

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCE
SCHOOL OF PUBLIC HEALTH

Assessment of factors associated with women's informed choice for HIV testing under Opt-out approach among antenatal attendees in Ghimbi Town, Western Ethiopia.

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List of acronyms

AIDS:	Acquired Immunodeficiency Syndrome
ANC:	Antenatal Care
ARV:	Antiretroviral Drugs
CDC:	Centers for Disease Control and Prevention
EDHS:	Ethiopian Demographic Health Survey
HCT:	HIV Counseling and Testing
HIV:	Human Immunodeficiency Virus
MTCT:	Mother -to- Child Transmission of HIV
PICT:	Provider Initiated Counseling and Testing
PMTCT:	Prevention of Mother-to- Child Transmissions of HIV
SPSS:	Statistical Package for Social Sciences
UNAIDS:	Joint United Nations Programme on HIV/AIDS
UNICEF:	United Nations Children Fund
WHO:	World Health Organization

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Abstract

Introduction: Under routine antenatal HIV testing and counseling or an “opt-out” approach all antenatal attendees are tested for HIV apart from those who actively decline the test. There are concerns that refusal of the test could be difficult for some women given the substantial social status that health providers hold in many societies. However, little is known about pregnant women’s ability and associated factors to make informed choice for HIV testing under routine antenatal HIV testing in Ethiopia and particularly the selected study area.

Objective: To assess women’s ability to make informed choice about HIV testing and associated factors under opt-out approach among pregnant women attending antenatal care at government health institutions in Ghimbi town.

Methodology: Health institution based cross-sectional study was conducted among **252** pregnant women attending antenatal care and known to be tested for HIV at government health facilities in Ghimbi Town from March 15 to May 9, 2013. Pregnant women were interviewed **after giving blood for HIV testing but before accepting test result** using pretested structured interviewer administered questionnaire. Descriptive statistics and multiple logistic regressions were carried out using SPSS version 17. Qualitative method was used to explore women’s experience on HIV testing and counseling with focus on consent for HIV testing to clarify the results of quantitative analysis.

Results: Only 59.9% of the women described acceptance of HIV testing as their own personal decision and **53.2% felt that they could not able to decline HIV testing**. When adjusted for other factors; being asked consent (OR = 12.184, 95% CI: 6.123, 24.243), knowing that antenatal HIV testing is offered for the purpose of PMTCT (OR=3.461, 95% CI: 1.523, 7.864), urban residence (OR=2.442, 95% CI: 1.251, 4.766), and knowing that antenatal HIV testing is optional (OR=2.899, 95% CI: 1.222, 6.876) were associated with the perceived ability do decline HIV testing/make informed choice to decline HIV testing.

Conclusion and recommendation: Women are tested in the expense of their right to make informed choice for HIV testing that contradicts with the basic principles of HIV testing. Providing the minimum components of pretest counseling is important to protect the autonomy of women and to ensure fully informed consent for HIV testing and women should be given a chance to decide about the test.

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Key words: Consent, pretest information/counseling, routine antenatal HIV testing, informed choice, PMTCT

1. Introduction

HIV/AIDS is a critical development issue that affects the lives of millions of people (1). In 2010, 34 million people were living with HIV globally, including 3.4 million children (<15 year) and an estimated 1.4 pregnant women. In sub-Saharan, women comprised 59% of the adults living with HIV and more than 90% of children (<15years) living with HIV resided in the region (2, 3).

In 2011, 92% of pregnant women living with HIV and more than 90% of children who acquired HIV in 2011 resided in sub-Saharan Africa. The coverage of services to prevent mother-to-child transmission (PMTCT) of HIV in the region reached 59% but PMTCT coverage is reported to be less than 25% in seven African countries including Ethiopia (4).

In 2011, in Ethiopia, only 24% of the estimated eligible HIV positive pregnant women received antiretroviral medicines to reduce the risk of mother-to-child transmission (MTCT) and less than a quarter of newborns to HIV positive women received prophylaxis (5)

HIV testing and counseling (HTC) is a critical gateway and an essential element in expanding access to HIV prevention, treatment, and ultimately achieving universal access. Providing HTC when mothers visit antenatal care (ANC) services is a critical opportunity for both pregnant women, their partners to receive HTC and hence PMTCT of HIV (2).

WHO and UNAIDS recommends that all women attending ANC routinely offered HTC with clear opportunity to decline the test that involves testing all antenatal attendees for HIV, apart from those who decline the test to achieve high coverage of HIV testing and PMTCT while it still protects autonomy (6-8).

According to the Ethiopian PMTCT guideline, pregnant women should be offered HIV testing as a routine component of maternal health care and be informed that she has the right to say “no” (9).

Providers need to ensure that patients understand the nature and consequences of HIV test as HIV infection is a lifelong condition, typically requires decades of management with potentially toxic drugs, and results in social and economic exclusion unparalleled by other current health conditions (10). Pretest counseling/information is vital for pregnant woman to make informed decision about HIV testing as she must take into account her own health and the health of her baby, need to know why HIV testing is being offered and the potential social implications of positive test result (11).

A critical ethical foundation to HIV testing is the ability of patients to provide informed consent (12). There are concerns that patients are coerced at the point of testing particularly in resource-poor countries and refusal of the test (opt-out) could be difficult for some women given the substantial social status that health providers hold in many societies, the belief that a doctor might react negatively to refusal that might negatively impact on other health services and the perception that HIV testing is institutionally sanctioned (11-14). It has been reported that pregnant women who fail to make an informed choice about HIV testing are less likely to come back for their test results (15).

Therefore, understanding women's experiences of consenting for HIV testing would help to formulate feasible and effective strategies to support women's informed decision making towards HIV testing and ensure that pregnant women infected with HIV gain access to HIV treatment services (16). However, little is known about pregnant women's ability to make informed choice for HIV testing in Ethiopia and particularly the selected study area. Thus, this study is aimed to assess pregnant women's informed choice for HIV testing and associated factors at public health facilities in Ghimbi Town.

2. Literature review

2.1. Overview of HIV testing and counseling approaches

HTC is the critical entry-point for engagement into treatment and care as well as for primary and secondary prevention efforts (17, 18). Client-initiated HIV testing approaches (also called voluntary HIV counseling and testing) have been the primary model for providing HIV testing and counseling. This model of HIV testing involves individuals actively seeking HIV testing and counseling (19).

