).

HIV/AIDS awareness is universal in Ethiopia where 97 percent of women and 99 percent of men have heard of AIDS. HIV prevention 56 percent of women and 82 percent of men age 15-49 years know that consistent use of condoms is a means of preventing the spread of HIV. Sixty-five percent of women and 74 percent of men know that limiting sexual intercourse to one faithful and uninfected partner can reduce the chances of contracting HIV (15)

A study done in Armed force referral hospital Addis Ababa, (2005) by Getachew W. shows that there is strongest association with acceptance of VCT visited with, knowing MTCT as route of HIV transmission and prior HIV testing experience. Those who knew MTCT as route of HIV transmission were 7 times more likely to be tested. knowledge of route of HIV transmission, when mother to child transmission MTCT was higher among women who were tested (77.2%) as compared to those who were not tested (37.5%) (13).

A study revel that knowledge on HIV modes of transmission and prevention were found to be significantly associated with acceptance of HIV test. This may indicate that having knowledge about HIV transmission may be enough to undergo HIV test. The same study shows that self-perceived risk for HIV was significantly associated with acceptance of HIV test and the level of awareness on VCT and PMTCT was 88.5% (14, 15).

Another study conducted in Nigeria on HIV voluntary counseling and testing practices among military personnel and civilian residents in a military cantonment in southeastern Nigeria 41.4% respondents reported having ever been tested for HIV; however, only 12.6% respondents had received the test result. Some of the significant factors that positively influenced uptake of VCT were awareness of VCT, education level, and knowledge of antiretroviral therapy benefits (16).

The antenatal care is the first step to access PMTCT services for pregnant women, because they will not be covered by the PMTCT/ARV services if pregnant women did not use the antenatal care system. In prevention of mother-to-child transmission of HIV, the antenatal care system is crucial. If the pregnant women come to health institution earlier, they could know their HIV status earlier, and can have enough time to know their HIV clinical and immunological status and make the decision whether to initiate antiretroviral therapy or start ARV prophylaxis at their appropriate gestational age. Otherwise, they will miss the opportunity to take the medicine (17). Ethiopian FHAPCO report revealed that over all coverage of PMTCT is 24%, availability only in 54% of the health facility and among ANC-PMTCT service users about 79% of them were tested for HIV (17, 18).

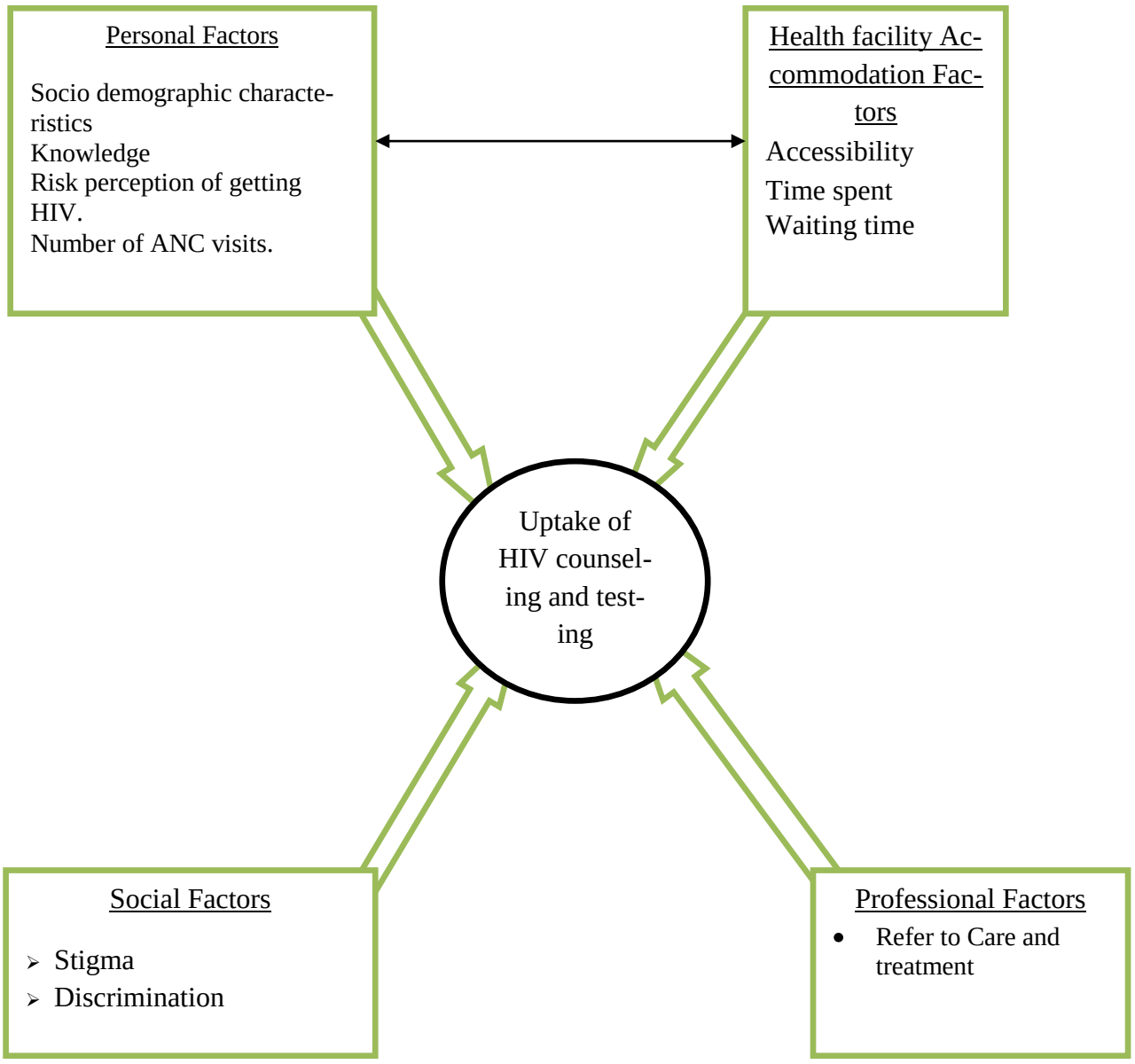

Figure 1: Conceptual framework for factors affecting uptake of HIV Counseling and testing service among pregnant women in ENDF Referral Hospitals, 2012

CHAPTER- THREE: SIGNIFICANCE OF THE STUDY

As HIV counseling and testing is one component of HIV/ AIDS prevention, care and support, and treatment activities; identifying magnitude and factors that related with uptake of Counseling and testing service in the army might be useful to all Direct and indirect beneficiary groups. As a result the finding would be useful in helping health care providers to improve PMTCT service utilization, programmer, Policy makers and persons who want to study and to introduce measures that could improve the utilization of antenatal HIV testing.

Base line information for program planning and implementation: - This study has a substantial contribution to determine the level of HIV counseling, testing and identify factors associated with avoidance of utilization at various levels of the PMTCT service. It may at large be a helpful asset to redesign program implementation for scaling up of PMTCT service coverage.

There was no study conducted using both qualitative and quantitative study design in this institution in large scale, and this study will provide information or serve as base line to similar studies that are going to be conducted in the future

CHAPTER-FOUR: - OBJECTIVES

General Objective

- To assess uptake of HIV counseling and testing among pregnant women who attend antenatal care at National Defense force referral hospitals, Ethiopia, 2012.

Specific Objectives

- To assess uptake of HIV counseling among pregnant women who attend antenatal care.
- To assess uptake of HIV testing among pregnant women who attend antenatal care.
- To assess factors affecting HIV counseling and testing among pregnant women who attend ante-natal care.