Despite the scaling-up of Voluntary Counseling and Testing (VCT), uptake of VCT services was relatively limited particularly in resource poor settings. This caused the international organizations to focus on increasing the accessibility of testing and making HIV testing a more ‘routine’ part of general medical care (20). The ‘routine’ offer of HIV testing in health facilities, also termed Provider Initiated Testing and Counseling (PITC) is recommended by health care to persons attending health care facility as a standard component of medical care (19).

Opt-in or Opt-out approach could be employed in providing PITC in health facilities. With “opt-out” approach, individuals must specifically decline the HIV test after receiving pretest information if they do not want the test to be performed (17). But, irrespective of the approaches, HIV testing should be voluntary (9).

PITC using the opt-out approach is recommended for all clients seen within the context of maternal care. This means that HIV testing is offered as a routine component of standard maternal health care. Compared with other approaches, routine PITC using the opt-out approach for all pregnant women has resulted in greater acceptability (9). According to the latest data, significant progress has been made in delivering PMTCT services in low- and middle-income countries. One important reason for the improving coverage is that HIV testing among pregnant women is increasing with the expansion of PITC in antenatal clinics, labour and delivery centres, and other health-care settings (21).

In 2007, Ethiopian government issued revised PMTCT guideline that promotes integrated and “Opt-Out” approaches as the most appropriate strategy for expanding national access and sustainability of PMTCT services in the country. According to the guideline, pregnant women should be informed about the benefits of HIV testing and offered testing as a routine component of maternal health care and be informed that she has the right to say “no” (to opt out) (9).

WHO suggests that “opt-out” approaches might be acceptable if people to be tested have a clear and informed opportunity to decline the test, and informed consent, counseling and confidentiality must be ensured. Obtaining truly informed consent involves three crucial elements: (1) providing pre-test information on the purpose of testing and on treatment and support available following the result; (2) ensuring understanding by the person getting tested; and (3) respecting the individual’s autonomy (17, 22).

The shift in HIV testing approach from client-initiated to routine (opt-out) has raised a debate as to how best increase the uptake of HIV testing while at the same time; protect individual rights to voluntary consent for HIV testing (17). Some doubt whether informed consent can be ensured in the context of routinely offered HIV testing and others argue that refusal of the test could be difficult for some women (14, 23) and streamlined pretest procedures might weaken the quality of counseling (11). There are reports that people are routinely tested in health care settings without counseling and informed consent and the confidentiality of results is not assured (24).

There is concern that pregnant women who fail to make an informed choice about HIV testing are less likely to come back for their test results (15). In 2010/2011, a dropout of 60% was observed from identification to provision of ARV prophylaxis to HIV positive pregnant women in Ethiopia (25).

2.2. Pregnant women's informed choice for HIV testing and associated factors

There are indications that nearly everywhere clients are sometimes tested without their knowledge. Even given a choice, clients do not always feel free to decline the offer of an HIV test. Because they are used to agreeing to health professionals' requests; think that agreeing to a test will improve the care they receive, do not think they can decline, or have a diffuse sense that refusing would have adverse consequences (26). Some argue that routine HIV testing strengthen women's ability to make autonomous decision about their own health without waiting permission from their husband or family (27).

Studies from sub-Saharan Africa have shown that clients were not aware of possibility of opting out and are unable to refuse HIV test under routine HIV testing. For example, a population based study conducted in Botswana to assess knowledge and attitude toward routine testing, revealed that 68% of individuals who were tested for HIV under a national policy of PITC believed that they were not able to refuse the test when it was offered (28). But the study conducted in Upper Region of Ghana revealed that majority of the respondents reported that the test was offered to them in a manner in which they could have refused the test (29).

A study conducted in three African countries has shown that informants expressed frustration related to their experienced inability to 'opt-out' or decline from the provider-initiated HIV testing services associated with the lack of counseling. Similar study revealed that women were taken by surprise and panicked when they understood that they were to be tested for HIV (30).

A study conducted in South Africa among women who had been tested for HIV revealed that, 52% felt they had made an informed choice, whereas 28% felt that their choice had been "less clear", and 20% felt their choice had been compromised (31).

Another qualitative study from Malawi has shown that only 4 of the 18 women tested stated that refusing the offer of a test was an option and believed that women could still receive services if they opted out of testing, however, the majority of respondents perceived that there was no option to refuse testing (32).

A qualitative cross-sectional survey conducted in central London revealed that of 26 women accepted HIV testing, only half of them (13) described their acceptance as of their own personal choice (14).

Studies have found that women feel PITC as an offer they cannot refuse, considers HIV testing as a precondition for receiving care and women thought that prenatal HIV testing should be mandatory (32, 33). For example, a study conducted in rural Kenya indicated that 83% of the women perceived testing as a mandatory part of ANC services rather than as a service independent of ANC that could be attributed to unclear delivery of pre-test information (34).

A study conducted in Turkey that involved both pregnant women and ANC providers has shown that 44% of the pregnant women thought that prenatal HIV testing should be mandatory, and 84% of the health care providers thought it should be performed routinely or be mandatory (33).

A study conducted in Toronto among women in postpartum wards has shown that an estimated 30% did not believe that they had been given an option to decline the test and a significant number (7%) of women were not offered testing or in some cases were tested without their consent (35).

A study conducted at public health facilities in Addis Ababa have shown that, majority (93.12%) of the clients reported that they were requested to have HIV blood test (36). But another study by same authors conducted in 2009 at public health facilities in Addis Ababa showed that a quarter of clients were not asked to freely consent or dissent for HIV testing (37).

A mixed-method study conducted in four African countries (Burkina Faso, Kenya, Malawi and Uganda) revealed that, overall, 92% of PMTCT testers reported being asked if they agreed to testing and 84% were informed that they had the right to refuse (38).

A study conducted in rural Zimbabwe revealed that almost all (95%) of respondents felt that the information provided during the group education was sufficient to make a decision on whether or not they should have an HIV test. However, only 50% of women who accepted HIV testing were aware of the possibility of opting for individual pre-test counseling (39).

The finding of a study done in rural districts of Kenya indicated that only 17% of the women surveyed knew that testing was optional and only 20% felt they could make an informed decision to decline HIV testing. Knowing that testing is optional, not having a stable relationship with the child's father and not having discussed HIV testing with a partner before the ANC visit were independently associated with increased likelihood of making an informed decision to decline HIV testing (34).

The study conducted in South Africa to explore women's perceptions of testing for HIV has shown that women who perceived they freely consented described positive experiences during group and individual education sessions, had thought about the issue prior to coming to the clinic and were less likely to be married/cohabitating than women in other categories (31).