CHAPTER- FIVE: METHODS

5.1 Study area and period

The study was conducted in all referral defense hospitals from January 31 to February 29, 2012. A total of five hospitals were included in the study. Armed force referral teaching hospital located in Addis Ababa which serves as a referral hospital to all army health institutions. Air force referral hospital located at Bishoftu which is 40km far from Addis Ababa in south east direction, Western command referral hospital located at Bahir-Dar city 630km far from Addis Ababa in the Northwest direction, Eastern referral hospital located at Harar city 650km far away from Addis Ababa in the East direction and Northern referral hospital located around Mekele city 8km far from Mekele in east Mekele city and 769Km from Addis Ababa. All hospitals provide different services including HCT service, antenatal, intrapartum and postnatal care, family planning and STI service, anti-retroviral drug therapy for prevention of MTCT and pre and post test counseling to the army members, civilian workers and living around the hospitals, and their families.

5.2 Study design*:* Facility based Cross-sectional study using both quantitative and qualitative methods.

5.3 Source population:-All women in reproductive age (15-49) who were attending in Ethiopian national defense force referral hospital, all health care workers currently working at Ethiopian national Defense.

5.4 Study Population*:* - *All* pregnant women with antenatal care visits during the study period and all Health care workers actively working at PMTCT service was study population.

5.5 Inclusion criteria:- Every pregnant woman who had at least one ANC visit at study area during the study period was eligible for study.

***5.6*.Exclusion criteria: -** Pregnant women who were coming as emergency (no adequate information about the service) and pregnant women who were come for delivery (inconveniency to communicate) will be excluded from the study.

5.7 *Sample size:-* Sample size (n) for the quantitative study was determined based on single proportion (p).The formula:

$n = \frac{Z_{\frac{\alpha}{2}}^{2} P(1-P)}{d^2}$, Where:

- n is sample size,
- P (assumed prevalence of Counseling and testing uptake is 50%).
- d (degree of precision) = 0.05
- Zα /2 = 1.96

$n = \frac{1.96^2 \; x \; 0.5(0.5)}{0.05^2}$, $n = \frac{3.8416 \, x \, 0.25}{0.0025}$, $n = \frac{3.8416 \, x \, 0.25}{0.0025}$ $n = 384.16 \approx 384$

Estimated non respondent rate: 10% =

$\frac{384 \times 10\%}{100\%} = 38.4 \sim 38$

$384 + 38 = 422$

Based on the above assumptions a total of 422 pregnant women were required for the study including 10% for the possible non respondents'.

5.8 Sampling Technique

There are five Defense referral hospitals (3 command referral hospital, Armed Force referral teaching hospital, and Air force referral hospital). Sample size was allocated according to the Proportion allocation for the pregnant women attending in the health facility. Every pregnant woman was invited for interview. The study respondents for the qualitative study were employed from each study area who were PMTCT service counselor but not participate in the data collection in this study .the selection was based on the current responsibility and their prior assignment were at PMTCT clinic (N=5, one from each study area).

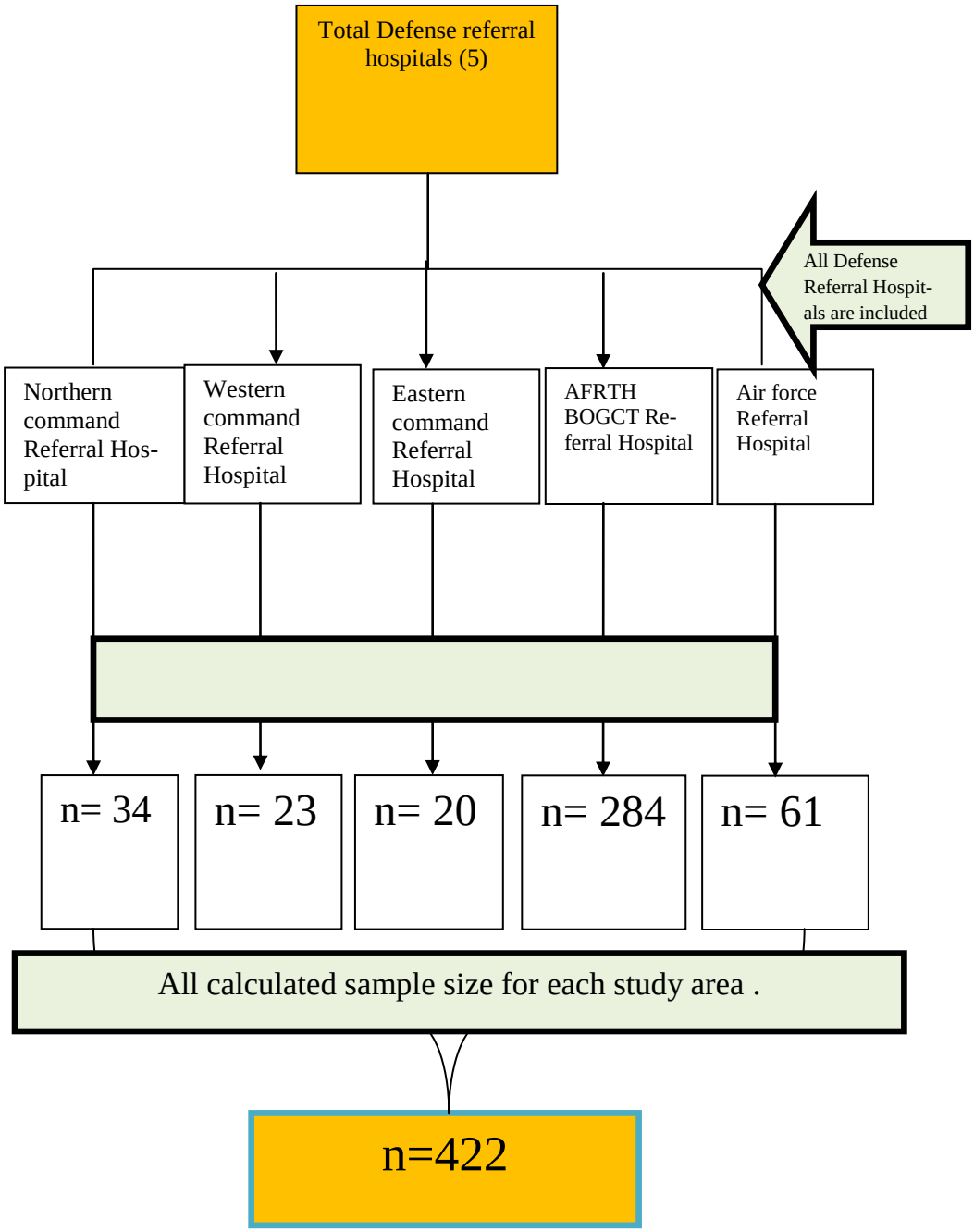

Figure 2: Schematic presentation of sampling procedure for Assessment of HIV Counseling and testing service among pregnant women in ENDF Referral Hospitals, 2012

5.9 Data collection procedure

The questionnaire was prepared originally in English and translated to Amharic. Different persons made the retranslation back to English for checking consistencies. The Amharic version was used for the actual interview. Issues addressed include: Socio demographic characteristics, Knowledge about HIV, MTCT and PMTCT, Risk perception of getting HIV and number of ANC visits and their plan as to where to deliver. The data collectors and supervisors were selected outside of study area from Division hospital (10 Diploma nurses - 2 for each site and one BSc nurse and senior Counselors supervisor was assigned for each site throughout the data collection period). Two days training regarding objective of the study and ways of conducting of interview was provided for data collectors and supervisors. The questionnaire was pre-tested on similar place at Awash-Arba training center hospital among participants equivalent to 5% of the sample size by trained Data collectors.

Data collection was started at the same period of time and stops after having achieved the calculated sample sizes for the study area. The survey questionnaire was administered by counselors of PMTCT service who were in charge at time of interview on average interviews for client was last from 20 minutes to complete and all responses was written in Amharic. After checking all questionnaires for consistency and completeness the supervisors submit the completed questionnaire to principal investigator. The in-depth- interview for counselors was administered by the principal investigator and it was lasts on average 45 minutes. An interview was in a private setting at the clinic locations.

5.10 Method of enrollment

5.10.1 *Quantitative survey:*

- The selected study participant was requested to participate in the survey questionnaire upon exit. They were first informed about the study and then screened for eligibility if they are Volunteer in participation. Once eligibility was established, informed consent was obtained from each participant.