A randomized controlled study from United States has shown that streamlining the pre-test counseling process with removal of requirements for prevention counseling, while associated with slightly lower knowledge, does not compromise patient decision making or satisfaction regarding HIV testing (40).

Studies so far conducted in Ethiopia focused on acceptance of antenatal HIV testing. Different studies has revealed that clients are sometimes tested for HIV without their knowledge and those who fail to make informed choice for HIV testing explain their autonomy by not coming for their test result.

Therefore, assessment of women's informed choice to decline HIV testing is important. Thus, this study is aimed to assess women's informed choice to decline HIV testing and associated factors among antenatal attendees at government health facilities in Ghimbi Town.

Conceptual framework

After review of available literatures, conceptual framework is developed to guide in the selection of variables that are associated with women's informed choice to decline HIV testing.

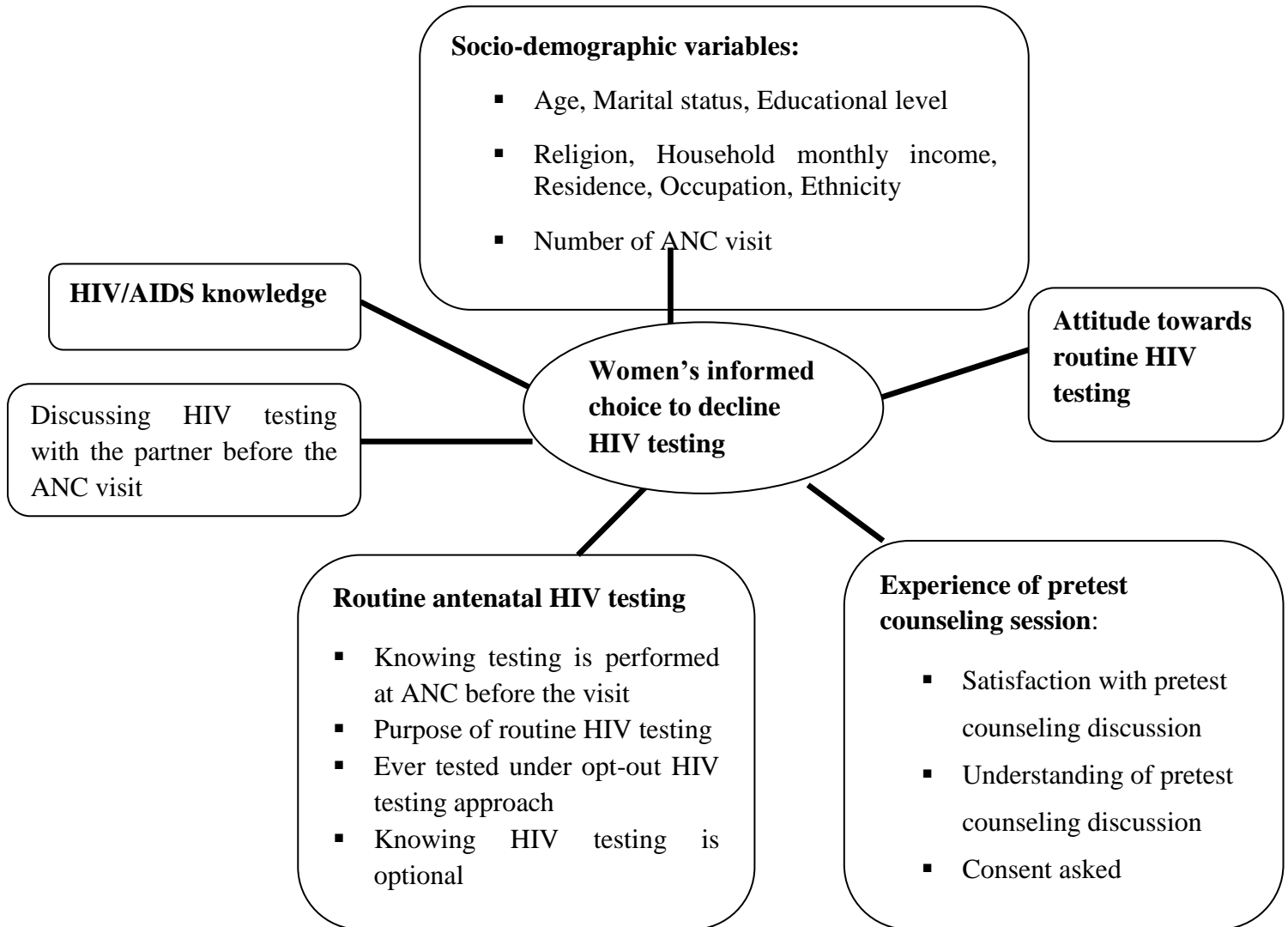


Figure 1: Hypothesized Model for Predictors of pregnant women's choice to decline HIV testing

3.3. Objectives

3.1. General objective

This study is intended to assess women's ability to make informed choice/decision about HIV testing in routine antenatal HIV testing among pregnant women attending ANC at government health institutions in Ghimbi town.

3.2. Specific objective

- To assess pregnant women's ability to make informed choice to opt-out/decline HIV testing
- To identify factors associated with pregnant women's ability to make informed choice to opt-out/decline HIV testing

4. Methods

Study design and study population

Health institution based cross-sectional study was conducted from March 15 to May 9, 2013. Both quantitative and qualitative approaches were concurrently used in this study. The qualitative data was designed to explore women's experience of HIV testing and counseling with focus on consent for HIV testing to clarify the results of quantitative analysis.

Target population: all pregnant women attending ANC and tested for HIV at government health facilities in Ghimbi town were the targeted study population for this research.

The study population was all pregnant women who were attending ANC and tested for HIV during the data collection period at government health facilities in Ghimbi town.

Study area

The study was conducted at two public health facilities (one health center and one hospital) in Ghimbi Town which is located 450 Km west from Addis Ababa. Both of these health facilities provide ANC, PITC and PMTCT. The two health facilities are the only government health institutions serving the population of the town and the surrounding.

Sample size determination

Quantitative method

Sample size was determined using a formula for single population proportion estimation and calculated using OpenEpi version 2.3 computer program/Open Source Epidemiologic Statistics for Public Health, 2009 (41). The following parameters were used to calculate sample size: absolute precision of 5%, 95% confidence interval, and 20% proportion (proportion of pregnant women making informed choice to decline HIV testing from the study conducted in Kenya (34)). This gives a sample size of 246. Adding an estimated 5% for non-response rate, totally 259 pregnant women were recruited in the study. Three variables were considered for sample size calculation (Table 1), among the variables, making informed decision to decline HIV testing was used, as it is the outcome of this research and gave the largest sample size.

Table 1: Sample size determination scenario

	Variable	Description	Value (proportion)	Sample size	Total sample size
1	Satisfaction with pretest counseling discussion	Client satisfaction is predictive of clients' decisions regarding choice of health care plans, compliance with regimens and outcome of the management	89.8%	141	149
2	Knowing that HIV testing is optional	Strongest predictor for women to make an informed decision to decline HIV testing	17%	217	228
3	Making informed decision to decline HIV testing	This is the outcome variable for this study that measures women's informed decision to decline HIV testing if they ought to	20%	246	259

Qualitative method

The number of study participants interviewed was determined by theoretical saturation of data (repetition of similar information).

Sampling procedure

Two public health institutions (one health center and one hospital) in Ghimbi town were included in the study. Both of these health facilities provide ANC, PITC and PMTCT.

Quantitative method

To get the required sample size in each health facility the total sample size was proportionally allocated based on to the average number of pregnant women who visited and tested for HIV at each health facility in the past six months. Eligible women from each health facility were recruited until the respective required sample size was achieved.

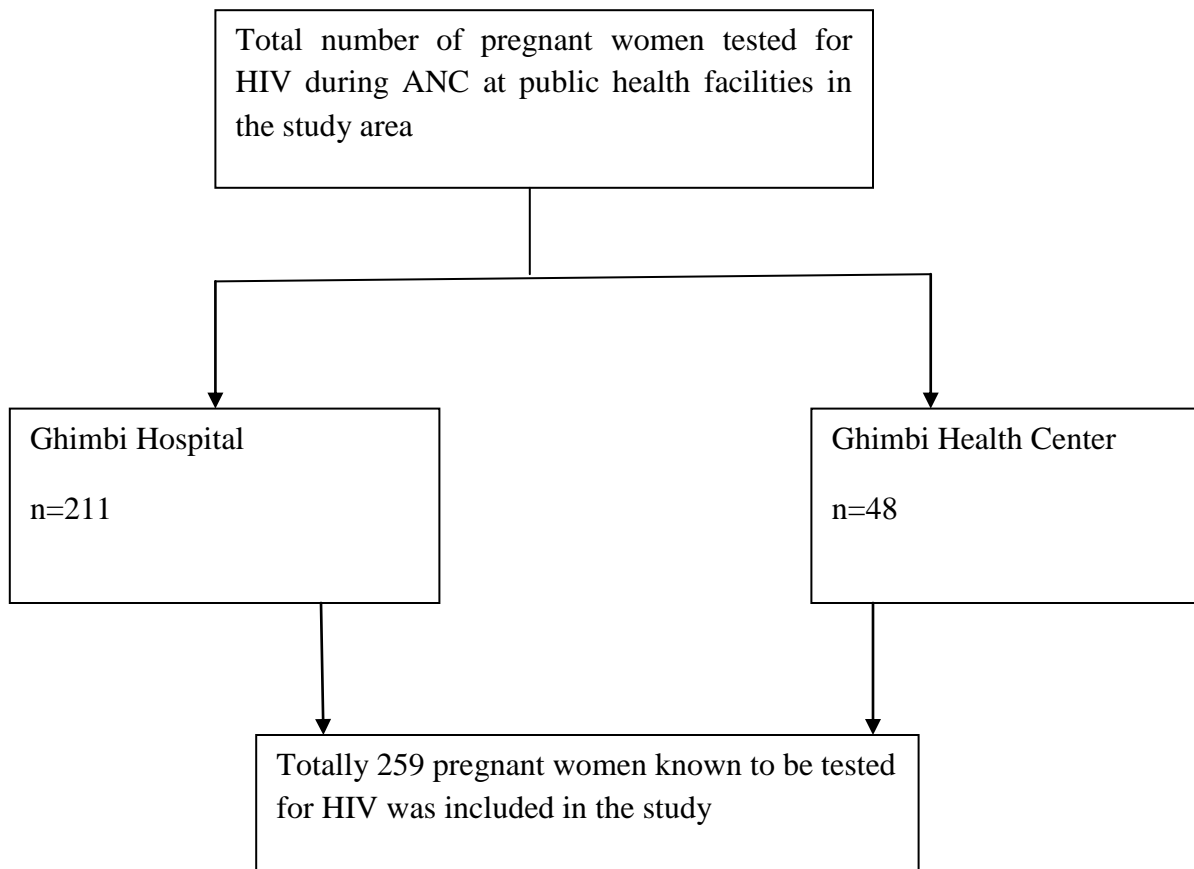


Figure 2: Sampling procedure of study participants in each health facility in Ghimbi Town, Western Ethiopia, Ghimbi, 2013

Inclusion and exclusion criteria

Inclusion criteria: All pregnant women tested for HIV during the time of data collection at the selected health institutions and willing to participate were eligible for the study.

Exclusion criteria: Women who had been tested for HIV elsewhere during current pregnancy were excluded from the study.

Qualitative method

A total of 20 clients (10 per health facility) and 3 health professionals working in ANC department and providing HTC services were interviewed. The clients were purposefully selected to consider the variety of clients in terms of experience in routine antenatal HIV testing, educational level and parity. The total number of clients involved in the in-depth interview was determined based on the saturation of the participants' response.

Data collection procedure

Quantitative method

The data was collected from March to May 2013 by interviewing eligible women after giving blood for HIV testing but before receiving test result using Afaan Oromo version of structured questionnaire.

The questionnaire consists of the following variables:

Dependent variable:

- Making informed choice to decline HIV testing

Independent variables:

- Socio-demographic variables,
- Comprehensive knowledge about HIV/AIDS,
- Attitude towards routine HIV testing,
- Awareness of MTCT,
- Knowing HIV testing is done at ANC before the visit,
- Knowing why HCT is given during pregnancy,
- Knowing prenatal HIV is optional,
- Ever tested for HIV during ANC visit previously,
- Client satisfaction with pretest counseling discussion to make decision about HIV testing,
- Understanding of pretest counseling discussion,
- Consent asked and
- Discussion with the partner about HIV testing

Measures/Operational definition

The outcome/dependent variable was pregnant women's ability to opt-out/decline HIV testing that was measured by asking 'Did you feel you could say no to get the HIV test? (Yes/No), and if not, they were asked 'what made you to get tested without your consent?' to explore reasons to accept HIV testing without consent.