5.10.2 *Qualitative interview:*

- In-depth interview: The purpose of the in-depth interview was to gather hidden information from key informants who have better knowledge, status, or access to observations denied to the researcher and who are willing to share their knowledge. It was conducted among health workers delivering counseling for PMTCT (N= 5).

5.11 Data quality control

Study participants were informed clearly about the objective of the study and interview was done only after verbal consent. Questionnaire was checked for completeness on a daily basis by immediate supervisors. During data collection supervisor and investigator were checking for completeness of all questionnaires daily and returned it to the respective data collector to complete it.

5.12 Study variables*:*

Dependent Variable

- Uptake of HIV counseling and testing

Independent variables

- Age
- Educational status
- Marital status
- Occupation
- Knowledge about HIV, MTCT and PMTCT
- Risk perception of getting HIV.
- Number of ANC visits.

5.13 Data Analysis procedure

Data cleaning was made manually by removing missing/conflicting ideas and responses to questions about relevant information. All responses to the survey questionnaires were coded against the original English version. Data entry was made by using SPSS version 19.0-computer database for analysis. Recoding and re-categorizing were made for relevant variables. Cross tabulations was used to calculate, p-values and $X^{2,}$ following this multi-variate analysis using the logistic regression model was made by the specific objectives. First we used the frequencies and mean score of the major variables, then we use categorical scoring to assess the factor that affecting uptake of HIV counseling and testing service. For the qualitative data the hand written notes discussions/interviews were translated, compiled together and transcribed into English. Summaries of the transcripts was developed that highlight important findings, with associated quotations from the interview extracted.

5.14 Operational Definition

- Attitude: Predisposition to respond in favorable or unfavorable manner towards HIV/AIDS and VCT.
- Direct beneficiary groups: Military and its nucleus family and Civil servant within the organization
- HIV Counseling: a confidential dialogue between a person and care provider aimed at enabling the person to cope with stress and make personal decision to take the test.
- Indirect beneficiary groups: Community outside the military member.
- Knowledge about HIV prevention- respondents considered to be knowledgeable about HIV prevention if they were correctly identified the three main ways to prevent HIV transmission: abstinence, faithful to one uninfected partner, and condom use
- Knowledge about MTCT= respondents will be considered to be knowledgeable about MTCT if they were correctly identify the three main rout of transmission of HIV: during pregnancy, during delivery and during breast feeding
- Members: Military with their family and Civil servant within in the organization.
- Risk perception for HIV/AIDS: Respondents feeling of vulnerability for HIV/AIDS.
- Stigma= Negative feeling towards people with HIV/AIDS, intention to avoid people living with HIV/AIDS.
- Counseling and testing uptake: Respondents who used counseling and testing for HIV
- HIV testing: A process of HIV testing after informed consent.

5.15 Ethical Considerations: The ethical approval and clearance was obtained from collage of public Health and medical science of Jimma University. Permissions were obtained from Defense Health General Directorate and Command and Air force Health Directorate Offices. The standard consent form for health research indicated in the National Health Research Ethics Review Guidelines of Ethiopia is adopted in this study. Prior to interview and discussions study participants and data collectors was requested consent. If in the processes of interview the data collector had found undesired belief or practice regarding HIV/AIDS, he/she must have educate the individual at the end of the session or refer to the principal investigator or supervisor when the case was beyond their level of understanding. Full informed consent was obtained from all participants, in each data collection. The consent form was written in Amharic, and read to those persons who were illiterate or passed for them to read for those who need it. Participants were not to sign the form to ensure their confidentiality. There were no identifying information recorded and data files were store in a secure location.

5.16 Dissemination plan: The result of this research work will be presented and after approval will be disseminate in hard copy and soft copy to Jimma University, Ethiopian National Defense force Health Directorate, Defense force Health HIV/AIDS Prevention and Control Version, Armed force referral teaching hospital; Northern command referral hospital, Air Force referral hospital ,Federal HIV/AIDS prevention and control and To University of California San-Diego- Ethiopia international organizations who are working with ministry of National Defense Health Main Directorate in the area of HIV/AIDS Care, treatment and capacity building. Efforts will be made to publish the paper on journal and reserve in the library.

CHAPTER- SIX: RESULT

6.1. socio-demographic variables **among pregnant women who were attended antenatal care**

One hundred eighty seven of the respondents (44.3%) were between 25-30 years of age flowed by greater than 31 years of age and between 18-24years age were 163 (38.6%), 72(17%) respectively. The age of pregnant women included in this study range between 18 and 40 years with mean age (±SD) of 28.15 (±4.88) and median 28years. The majority, 304 (72.0%) and 407(96.4%), were Orthodox Christians and married, respectively. Regarding the ethnicity 34% and 27% were Oromo and Tigray respectively.

Regarding educational status of the respondent, more than half of the respondents (68.7%, N=422) had able to read and write and elementary school attendant. Regarding occupation majority of the respondents were house wife (53.3%, N=422). (For detail see table 2)

Table 1: Socio demographic characteristics of pregnant women attending Ante Natal Care, at National Defense force referral hospitals , April 2012, Ethiopia(n=422)

	Variable	Frequency	Percent
Age category	18-24	72	17.1
	25-30	187	44.3
	>=31	163	38.6
Ethnic group	Amhara	101	24
	Oromo	144	34
	Tigray	116	27
	Other	61	14
Religion	Orthodox	304	72
	Muslim	47	11
	Catholic	4	1
	Protestant	67	16
Marital status	Married	407	96.7
	Unmarried	15	3.6
Educational status	unable to read and write	69	16.4
	only able to read and write and elementary school	290	68.7
	High school and college/university	63	14.9
occupation	Government employee	126	30
	Private worker	99	23
	House wife	197	47

6.2. Uptake of HIV counseling and testing among pregnant women who attend antenatal care

As to association of socio demographic characteristics of the respondents with uptake of HIV testing, age of the respondent were highly associated with uptake of counseling and testing. Pregnant women with age category between 18-24 years old were 5 times more likely to be tested than age category 25-30 years [AOR (95%CI) =5.40(3.44-7.36). With respect to occupation, Government employed pregnant women were 7 times more likely to undergone HIV test than those who were House wife [AOR (95%CI) = 6.69(2.75-16.30) (Table-3).

Four hundred twenty two (100%) of the antenatal care attendee had recommended HIV counseling and testing; of these 404(95.7%) and 359(85.1%) were undergone counseling and tested respectively. Among all pregnant women who were counseled, 88.9% proceeded with HIV testing, and 100% of those who were tested subsequently received

Table 2: Associations of socio-demographic variables with uptake of testing service National defense force referral hospitals, April 2006 (n=422).

Variable		HIV test			
		Yes	No	COR(95%CI)	AOR(95%CI)
		N (%)	N (%)		
Age	18-24	70(97)	2(3)	5.40(3.44-7-36)	5.48(3.52-7.44)
	25-30	162(87)	25(13)	1	1
Occupation	Gon't Employee	120(95)	6(5)	6.69(2.75-16.30)	6.69(2.75-16.30)
	Private workers	91(92)	8(8)	1.76(0.59-5.25)	2.22(0.72-6.80)
	Hose wife	148(75)	49(25)	**1**	1
Educational status	unable to read and write	59(85)	10(14)	1	1
	able to read and write and elementa-ry school	246(85)	44(15)	1.02(0.38-2.69)	1.09(0.49-2.39)
	High school and collage/university	54(86)	9(14)	1.01(0.49-2.33	1.12(0.40-3.16)
Marital status	Married	347(97)	60(95)	1	1
	Unmarried	12(3)	3(5)	1.44(0.4-5.28)	1.30(0.31-5.44)

6.3. **Factors affecting HIV knowledge of mothers about MTCT.**

Three hundred fifty four (88%) of the pregnant women had knew ways of HIV transmission and 304(87%) of the pregnant women had heard about ways of preventing Mother to child HIV transmission to their baby were undergone HIV testing. Of these, 217(85%) mentioned prophylaxis while 57(95.0%) believed that avoiding breast feeding and using prophylaxis for PMTCT. Regarding rout of HIV transmission 42% of respondents mentioned sexual contact, 19% mentioned sharing contaminated objects, and 8% of them were mentioned infected blood as route of HIV transmission. Regarding methods of preventing Mother to child HIV transmission, only 15% of HIV tested pregnant women correctly identified using antiretroviral drug and avoiding breast feeding as means of preventing HIV transmission. Don't start a new statement using numbers. 348 (82.5%) had responded that pregnant mothers can transmit HIV virus to her baby.