Comprehensive knowledge on HIV/AIDS: was measured as ability to identify the two important prevention ways, being aware that a healthy-looking person can have HIV, and reject the two locally common misconceptions about HIV transmission (AIDS cannot be transmitted by mosquito bite and a person cannot become infected by sharing food with a person who has AIDS) (EDHS 2011) .

Client Satisfaction with pretest counseling: Client satisfaction was assessed in relation to client's perception of adequacy of information to make a decision about HIV testing adopted from the UNAIDS tool for evaluating client satisfaction with ANC-linked HCT for prevention of MTCT.

Understanding of pretest counseling discussion: this was assessed by asking clients "Have you understood the pretest counseling discussion?"

Attitude towards routine HIV testing in PMTCT: participants were asked whether they are in favour/not in favour of routine testing. The response options included yes/no. Respondents were asked if they agree or disagree (Yes/No) with specific attitudes toward routine HIV testing.

Qualitative method

The qualitative method was used to explore the experiences of women on counseling, and consent process, in general experiences related to HIV testing. Two sources of data were used including semi-structured in-depth interview of pregnant women, and health worker working in the ANC and deliver HIV testing and counseling to pregnant women. The questions used for quantitative method were used to develop the topic guide to the in-depth interview of pregnant women. The interview guide included questions related to counseling, consent process and perception of women to decline HIV testing in case they ought to. Probing questions were included in the interview guide in case the responses of the participants are superficial and/or the answers are conflicting. The health workers were involved to explore the process of delivering HIV testing and counseling. The interviews were conducted in separate room which provides privacy and each of the interviews was tape recorded. The in-depth interview was moderated by the principal investigator.

Data quality control

To maintain the data quality, data collectors and supervisors were trained for two days. Data collectors were nurses knowledgeable on the local language, and were selected from the health facilities other than the facilities where the study was conducted to avoid possible social desirability bias. Initially, the questionnaire was prepared in English. The principal investigator translated the questionnaire into Afaan Oromo and language expert translated back to English to check for validity. The questionnaire was pretested on 5% of the sample in other health facility to check for clarity and validity. The completeness and consistency of the questionnaires were checked on daily basis.

Data analysis

Quantitative data

Data were entered, cleaned and analyzed using SPSS version 17 computer statistical package. Descriptive statistics was performed to generate frequencies and proportions. The effect of each independent variable on the outcome of interest was checked using chi-square test. Independent variables with a p-value less than 0.20 at the bivariate analysis were included in the multiple logistic regression models. The selection of P-value 0.20 as level of significance was to include potential residual confounding variables in the final model. Multiple logistic regression was used to check for independent effect of the variables (controlling for confounders). Odds Ratio (OR) and 95% confidence interval was calculated. Multicollinearity was checked using the standard error (standard error > 2) of each of the covariates in the final model. The presence of interaction between the independent variables was also checked by running a model that included the interaction terms and ruled out based on the significance of the association between the interaction terms and the outcome variable. The association was deemed significant when p-value is less than 0.05 in the final model.

Qualitative data

The interviewer took field notes during interview and all interview sessions were audio recorded. After preparation of transcripts in Afaan Oromo (local language used for data collection) using hand written notes and tape recordings, the transcripts were translated into English. The transcripts were entered into the qualitative research analysis software, Open Code. Open coding was done using the software and the codes were compared for similarities and differences, and themes were developed. As part of the analysis four categories were developed that reflect the finding.

5. Ethical consideration

Ethical clearance was obtained from the Research Ethics Committee (REC) of School of Public Health; College of Health Sciences, Addis Ababa University. Women received an explanation about the purpose of the study invited to participate and asked to give oral consent. The implementation of the study at the selected health facilities were approved by Oromia Regional Health Bureau. The names of the participants were not asked to assure confidentiality. The anonymity and confidentiality of information provided by study participants was assured.

6. Dissemination of study results

The result of the study will be submitted to School of Public Health, Addis Ababa University and West Wollega Health Department, Ghimbi District Health Office and other organizations if necessary. The finding will also be presented to School of Public Health, Addis Ababa University, presented in relevant conferences and submitted for publication.

7. Results

Socio-demographic characteristics of the participants

Out of the total 259 respondents 252 completed the survey obtaining a response rate of 97.3% and the remaining 7 (2.7%) were unable to complete the interview.

Majority 141 (56%) of the participants were from rural area, all of the respondents were married, of whom 249 (98.8%) were married and living with their husband/partner. The median age of the participants were 23 and with the range of 20 (minimum 15 and maximum 35).

Concerning the educational level, majority 106 (42.1%) had attended secondary and above education followed by those who attended primary school 79 (31.3%) and who had no formal education 67 (26.6%).

Half 126 (50%) of the participants were protestants followed by Seventh Day Adventist 64 (25.4%) and Orthodox Christians 53 (21%). Regarding the ethnicity, almost all 250 (99.2%) of the respondents were Oromo. Most women were not gainfully employed and were housewife 197 (78.2) while only 35 (13.9%) were government employee.

Table 2: Socio-demographic characteristics of pregnant women tested for HIV under opt-out approach at public health facilities in Ghimbi Town, Ghimbi, 2013.

Socio-demographic variables	No. (%)	
Place of residence	Urban	111 (44)
	Rural	141 (56)
Age (Median = 23)		
	15-19	38 (15.1%)
	20-24	110 (43.7%)
	25-29	80 (31.7%)
	30-34	20 (7.9%)
	>=35	4 (1.6%)
Marital status	Married and living with spouse	249 (98.8)
	Married not living with spouse	3 (1.2)
Educational level	No formal education	65 (25.8)
	Primary	81 (32.1)
	Secondary and above	106 (42.1)
Religion	Protestant	126 (50)
	Seventh Day Adventist	64 (25.4)
	Orthodox	53 (21)
	Muslim	9 (3.6)
Ethnicity	Oromo	250 (99.2)
	Others	2 (0.8)
Current occupation	Housewife	197 (78.2)
	Government employee	35 (13.9)
	Merchant	16 (6.3)
	Others	4 (1.6)

Pregnancy history

About half 132 (52%) of the respondents had two to four pregnancies and 111 (44.4%) were primigravida and most 210 (83.3%) had their first antenatal visit while the remaining 42 (16.7%) of the participants had two and above antenatal visit during the current pregnancy.

Table 3: Pregnancy and related characteristics pregnant women tested for HIV under opt-out approach at public health facilities in Ghimbi Town, Ghimbi, 2013.