As to the time when MTCT could occur, only 22% of HIV tested mentioned transmission of HIV virus during Pregnancy. Those who knew ways of HIV transmission were 14 times more likely to be test than not knew [AOR (95%CI) =14.28(4.19-48.66)]. Those who knew MTCT as a rout of HIV transmission were 2 times more likely to be tested [AOR (95%CI) = 2.0(1.0-4.0)].

Table 3: Knowledge of respondent on HIV, MTCT & PMTCT among pregnant women attending ANC at National Defense force referral hospitals in Ethiopia, 2012(n=422)

Variable		HIV test		COR(95%CI)	AOR(95%CI)
		Yes	No		
		N (%)	N (%)		
comprehensive Knowledge of HIV transmis-sion	Knowledgeable	354(88)	49(12)	20.2(6.9-58.62)	**14.3(4.19-48.66)**
	Not knowledgeable	5(26)	14(74)	1	1
Mother to child trans-mission of HIV	Yes	308(88.5)	40(11.5)	3.22 (1.92-6.28)	2.0(1.0-4.0)
	No	51(68.9)	23(31)	1	1
Intervention to prevent mother to child HIV transmission	Yes	304(87)	45(12)	2.21 (1.19-4.1)	0.9(0.4-2.0)
	No	55(75)	18(24)	1	1

When we come to health facility service, having waiting time <=39 minutes (mean average waiting time) were 2.6 times more likely to be HIV counseling and testing than those who were waiting time > 39 minutes in the health facility [AOR (95%C.I) =2.56(1.4-4.6)]. Regarding time spent with health care provider having <=27 minute (mean average time) were 0.5 times less likely to have HIV counseling and testing than those who had >=28minutes spent with health care provider [AOR (95%C.I=0.47(0.26-0.86)] (Table-6).

Findings from Qualitative in-depth interviews among PMTCT counselors, Perceived reasons why many pregnant women do not follow ANC were Lack of awareness. As stated by counselors lack of awareness of the benefits of having ANC is said to be common among Marred living together with their husband than those women separately living. "Some think as having minimal risk of HIV as they are living with the ever partner in life." (PMTCT Nurse, a 47years old male). Similarly all the interviewees mentioned the fear of being identified as positive and the consequent stigma and discrimination by family and community. "Particularly women are afraid of having HIV positive test result while status of the husband is unknown or negative. In that case the family will discriminate the woman and even abandon from home by their husbands" (counselor nurse, 40 years old).

Regarding receiving test result, all respondents said majority of the client received their result in the same day. Regarding factors that affect to be counseled and testing were fear of stigma, discrimination and self-coping, "Women fail to have VCT because many lack the skill how to cope and what to do if positive, afraid of stigma and discrimination, many women do not like to be seen in the VCT" (Counselor nurse 25 years old). Distance of health facility had also impact on service utilization. Majority of the nurses mentioned that military health facilities were too far to pregnant mothers. Some of the health facilities are located at distance from the service users. Regarding the preferred place of delivery, 28 (56%) planned home, 331(89%) planned to deliver in this facility.

Table 4: Association of Health service variable with counseling and testing among women attending ANC-PMTCT at National Defense force referral hospital, Ethiopia, April 2012 (n=422)

Variable		Tested			
		Yes	NO	COR(95%CI)	AOR(95%CI)
		N (%)	N (%)		
waiting time	<=39*	192(80.6)	46(19.3)	2.35(1.3-4.26)	2.56(1.40-4.67)
	>39*	167(90.7)	17(9.2)	1	1
time spent with nurse	<=27*	161(89.4)	19(10.6)	1.88 (1.06-3.34)	0.47(0.26-0.86)
	>27*	198(81.8)	44(18.2)	1	1
choice of delivery	Home	28(56)	22(44)	6.34(3.32-12.1)	5.16(2.55-10.45)
	Health facility	331(89)	41(11)	1	1

(*)= mean time (minute), (a) time takes to encounter health care provider with client.

Regarding risk perception, those who having risk perception HIV were 2.3 times more likely to be tested than those who were not risk perceive for themselves [COR (95%CI) = 2.27(1.23-4-2)]. HIV test was slightly higher among repeat ANC visitor as compared to first ANC visitors, even though it was not statistically significant.

Table 5: Risk perception associates with uptake of HIV test among pregnant women at ANC-PMTCT in National Defense Force Referral Hospitals, Ethiopia, (n=422). April 2012

Variables		Tested				COR(95%CI)
		Yes		No		
		No.	%	No.	%	
Perceive HIV	Yes	215	82	48	18	2.27(1.23-4-2)
	No	144	91	15	9	1

CHAPTER- SEVEN: DISCUSSION

Counseling and testing is the main gateway in PMTCT service in preventing the transmission of HIV from infected mother to her child. This study has tried to assess the uptake of counseling and testing HIV in pregnant women at five health facilities in National Defense Force. Ethiopia adopts the PMTCT strategy of WHO, UNICEF, UNIAIDS emphasizing, four main strategies that are essential for achieving maximum effective reduction of MTCT of HIV: primary prevention of HIV among women, prevention of unwanted pregnancy among HIV positives, prevention of HIV transmission from HIV infected females to their infants and transmission from mother to child and enrollment of infected pregnant women and their families in to ART. HIV-positive women will become infected with HIV during pregnancy and delivery and an additional 10 to 20% during breastfeeding. Recently, interventions to prevent transmission of HIV from mother to child have become increasingly available in Africa (5). Nationally among ANC-PMTCT service users about 79% of them were tested for HIV (16)

The antenatal care is the first step to access PMTCT services for pregnant women, because they will not be covered by the PMTCT/ARV services if pregnant women did not use the antenatal care system. In prevention of mother-to-child transmission of HIV, the antenatal care system is crucial. If the pregnant women come to health institution earlier, they could know their HIV status earlier, and can have enough time to know their HIV clinical and immunological status and make the decision whether to initiate antiretroviral therapy or start ARV prophylaxis at their appropriate gestational age. Otherwise, they will miss the opportunity to take the medicine. (17).

In this facility based survey conducted in Ethiopian National Defense force referral hospital, 422(100%) of the antenatal care attendee had recommended HIV counseling and testing; of these 404(95.7%) and 359(85.1%) were undergone counseling and tested respectively. Among all pregnant women who were counseled, 88.9% proceeded with HIV testing, and 100% of those who were tested subsequently received the HIV test result. This is similar with study conducted at Gondar *by Malaju and Alene* on August *2010,* among pregnant women 82.5% of them were undergone HIV test. In this qualitative study regarding receiving test result, all respondents mentioned that majority of the

client received their result in the same day, however, when we compare with national plan to test 90% of pregnant women, slightly left behind. A lesson that can be learned from these levels of testing and receiving test results is that once women are enrolled to counseling, through the PMTCT service they are likely to proceed with testing and receiving of test results. The difference b/n this study from study conducted at Gondar could be due to the health facility all service provides free of charge. This might be has additional effect on demand creation.

In this study it was observed that majority of the respondent 87%, knows the transmission of HIV, however 138(47%) and 27% knew sexual intercourse and MTCT as means of transmission respectively. Those who knew HIV transmission 14 times more likely to be test than those who had less knowledge [AOR (95%CI) = 14(4.19-48.0).