Variables	Frequency	%
Number of pregnancy (including current)		
One	111	44
Two to four	132	52.4
Above four	9	3.6
Number of ANC visit during the current pregnancy		
One	210	83.3
Two and above	42	16.7

Comprehensive knowledge about HIV/AIDS and awareness about mother to child transmission of HIV/AIDS among pregnant women tested for HIV under opt-out approach at public health facilities in Ghimbi Town, Ghimbi, 2013

Most 242 (96.8%) of the respondents know that having one sexual partner who is not infected and who has no other partner can reduce the chance of getting the AIDS virus but only 81 (32.1%) of the pregnant women had comprehensive knowledge about HIV/AIDS and more than half (54.4%) of respondents had misconception that AIDS can be transmitted by mosquito bite. A significant number 61 (23.6%) of respondents rejected that using condom at every sexual intercourse can reduce the risk of getting the AIDS virus. Majority 207 (82.1%) of the women know that HIV/AIDS can be transmitted from infected mother to her baby and all of those who knew about the transmission heard it before the current ANC visit.

Table 4: Knowledge about HIV/AIDS among pregnant women tested for HIV under opt-out approach at public health facilities in Ghimbi town, Ghimbi, 2013

Variable	Frequency	%
Those who say that:		
Having one sexual partner who is not infected & who has no other partner can reduce the chance of getting the AIDS virus	242	96.8
A healthy- looking person can have the AIDS virus	205	82
AIDS cannot be transmitted by mosquito bites	112	44.8
Consistent condom use reduces the risk of getting HIV	191	76.4
A person cannot become infected by sharing food with a person who has AIDS	221	88.4
Comprehensive knowledge about HIV/AIDS	81	32.1
Ever heard of mother to child transmission of HIV/AIDS	207	82.1

Knowledge, attitude and experience of pregnant women tested at routine antenatal HIV testing ANC unit at public health facilities in Ghimbi Town, Ghimbi, 2013

Among the respondents in this research, 218 (86.5%) women responded that they have ever heard of the routine HIV testing and 199 (79%) of the respondents knew that HIV testing is done at ANC before they came for ANC visit. A significant number 79 (31.3%) of women were not aware of the fact that HIV testing is offered to pregnant women to prevent mother to child transmission of HIV.

Majority 198 (78.6%) of the respondents knew that antenatal HIV testing is optional but a significant number 54 (21.4%) of the participants didn't know that HIV testing is optional. Of 95 women responded that they were offered HIV testing as part of ANC during their last pregnancy 91 (95.8%) said that they were tested for HIV.

Table 5: Knowledge and experience related to routine antenatal HIV among pregnant women tested for HIV at public health facilities in Ghimbi Town, Ghimbi, 2013

Variable	Frequency	%
Ever heard of routine HIV testing		
No	34	13.5
Yes	218	86.5
Aware that HIV testing is done at ANC before coming for ANC visit		
No	52	20.6%
Yes	200	79.4
Aware about the purpose of antenatal HIV testing		
No	79	31.3
Yes	173	68.7
Knew that antenatal HIV testing is optional		
No	54	21.4
Yes	198	78.6
Tested for HIV at ANC previously (n = 95)		
No	4	4.2
Yes	91	95.8

Most 242 (96%) of the participants were in favour of routine antenatal HIV testing. Regarding specific attitudes towards routine antenatal HIV testing, majority (96%) of the respondents agreed that routine antenatal HIV testing helps pregnant women to get access to ART, makes easier for ANC clients to get tested for HIV (98%), results in less discrimination of HIV positive people (68.3%) and 72.2% of the respondents disagreed with the statement that routine antenatal HIV testing cause people to avoid seeing doctor or nurse for fear of being tested. However, 91.3% believed that routine antenatal HIV testing leads to more violence against women and 31.7% of women said that routine antenatal HIV testing results in more discrimination of HIV positive people.

Table 6: Attitude towards routine antenatal HIV testing among pregnant women tested for HIV at public health facilities in Ghimbi Town, Ghimbi, 2013

Variable	Frequency	%
In favour of routine antenatal HIV testing		
Yes	242	96
No	10	4
Specific attitudes towards routine antenatal HIV testing		
Agree that routine testing helps people get access to ART	242	96
Agree that routine testing makes it easier for people to get tested	247	98
Agree that routine testing makes it harder for people to get tested	17	6.7
Agree that routine testing results in less discrimination of HIV positive people	172	68.3
Agree that routine testing leads to less violence against women	21	8.3
Agree that routine testing leads to more violence against women	230	91.3
Agree that routine testing will cause people to avoid seeing doctor or nurse for fear of being tested	70	27.8

Women's view on counseling and consent, and discussion with their partner/husband about HIV test before coming for ANC visit

Only 46 (18.3%) of the respondents responded that they were given counseling before they gave blood for HIV test, of whom 41 (89.1%) indicated that adequate information was given to them in order to make decision about HIV testing, 39 (84.8%) responded that they had adequate time with the counselor, 41 (89.1%) responded that they could ask any question and overall 42 (91.3%) of women responded that they understood pretest counseling session, and all of the women said that they would recommend HIV testing to a pregnant friend or relative.

I. Offer of HIV testing without pretest information

The in-depth interview held with the participants also revealed that pretest counseling was missed and some were asked to give blood without being told why the blood was needed. A 30 years old woman indicated the situation as follows:

“She took my blood to check my status; this is the only thing that I know. She told me nothing. I knew that the test was for HIV because the blood was taken from the finger (Quba irraa isanni ta'eefan akka inni HIV ta'e bare)”.

Another woman added:

“... They simply took it (blood) they didn't tell me why they take it, but I know that they test it for HIV. It was not my decision ...”

The in-depth interview with women showed that some women were not aware of the availability of intervention to prevent mother to child transmission of HIV. This indicates that women are sometimes tested without knowing the purpose of antenatal HIV testing as it was also found in the quantitative finding. One woman stated that knowing a women's status will not help the baby if the women is infected with HIV as quoted below.

“..... If the mother is healthy, the baby will also be healthy. If her blood is clean (free of the virus), the baby will be healthy. What will it benefit if the mother is infected with the virus?”

The in-depth interview with the health workers has shown that pretest counseling is missed related to client overload and there is confusion regarding routine HIV testing. One health worker said that:

“As we are doing there is no counseling, if we take longer time counseling one woman, others waiting outside will complain.”

The other health worker added that:

“You know it is not like VCT, in VCT you counsel much, but for this you give a little bit idea and if there will be a problem (the mother is HIV positive), much counseling is given at the end”

One health service providers explained that she doesn't take training on routine antenatal HIV testing and expressed that they are not giving pretest information but consider it is important:

... I didn't take training on PMTCT; you tell them that you are going to do blood test for HIV, counseling has benefits but you have seen that we give service to many women and it is difficult to provide pretest information to all.”

Some of the service providers emphasized the importance of training: *“Training is important, for example I heard when to start prophylaxis from others but I don't know the detail.”*

The other health worker added that it is a long time ago that she took training on antenatal HIV testing:

“... I took the training four years back. Concerning PMTCT, when we first took training, it was at 28th week that they start prophylaxis but now it became 14th week, the current one, this makes it different from what we took. I heard this from those who took the training.”

More than half 139 (55.2%) of the women responded that they were not asked their consent to be tested for HIV.

II. HIV testing without asking consent

The qualitative interview also revealed that women were not asked if they agreed to be tested and the health worker simply told them that they need do blood test for HIV as quoted below:

“They told me to give my finger and I was seen, they told me that they need it for AIDS. They didn’t ask me consent.”

Another respondent added that: *“They didn’t ask my consent. They simply told me that my blood will be tested for HIV and I accepted.”*

More than half 138 (54.8%) of the respondents have discussed about HIV testing before coming for the ANC visit and the remaining 45.2% of the women did not.

Table 7: Women’s view about pretest counseling and satisfaction, consent and discussion about HIV testing with the partner among pregnant women tested for HIV under opt-out approach at public health facilities in Ghimbie Town, Ghimbi, 2013.

Variable	Frequency	%
Given pretest counseling (n = 252)		
No	206	81.7
Yes	46	18.3
Understood pretest counseling (n = 46)		
No	4	8.7
Yes	42	91.3
Consent asked/asked if agreed to be tested (n = 252)		
No	139	55.2
Yes	113	44.8
Discussed HIV testing with the partner before ANC visit (n = 252)		
Yes	138	54.8
No	114	45.2

Women's ability to make informed choice for HIV testing and associated factors

Among women included in this study, only 151 (59.9%) of them responded that their acceptance of HIV testing as their own personal decision and 101 (40.1%) of the respondents said that it was not their personal decision to get tested for HIV. Women were also asked if they would make informed choice to decline HIV testing, only 118 (46.8%) responded that they would decide to decline HIV testing and the rest 134 (53.2%) said they would not able to say no.

III. Compromised women's right to make informed decision for HIV testing

The in-depth interview with women indicated that their right to make informed choice for HIV testing was compromised as they were not given clear choice and women stated it as the acceptance of the health worker's request. The qualitative finding also revealed that it is impossible to refuse what the health workers request. One respondent reported:

"I can't, how come? I can't refuse government worker (nama mootummaa diduu hin danda'u."

In the in-depth interview, some women stated that they wanted to be tested for HIV but they didn't take being tested for HIV as their own decision. One woman stated the counseling and consent process as non voluntary and thought it is important:

"I am happy that my blood is tested for HIV because I should be tested, but they simply took it (blood) they didn't tell me why they took it, but I know that they test it for HIV. It is not my decision, I didn't ask them to test me but I am happy to be tested."

Nearly half 66 (48.9%) of women who responded that they would not refuse HIV testing reported that the health worker decided for them and 48.9% believed that saying ok to the health worker improves services that they get.

IV. Routine antenatal HIV testing perceived as a prerequisite for other health services

Women were asked what would happen if a woman refused HIV testing/if refusing HIV test has problem on other services that the woman gets. The in-depth interview with women revealed that women were not aware that antenatal HIV testing is independent of other maternal health services and they believed that it is a prerequisite to get other health services and refusal has a negative impact on maternal health services like delivery service. One respondent reported that:

“They will not equally serve two women, one who refused and the other that accepted HIV testing. How will they be seen equally, since it is she who refused, if she face a problem during delivery, will she not be in trouble?”

Another woman added that:

“If I didn't give my blood, I am not trusted, you may not help me. So, I should get trusted by giving my blood.” (waanana dhiiga koo hin laanneef waanan hin amanamneef, na gargaaruu dhiisuu dandeessu. Kanaaf, dhiiga koo laadhee amanamuun qaba).

On the other hand, some women believed that they can decline the offer of HIV testing as follows:

“Can't I deny/refuse giving my finger? It is based on interest. I can refuse but now I m tested because I have interest.” (Harka koo dhowwachuu hin danda'uu fedha koo irratti hunda'a, diduu nan danda'a garuu amma fedhan qabaafan sakatta'ame)

Factors associated with women's ability to make informed decision to decline HIV testing

After controlling for potential confounding factors, four independent variables were found to be independently associated with women's perceived informed choice to decline HIV testing as presented in Table 8.

Respondents from urban area were found more than two times more likely to state that they would decline HIV testing compared to their counter parts (AOR: 2.442, 95% CI: 1.251, 4.766).

Pregnant women who know that antenatal HIV test is offered to pregnant women for the purpose of preventing mother to child transmission were three times more likely to think that they would make informed choice to decline HIV testing compared to those women who do not know why antenatal HIV test is offered to pregnant women (AOR = 3.461, 95% CI: 1.523, 7.864).

Women who know that antenatal HIV testing is optional were 2.68 more likely to say they would make informed choice to decline HIV testing compared to women who do not know that it is optional (COR: 2.899, 95% CI: 1.22, 6.876).

Women whose consent for HIV testing was asked said they were asked were twelve times more likely to say they would decline HIV testing compared to their counter parts (AOR: 12.184, 95% CI: 6.123, 24.243).

Educational level, ever heard of routine HIV testing, awareness that HIV testing is done at ANC before visit and discussion about HIV testing with the partner were significantly associated with the likelihood of making informed decision to decline HIV testing in the bivariate analysis but the associations turned statistically insignificant in the final logistic regression model.

Table 8: Association between explanatory variables and perceived informed choice /decision to decline HIV testing among pregnant women tested for HIV at public health facilities in Ghimbi Town, 2013.