In this study in-depth interview showed that; Knowledge gap was manifested in various ways; stigma and discrimination are also the result of lack of or incorrect knowledge. Counselor mentioned that "Among other reasons, mothers fail to use the services partly not to be seen by others, and partly due to the facility distance, therefore they will be addressed at home in a private setting where there is no barrier to discuss"(a 42 years old). The result of this study shows that self-perceived risk for HIV was significantly associated with HIV test. Those who had self-perceived risk for HIV were more like to be tested than no self-perceived risk for HIV. This may be explained that those who consider themselves as being at risk of HIV may not HIV test because they may be afraid of the results being HIV positive. House wife were less likely to be tested than employed. This could be due to the difference in education.

Limitations: - Since the study is a facility-based study, it might be limited to see the barrier that affects uptake of HIV counseling and testing only among pregnant women who were visiting the facilities. Study area distance, time and budget were the key limitations in this study.

CHAPTER-EIGHT: CONCLUSION AND RECOMMENDATIONS

8.1 CONCLUSION: -opt-out approach is increased the uptake of counseling and testing among pregnant women at National defense referral hospitals. Even though there factors that affect pregnant women's to be testing. Among those identified were: - long waiting time at health facility, less time contact with health care provider lowers the uptake of counseling and testing. Attending with partners were more likely utilize counseling and testing than without partner accompanied. Perceive risk of getting HIV were more likely to be tested than no risk perception. Regarding Occupations; employed pregnant women were much more likely tested than house wife.

8.2 RECOMMENDATIONS:-

National Defense force Health Directorate:-

- Should be looking the importance of implementing Information Education communication/Behavioral Change Communication material developing to address the target population (IEC/BCC).
- Should undertake further study on counseling and testing as key component of ANC PMTCT service.
- Army family at their residency based intervention should be emphasis on awareness creation on the importance of ANC-PMTCT service.

The study area:

- should Shorten patient waiting time through giving training for health care workers
- To increase the uptake of counseling and testing should be increases patient provider contact time to discuss with client.
- Out reaches program in the health system should be integrate with health extension workers.

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ANNEXA

1- QUESTIONNAIRE (English)

Site _____

Instruction:

The Survey questionnaire has 5 pages contains 51 questions divided among 5 sub-sections. First you will find the informed consent. Please make sure that all the stated sections & questions are present, and read (inform Verbally) the consent for the interviewee before beginning the interview. Please Circle the answers against the cod numbers or write if stated otherwise on the space provided.

Informed Consent Form for the survey questionnaires

My name is ----------. I am working temporarily as a data collector with the Department of Health service Management Jimma University, which is conducting a study among pregnant women. The objective of the present study is to examine the uptakes of HIV counseling and testing. A number of people are needed in this study for which it is being conducted elsewhere. During the interview you will be asked some short questions about your background, about HIV and AIDS, your feelings etc. I am going to ask you some question about HIV counseling and testing, your responses are completely confidential; your name will not be written on the form and will never be used in connection with any of the information you provide. You don't have to answer any question you don't want to answer, however your honest answer to this question will help us to understand factors affecting of HIV counseling and testing .We would like to thank you in advance for your help, are you willing to participate. If yes = (1) continue, if No= (2) stops

Thank you for your participation!!!

Assurance of completeness

Certified By (Name)		Completed/interrupted/incomplete	Signature	Date
Interviewer				
Supervisor				

Survey questionnaire
Section 00: General Information

#	Question Item	Response	Cod No	Skip to
001	Study Record #	Northern Command Referral Hospital	1	
		Armed Force Referral Teaching Hospital Bella Gynecology & Obstetric Case Team	2	
		Air Force Referral Hospital	3	
		Western Command Referral Hospital	4	
		Eastern Command Referral Hospital	5	

Section I : Back ground characteristics

#	Question Item	Response	Code no	Skip to
101	Residence address	Urban..... Rural.....	1 2	
102	How long did it take you to reach here?		__Hr&_ Min	
103	Age of the respondent	in years		
104	To which ethnic group/tribe do you belong?	Amhara..... Oromo..... Tigray..... Other.....	1 2 3 66	
105	What is your religion?	Orthodox Christian..... Islam..... Catholic..... Protestant..... Other (specify)……	1 2 3 4 66	
106	Marital Status	Currently married..... Single – Never married..... Separated..... Divorced..... Widowed..... I do not want to respond to this question..…	1 2 3 4 5 99	
107	If married are you currently Living with your partner?	Yes..... No.....	1 2	
108	Educational Status	Unable to read and write..... …….. Only able to read and write..... …… Attended elementary school (Grades 1– 6)…… Attended high school (Grades 7 – 12)..... …… Attended University/college.....	1 2 3 4 5	
109	Occupation	Government employee..... Private..... House wife.....	1 2 3	

Section II: Knowledge, Perceptions and Attitudes towards HIV/AIDS				
#	Question Item	Response	Code No	Skip To
201	Have you ever heard about HIV/AIDS before?	Yes..... No..... Not sure..... I Do not want to respond.....	1 2 3 99	
202	Do you know how HIV is transmitted?	Yes..... No..... No response.....	1 → 2 88	203
203	Can HIV/AIDS be cured	Yes..... No..... I don't know..... No response.....	1 2 3 88	
204	Dose HIV transmitted mother to child?	Yes…… No…… I do not Know…… No response ……	1 2 3 88	
205	If a woman is infected with the AIDS virus, is there any way to de-creases the possibility of transmission to the Ba-by?	Yes..... …….. No..... I don't know.....	1 2 3	
206	What can a woman do to reduce transmission of the HIV virus	Use antiretroviral drug..... Avoid breast feeding..... Other (specify).....	1 2 66	
207	Do you support the idea that every pregnant woman should be screened for HIV?	Yes..... No..... Not sure..... I don't know.....	1 2 3 4	

208	Do you think you can get the virus?	Yes…… No……I don't Know……. No response…….	1 2 99 88	
209	What are your chances of getting infected with HIV?	Moderate…….. High……. I don't know……. No response……	1 2 99 88	
211	If the answer is moderate or high, what are the reasons?	I had sexual contact without condom..... I had sexual contact with HIV positive person..... I had multiple sexual partners..... I had injection with unsterile needle.....	1 2 3 4	
210	What do you think is the reason that pregnant women following ANC will not be voluntary to provide blood Samples for HIV testing? (Do not read the alternatives. More than one response is possible	Lack of awareness..... Fear of long waiting time..... Afraid of the consequences of knowing that they might be positive..... Distance of the facility..... The religious faith does not permit it..... I don't know.....	1 2 3 4 5 6	

Section III –HIV Counseling and Testing				
#	Question Item	Response	Cod No	Skip To
301	How many times do you visit your ANC flow up?	First Repeat	1 2	
302	Have you ever told about the benefit of HIV testing	Yes…… No……	1 2	
303	Do you think HIV counseling and testing is important for pregnant women	Yes ……. No ……. I don't know ……...	1 2 3	
304	Have you been currently counseled for HIV testing?	Yes..... No.....	1 2	
305	If you were counseled do not tell me the result, but have you been tested for HIV?	Yes..... No.....	1 2	
306	Do not tell me the result, but have you known the HIV test result for yourself?	Yes..... No.....	1 2	
307	If your response is yes tested for HIV, would you accept the test result?	Yes..... No.....	1 2	
308	If your response is yes number 307 Do you get posttest counseling?	Yes..... No.....	1 2	
309	If your response is no number 307, why not?	Afraid of copping with positive result for myself Afraid of discrimination by husband and family. Afraid of discrimination by community..... Other (specify)_____	1 2 3 66	
310	Does your partner referred for care, Treatment and support	Yes..... No..... I don't know ……...	1 2 3	
311	Where do you like to deliver in the current pregnancy?	At home attended by TBA..... In this health facility..... In another health facility..... I have not decided yet..... Other (specify……..	1 2 3 4 66	

Section IV Health facility related factors				
No	Questions	Responses	Codes	Skip
401	How much time did you spend for your prenatal visit at this clinic today? RECORD TIME IN MINUTE	Time_____	-	
402	Would you say that the amount of time you spent was:	Too much Just right (reasonable) Too short	1 2 3	
403	Upon your arrival at the clinic did the staff offer you HIV counseling?	Yes No	1 2	
404	How long did the nurse (or other staff) talk to you during the HIV counseling? RECORD TIME IN MINUTES	Time_____	-	
405	Is there anything you did not like during the discussion about HIV/AIDS?	Yes No	1 2	
406	Given that HIV testing is offered at this Hospital, if you have a friend or a sister who is pregnant, would you refer her to this hospital?	Yes No	1 2	
407	If yes to 507, why?	Good handling Quality of the service Free charge	1 2 3	
408	If no to 507, why not?	Health care provider doesn't respect clients Poor service shortage senior health care worker	1 2 3	
409	Would you come back to this clinic for your care?	Yes No	1 2	
410	If yes to 510, why?	It is nearest to me No delay here The Service quality so good	1 2 3	
411	If no to 510, why not?	Too far to me Long waiting time Poor healthcare worker approach	1 2 3	
412	Was the provider friendly to you?	Yes No	1 2	

2- መጠይቆችና እና የማወያያ ነጥቦች በአማርኛ

ትዕዛዝ

ይህ መጠይቅ በ5 ንዑስ ክፍል የተከፈለ ሰሆን 51 ጥያቄዎች አሉት፡፡ ጥያቄዎች ከመጀመራችው በፊት የስምምነት መግለጫ ይገኛል፡፡ ይህን መጠይቅ ለመረጃ መሰብሰብያነት ከመጠቀም በፊት ሁሉም ገፃችና ጥያቄዎች መኖራችውን ያረጋግጡ፡፡ መረጃ ለመሰብሰብ በቅድሚያ የስምምነት መግለጫውን ለመረጃ ሰጪ በጥሞና አንብበው መስማማታችውን በፊርማ ያረጋግጡ፡፡ ለእያንዳንዱ ጥያቄ መረጃ ሰጪ የሚሰጡትን መልስ በመልስ ረድፍ እና በጥያቄው አካያ የሚገኘውን ቁጥር ያክብቡ፡፡ በእያንዳንዱ ክፍለ ጊዜ መጠይቅ ሲጀመር እና ሲጠናቀቅ ሰዓቱን ይፃፉ፡፡ ሲጨርሱ አሚልተው መመዝገብን በማረጋገጥ ይፈርሙ፡፡

የስምምነት መግለጫ

ስሜ .._____ይባላል፡፡ በጅማ ዩኒቨርስቲ የህክ/የጎ/ሰብ ጤና አጠባበቅ ኮሌጅ የሰው ሃብት አስተዳደር ተምህርት ክፍል በሚያካሂደው ጥናት ውስጥ በጊዜያዊ መራጃ ሰብሳቢነት በመስራት ላይ እገኛለሁ፡፡ የጥናቱ ዓላማ የኤች.አይ.ቪ ደም ምርመራና ምክር አገልግሎት ላይ የነፍሰ ጡር እናቶች አጠቃቀም ለማወቅ ነው፡፡ በጥናቱ በርካታ ነፍሰ ጡሮችን ማሳተፍ አስፈላጊ በመሆኑ በተለያዩ ቦታዎች የመረጃ ስብሰባው በመከናወን ላይ ነው፡፡

በዚህ ጥናት ስለ ግል ሕይወት፤ስለ ቤተሰብ፤ ስለ አከባቢ፤ ስለ ኤች.አይ.ቪ እና የመሳሰሉት ጉዳዮች ይጠየቃሉ፡፡እንዳድ ጊዜ ለራስ የማይመች ጥያቄ ሊጠየቁ ይችላሉ፡፡ የእራስን ማንነት የሚያመለክት መረጃ ፈፅሞ አይመዘገብም፡፡የሚሰበሰበው መረጃ ተጠቃልሎ በዋናው አጥኝ በጥንቃቄ የሚቀመጥ ሲሆን ጥናቱ ሲጠናቀቅ ማንም ሰው በማያገኘው ሁኔታ ይወገዳል፡፡ መጠየቁ የሚካሄደው በፍፁም ፍቃደኝነት ላይ የተመሰረተ ነው፡፡

ከዚህ ጥናት የሚገኘው ውጤት ለወደፊቱ ፕሮግራሙን የተሸለ ለማድረግ ይጠቅማል፡፡ በአጠቃላይ መጠይቁ ከ 15-20 ደቂቃ ይወስዳል፡፡ በትፅግስትና በጥሞና አዳምጠው ለመመለስ የሚያደርጉትን ጥረት እያደነቅን በቅድሚያ ከልብ እናመሰግናለን፡፡

በጥናቱ ለመሳተፍ ፈቃደኛ ኖት? ፈቃደኛ ካልሆኑ አመስግነሽ/ህ አሰናብች/ት፡፡ ፈቃደኛ ከሆኑ ቀጥይ/ል፡፡ ፈቃደኝነታቸውን ያረጋገጠች/ው ጠያቂ ስም_____

__ፊርማ_____

ንዑስ ክፍል 00) አጠቃላይ መነሻ ሀሳብ

ተ.ቁ	መጠይቅ	ዝርዝር መልስ	የመልስ መስያ	ደስፍ
001	የመጠይቅ መስያ ቁጥር	ሰሜን ዕዝ ሪፈራል ሆ/ል	1	
002	መጠየቁ የተካሄደበት ቦታ	ጦ/ሃይ/ሪ/ማሰ/ቤሳ እናቶችና ሕፃናቶች ኬ/ቲም	2	
		አየር ሃይል ሪፈራል ሆ/ል	3	
		ምዕራብ ዕዝ ሪፈራል ሆ/ል	4	
		ምስራቅ ዕዝ ሪፈራል ሆ/ል	5	
003	መጠየቁ የተጀመረበት ጊዜ .....ሰዓት.....ደቂቃ የተጠናቀቀበት ጊዜ .....ሰዓት.....ደቂቃ			

ንዑስ ክፍል አንድ አጠቃላይ መረጃ

ተ.ቁ	መጠይቅ	ዝርዝር መልስ	የመልስ መስያ	ደስፍ
101	የመኖሪያ አከባቢ	ከተማ	1	
		ገጠር	2	
102	እዚህ ተቁም ስመድረስ የሚወስድቦ ሰዓት	-----	ሰዓት..... ደቂቃ.....	
103	ዕድሜ ስንት ነው?	በቁጥር		
104	ብሔርዎ/ብሔረሰብዎ ምንድን ነው	አማራ..... ኦሮሞ..... ትግሬይ..... ሌላ(ይጠቀስ).....	1 2 3 66	
105	ሐይማኖትዎ ምንድነ ነው?	ኦርቶዶክስ..... ሞስሊም ..... ካቶሊክ..... ፕሮቴስታንት..... ሌላ (ይገለፅ).....	1 2 3 4 66	
106	በአሁኑ ሰዓት የጋብቻ ሁኔታ እንዴት ነው?	ባለትዳር..... በፍፁም አግብቼ አላዉቅም..... ከባለቤቴ ጋር ተለያይተን ነው የምንኖረው ግን አልተፋታንም..... ተፋትቻለሁ..... ባለቤቴ ከዚህ አለም በሞት ተለይቷል..... ለዚህ ጥያቄ መልስ መስጠት አልፈልግም...	1 2 3 4 5 99	
107	ባለትዳር ነኝ ከሆነ መልሱ፣አሁን በአንድላይ ነው የምትኖሩት?	አዎ..... አይደለም.....	1 2	

108	እርሶ ያጠናቀቁት ከፍተኛ ትምህርተ ደረጃ ስንት ነው	ማንበብና መፃፍ አልችልም..... ማንበብና መፃፍ ብቻ እችላለሁ..... ከ1ኛ-6ኛ ክፍል ተምሬአለሁ..... ከ7ኛ -12ኛ ክፍል ተምሬአለሁ..... ከፍተኛ ትምህርት ተምሬአለሁ.....	1 2 3 4 5	
109	መደባኛ ስራዎ ምንድን ነው?	ሲቪል የመንግስት ሰራተኛ.....	1	
		ወታደር	2	
		የቤት እመቤት.....	3	

ንዑስ ክፍል- ሁለት፡ ስለ ኤች.አይ.ቪ እውቀትና አሳቤ እና እምናት(አመለካከት)

ተ.ቁ	መጠይቅ	ዝርዝር መልስ	የመልስ መለያ	ይለፍ
201	ስለ ኤች.አይ.ቪ ወይም ኤድስ በሽታ ያውቃሉ?	አዎን	1	
		ሰምቼ አላውቅም	2	
		እርግጠኛ አይደለሁም	3	
		ለዚህ ጥያቄ መልስ መስጠት አልፈልግም	99	
202	የኤች.አይ.ቪ ህዋስ ከሰው ወደ ሰው መተላለፊያ መንገዶችን ያዉቃሉ	አዎ.....	1 →	203
		አላቅም.....	2	
		መልስ አልተሰጠም.....	88	
203	መልስ አዎ ከሆነ የኤች.አይ.ቪ ህዋስ ከሰው ወደ ሰው እንዴት እነደሚተላለፍ ሊነግሩኝ ይችላሉ? (ከአንድ በላይ መልስ መስጠት ይቻላል ግን መልሱ አይነበብ)	በግብረ ስጋ ግንኙነት	1	
		በተበከለ ደም	2	
		ለለታም ነገሮችን በመጋራት	3	
		ከእናት ወደ ልጅ	4	
		ባልተቀቀለ መርፌ በመወጋት	5	
		ሌላ (ይገለፅ)_____	66	
204	ኤች.አይ.ቪ/ኤድስ ጨርሶ የሚድን ነውን;	አዎ.....	1	
		አይደለም.....	2	
		አላውቅም.....	3	
		መልስ አልተሰጠም.....	88	
205	ኤች.አይ.ቪ ከእናት ወደ ልጅ ይተላለፋል?	አዎ	1	
		አይተላለፍም.....	2	
		አላዉቅም.....	3	
		መልስ አልተሰጠም.....	88	
206	ኤች.አይ.ቪ በደምዋ ያለባት ነብሰጡር እናት በምን ወቅት ለልጅዋ ቫይረሱን ታስተላልፋለች ብለው ያስባሉ?	በእርግዝና ወቅት.	1	
		በወሊድ ወቅት.....	2	
		ጡት በማጥባት ወቅት.....	3	
		መልስ አልተሰጠም.....	88	

207	ኤች.አይ.ቪ ከእናት ወደ ልጅ እንዳይተላለፍ የሚያደርግ መንገድ መኖሩን ያውቃሉ?	አዎ..... የለም..... አላዉቅም.....	1 2 3	
208	የኤች.አይ.ቪ ህዋስ ወደ ጽንስ እንዳይተላለፍ ለማድረግ ምን መደረግ አለበት	በዘመናዊ ህክምና መድሃኒት በመውሰድ..... ጡት ማጥባት ማቆም..... ሌላ(ይጠቀስ)_____ _____	1 2 66	
209	እያንዳንዷ ነብሰ ጡር ሴት የኤች.አይ.ቪ ደም ምርመራ ታድርግ የሚለውን ሃሳብ ይደግፋሉ?	አዎ..... አልደግፍም..... እርግጣኛ አይደለሁም ..... አላዉቅም.....	1 2 3 4	
210	አብዛኛዉ ጊዜ እናቶች የእርግዝና ክትትል ለማድረግ ወደ ጤና ድርጅቶች የማይሄዱት ለምንድን ነው	በግንዛቤ ማነስ..... መጉላላት እንዳይደረስባቸው..... ኤች.አይ.ቪ. ጋር እንደሚኖሩ ቢታወቅ ሊደርስባቸው የሚችለውን ችግር በመፍራት..... የጤና ድርጅቱ ርቀት..... ከልማድና ከእምነት አንፃር..... አላዉቅም.....	1 2 3 4 5 6	
211	የኤች.አይ.ቪ/ቫይረስ ሊይዝኝ ይችላል ብለው ያስባሉ?	አዎ..... አላስብም/የለም..... አላዉቅም..... መልስ አልተሰጠም.....	1 2 3 88	
212	በቫይረሱ የመያዝ ዕድልዎ ምን ያህል ነው?	መካከለኛ..... ከፍተኛ..... አላውቅም..... መልስ አልተሰጠም.....	1 2 3 88	
213	የጥያቄ 211 መልስ አዎ ከሆነ ምክንያቱ ምንድን ነው?	ያለኮንዶም የግብረ ስጋ ግንኙነት ስለፈፀም..... ኩኤች.አይ.ቪ ፖዘቲቭ ከሆነ ሰው ጋር የግብረ ስጋ ግንኙነት ስለፈፀምኩ..... ብዙ የወሲብ ጓደኞች ስለነበሩ..... ሌላ ሰው በተወጋበት መርፌ ስለተወጋሁ.....	1 2 3 4	

ክፍል ሦስት፡ ስለ ኤች.አይ.ቪ የምክርና የደም ምርመራ				
301	ይህ የቅድመ ወሲድ ክትትልዎ ስንተኛ ጊዜዎ ነዉ?	መጀመሪያ..... ድጋሚ.....	1 2	
302	በቅድመ ወሲድ ወቅት የኤች.አይ.ቪ ደም ምርመራ ማድረግ ያለው ጠቄሜታ ተገልፃሎት ያውቃል?	አዎ..... አልተገለፀኝም.....	1 2	
303	የኤች.አይ.ቪ የምክር አገልግሎትና የደም ምርመራ ለነፍሰ ጡር ሴት ጠቃሚ ነው ብለው ያስባሉ?	አዎ..... አላስብም..... አላውቅም.....	1 2 3	
304	የኤች.አይ.ቪ ምክርና ደም ምርመራ አገልግሎት አድርገው ያውቃሉ ?	አዎ..... አልተመረመርኩም.....	1 2	
305	በአሁኑ ሰዓት የኤች.አይ.ቪ ምክርና ደም ምርመራ አድርገዋል?	አዎ..... አላደረኩም.....	1 2	
306	ውጤቱን አትንገረኝ ግን የምክር አገልግሎት አግኝተው ከሆነ ተመረመሩ?	አዎ..... አልተመረመርኩም.....	1 2	
307	ለተራ ቁጥር 306 መልሶ አዎ ከሆነ ውጤቱን ለእኔ አይንገረኝ ግን ውጤትዎን ለራስዎ አወቀዋል?	አዎ..... አላወኩም.....	1 2	
308	ለተራ ቁጥር 307 መልሶ አዎ ከሆነ የድህረ-ኤች.አይ.ቪ ምርመራ ምክር አገኝቷል?	አዎ..... አላወኩም.....	1 2	
309	ለተራ ቁጥር 307 መልሶ አላውቅም ከሆነ ምክንያትዎ ምንድን ነው?	ኤች.አይ.ቪ ለብሽ ብባል እራሴን መግዛት እንዳያቅተኝ ባለቤቴና ሌሎች ቤተሰቦቼ እንዳያገሉኝ ስለፈራሁ..... የለከባብዬ ሰዎች እንዳያገሉኝ ስለፈራሁ..... ሌላ(ይገለፅ)_____ _____	1 2 3 66	
310	የትዳር አጋርዎ/የፍቅር ጓደኛዎ ስድጋፍ ፣እንክብካቤ እና ህክምና አገልግሎት ሪፈር ተብለዋል?	አዎ..... አልተባለም..... አላወኩም	1 2 3	
311	በዚህ እርግዝናሽ የት ነው ለመውለድ ያቀድሽው?	ከቤት በልምድ አዋላጅ አማካኝነት..... በዚህ ህክምና ተቋም..... በሌላ ህክምና ተቋም..... ገና አልወሰንኩም..... ሌላ/ይጠቀስ/	1 2 3 4 66	

ንዑስ ክፍል አራት ፡ የጤና አገልግሎት በተመለከተ				
ተ.ቁ	መጠይቅ	ዝርዝር መልስ	የመልስ መስያ	ይለፍ
401	የቅድመ ወሊድ ምርመራ ለማግኘት የወሰደበት ጊዜ? ጊዜው በደቂቃ ይመዝገብ	ጊዜ_____	-	
402	የቅድመ ወሊድ ምርመራ ለማግኘት የወሰደበት ጊዜን እንዴት ይገመግሙታል?	ረጅም ጊዜ ነው ..... ተመጣጣኝ ነው..... በጣ ም ያጥራል	1 2 3	
403	በቅድመ ወሊድ የምርመረ ክፍል ሲደርሱ የጤና ባለሞያዎቹ ለኤች.አይ.ቪ. ደም ምርመራ እንዲያደርጉ ይጋብዛሉ?	አዎ ..... አያደርጉም	1 2	
404	የሆስታሉ ጤና ባለሞያዎች ምን ያህል ጊዜ ወሰደውለኤች.አይ.ቪ. ደም ምርመራ እንዲያደርጉ የምክር አገልግሎት ይሰጣሉ? ጊዜው በደቂቃ ይመዝገብ	ጊዜ_____	-	
405	የሆስታሉ ጤና ባለሞያዎች ለኤች.አይ.ቪ. ደም ምርመራ እንዲያደርጉ የምክር አገልግሎት በሚያወያዩበት ወቅት ደስ ያላሎት ነገር ነበር?	አዎ ..... የለም	1 2	
407	በዚህ ሆስፒታል ለኤች.አይ.ቪ. ደም ምርመራና ምክር አገልግሎት እንዲያደርጉ ጓደኛዎን አልያም ነብሰ ጡር ቤተሰቦን ይመክራሉ?	አዎ የለም	1 2	
408	ለተራ ቁጥር 407 መልስዎ አዎ ከሆነ ለምን?	ጥሩ አቀባበል ቀልጣፋ አገልግሎት	1 2	
409	ለተራ ቁጥር 407 መልስዎ የለም ከሆነ ለምን?	ጤና ተቋሙ ይርቃል ቶሎ አገልግሎት አይገኝም የጤና ሙያዊች እጥረት አለ	1 2 3	
410	ወደፊት ተመልሰው አገልግሎት ለማግኘት የመምጣት ሀሳብ አሎት?	አዎ..... የለም	1 2	
411	የጤና ባለሙያዎች ነፍሰጡር እናቶችን ያከብራሉ?	አዎ ..... የለም	1 2	

Informed Consent Form for the In-depth interview

I want to thank you for taking the time to meet with me today.

My name is _____ and I would like to talk to you about your experiences participating in the ANC PMTCT service. Specifically, we are assessing uptake of counseling and testing among pregnant woman at defense health facilities in order to capture lessons that can be used in future interventions.

The interview should take less than an hour. I will be taking some notes during the session, I can't possibly write fast enough to get it all down.

All responses will be kept confidential. Our report does not identify you as the respondent. Remember, you don't have to talk about anything you don't want to and you may end the interview at any time.

Are there any questions about what I have just explained?

Are you willing to participate in this interview?

_____	_____	_____
Interviewee	Interviewer	Date

Section 3: **In-depth interview guide: -** Among ANC PMTCT service providers will be covering a range of topics including:-

1. To what extent did women do not visit ANC while pregnant? Why? What could be the reason?
2. Do all tested pregnant women taking their test result? If not, what do think the reason?
3. What are the factors that influence utilization of HIV counseling and testing? Please explain.
4. What measures should be taken to scale up the program?
5. Any values of outreach programs focused on pregnant women? Could it give opportunities outside antenatal setting?

We would like to thank you in advance!!

ስጤና ሙያተኛች/ካውንስሰሮች/ የተዘጋጀ የቃስ መጠይቅ መወያያ ነጥብ

<u>የስምምነት መግለጫ</u>

ፈቃደኝነታችውን ያረጋገጠች/ው ጠያቂ ስም_____ፊርማ_____

በቅድሚያ ጊዜአችሁን መድባችሁ ቃለ መጠይቁን ለማካሄድ ስለፈቀዳችሁ በቅድሚያ ማመስገን እፈልጋለሁ፡፡

ስሜ ..._____ይባላል፡፡በቅድሚያ ልነግርህ/ዎት የሚገባ ፣በቅድመ ወሊድ ክትትል እና ከእናት ወደ ልጅ ኤች.አይ.ቪ እንዳይተላለፍ ለመከላከል በሚሰጠው አገልግሎት ዙሪያ የእርሶን ልምድና ተሞኩሮ ዙሪያ እንደምንነጋገር ነው፡፡ በተለይ በመከላከያ ጤና ተቋማት አሁን ያለውን ለነብሰ ጡር እናቶች የሚሰጠውን የኤች.አይ.ቪ የምክርና የደም ምርመራ አገልግሎት የዳሰሳ ጥናት በማካሄድ ከጥናቱ የሚገኘው ውጤት ላይ በመመርኮዝ ወደፊት የመፍትሄ አርምጃ ለመውሰድ እንዲያስችል የበኩሉን አስተዋፅኦ ያደርጋል፡፡

ቃለ መጠይቁ ከአንድ ሰዓት በታች የሚወስድ ነዉ፡፡ በቆይታችን በማስታወሻ ደብተሬ አስፈላጊ የሆኑ ሀሳቦችን እይዛለሁ፡፡ ሁሉም ሃሳቦች በሚስጢር የሚያዙ ናቸው፡፡ ሪፖርታችን የሰጣችሁትን ሀሳቦችን እንጂ ምላሽ ሰጪዎችን የማይጠቅስ መሆኑ ሚስጥርነቱ የበለጠ የተጠበቀ ያደርገዋል፡፡ በቆይታችን በማንኛውም ሰዓት መግለፅ የማትፈልገው ሀሳብ አለመግለፅ እና ውይይቱንም ጨርሶ እስከማቋረጥ መሄድ ይቻላል፡፡

መብራራት ያለበት ጥያቄ አለህ/ሽ?

በቃለ መጠይቁ ለመሳተፍ ፍቃደኛ ነህ/ሽ?

_____ _____ _____

ተሳታፊ ቃለ መጠይቅ አድራጊ ቀን

<u>የቃለ መጠይቅ መወያያ ነጥብ መመሪያ</u>

1. **በሆስፒታላችሁ በእርግዝና ወቅት የቅድመ ወሊድ ክትትል የሚያደርጉ ሴቶች በሚፈለገው መጠን ያደርጋሉ?**
2. **ሁሉም የኤች.አይ.ቪ ደም ምርመራ ያደረጉ ነብሰ-ጡር እናቶች ውጤታቸውን ይስዳሉ ወይ?**
3. **ለነብሰ ጡር እናቶች የሚሰጠውን የኤች.አይ.ቪ ምክርና የደም ምርመራ አገልግሎት ለመስጠት ያሉ እንቅፋቶች ምን ምን ናቸው? በምን መልክ እየፈታችሁ እንደመጣችሁ ብትገልፁልን?**
4. **ወደፊት አገልግሎቱን ለማሻሻል ወደፊት መደረግ አለበት መፍትሄ የምትለው/የምትይው ምንድን ነው?**
5. **በቅድመ ወሊድ ክትትል ክፍል የሚሰጠው የኤች.አይ.ቪ ምክርና ደም ምርመራ እንደተጠበቀ በቤት ለቤት አገልግሎት እንደ አማራጭ ሊሆን ይችላል?**

3- ASSURANCE & APPROVAL

Assurance of principal investigator

The undersigned agrees to accept responsibility for the scientific ethical and technical conduct of the research project and for provision of required progress reports as per terms and conditions of the research publications office in effect at the time of Grant is forwarded as the result of this application.

Name of the student: **AMAZE ABEREHA**

Date_____ Signature_____

Approval of examiner

1. Name of the internal examiner:

   Date_____ Signature_____

Approval of advisors

2. Name of the first advisor:

   Date_____ Signature_____

3. Name of the first advisor:

   Date_____ Signature_____