Independent Variables	Could have declined HIV testing		Crude OR, 95% CI	Adjusted OR, 95% CI	p-value
	Yes	No			
Residence					
Rural	55	86	1.00	1.00	
Urban	63	48	2.052 (1.238, 3.402)	2.442 (1.251, 4.766)	0.009*
Educational level					
No formal education	29	36	1.00	1.00	
Primary	30	51	0.730 (0.375, 1.42)	0.811 (0.34, 1.938)	0.638
Secondary and above	59	47	1.558(0.837, 2.901)	0.674 (0.84, 1.6)	0.674
Ever heard of routine HIV testing					
No	10	24	1.00	1.00	
Yes	108	110	2.356 (1.076, 5.161)	0.824 (0.257, 2.643)	0.745
Aware that HIV testing is done at ANC before coming for ANC visit					
No	14	39	1.00	1.00	
Yes	104	95	3.05 (1.559, 5.966)	1.889 (0.762, 4.683)	0.169
Aware that antenatal HIV testing is offered to pregnant women to prevent MTCT of HIV					
No	23	56	1.00	1.00	
Yes	95	78	2.965(1.676, 5.246)	3.461 (1.523, 7.864)	0.003*
Knew that antenatal HIV testing is optional					
No	14	40	1.00	1.00	
Yes	104	94	3.161 (1.618, 6.174)	2.899 (1.222, 6.876)	0.016*
Discussed about HIV testing with the partner/husband before ANC visit					
No	53	85	1.00	1.00	
Yes	65	49	2.127 (1.284, 3.526)	1.448 (0.76, 2.756)	0.26
Consent as asked					
No	33	106	1.00	1.00	
yes	85	28	9.751 (5.466, 17.395)	12.184 (6.123, 24.243)	<0.001*

***Represents significant at p-value < 0.05**

8. Discussion

This study was designed to assess the ability of women to make informed choice for HIV testing and associated factors among pregnant women tested for HIV at public health facilities during their ANC visit.

This health facility based cross-sectional study revealed that significant number (40.1%) of women have not considered their acceptance of HIV test as their own choice and more than half of the participants (53.2%) felt that they could not refuse the offer of HIV testing. In addition, this research revealed that significant numbers of women were tested without knowing the purpose of antenatal HIV testing (31.3%) and 21.4% of them didn't know that antenatal HIV testing is optional. More than half (55.2%) reported that they were not asked consent and majority (81.7%) were not given pretest information.

As it is suggested by WHO, opt-out approach might be acceptable if people to be tested have a clear and informed opportunity to decline the test, and informed consent and counseling must be ensured (17, 22). The Ethiopian revised PMTCT guideline also states that at least pregnant women should be informed about the benefits of HIV testing for mother and baby and testing should be voluntary irrespective of HIV testing approach. However, the findings of this study revealed that majority of women were not given pretest counseling and their consent was not asked. The proportion of women who were given pretest information was much less compared to the study conducted in Addis Ababa to assess the pregnant women's satisfaction (36) and consistent with other published study in Kenya (34). This finding suggest that pretest counseling has been dismissed as relatively unimportant and the finding shows that there is missed opportunity for prevention as some have only very limited knowledge about HIV and AIDS (42)

This study revealed that significant proportion (31.3%) of women didn't know that HIV testing is offered for the purpose of PMTCT which could be attributed to poor counseling quality or lack of pretest counseling as evidenced by small proportion (18.3%) of women who were given pretest counseling, or it could be because of poor advocacy from the part of the health offices and other concerned bodies. This finding is higher compared the finding of the research held in Addis Ababa that showed 21.3% of women didn't know why antenatal HIV testing is offered (36). This finding indicates that women **were** tested with no idea about the test and its importance (43).

More than half of the respondents reported that they were not given option to decide about HIV testing (were not consented). This finding is congruent with the researches held in rural Kenya and Malawi (32, 34). But the research conducted in upper west region of Ghana showed that clients reported that they were given/offered HIV testing in a manner that they could have refused the test (29).

This research revealed that only less than half (46.8%) of the participants responded that they would have made informed choice to decline the test. This finding is higher when compared to the research conducted in rural Kenya where only 20% of the respondents stated that they could make informed choice to decline HIV testing (34). This difference might be because of the site where the researches were conducted. But the finding is slightly similar to the study from population based study in Botswana where 68% felt that they could not refuse the test (28).

Almost half the women described their acceptance of HIV testing as the health worker made a choice for them which was also found in other studies (34) and that it is impossible to say no to the offer of the health worker.

Only 59.9% of women described their acceptance as of their own personal choice. This is consistent with the studies conducted in different parts of the world (14, 36). But the finding is less compared to the study conducted in Botswana where 93% of women reported it was their own decision to be tested for HIV (28). This finding may be because of the fact that clients might want providers to make decisions on their behalf or because they perceived the provider to be more knowledgeable and to know best (16, 34).

The finding of this research also revealed that women did not know that antenatal HIV testing is independent of other services (that do not depend upon knowledge of HIV status) and believes that those women who refuse the offer of HIV test will not be equally served with those women who accepted the offer. This finding is consistent with the finding of the researches conducted in other African countries that women were tested without understanding the importance of their active involvement in HIV testing and experienced inability to refuse the offer of HIV test (28, 32, 34, 44) and clients have a diffuse sense that refusing would have adverse consequences and/or clients fear that they will receive inferior care as a result of their refusal (13) or think that agreeing to a test will improve the care they receive (23).

In addition, this research revealed that nearly quarter (27.4%) of respondents agreed that routine testing will cause people to avoid seeing doctor or nurse for fear of being tested which is less when compared to the finding (43.1%) from Botswana and Ghana Wa district (28, 29) and almost similar to the finding of the research conducted in Gondar (45). This will negatively impact the utilization of other maternal services and result in failure to come back for HIV test result (32).

Regarding the factors associated with the likelihood of making informed choice to decline the offer of HIV testing, when adjusted for other potential confounding factors; being asked consent, knowing that antenatal HIV testing is offered for PMTCT, urban residence, and knowing that antenatal HIV testing is optional were independently associated with the perceived ability to decline HIV testing/make informed choice to decline HIV testing.

This study has shown that women who stated that they were asked if they agreed to be tested for HIV were more likely to say that they would decline HIV testing compared to their counter parts. This association could be because women who were asked their consent believe that they have a choice to accept or decline HIV testing.

Knowing that antenatal HIV testing is offered to pregnant women for the purpose of preventing mother to child transmission were independently associated with likelihood of saying that they would make informed choice to decline HIV testing. This association would be secondary to the fact that women needs to know why HIV is being offered to take into account their own health and the health of the baby and potential implications of the positive test result that would help them to make informed decision for HIV testing (11).

Respondents' residence was found independently associated with the perceived ability to decline HIV testing. Respondents from urban areas were more likely to perceive that they would decline HIV testing. This association might be because of the fact the choice will be more likely constrained if clients are from rural as compared to health workers (32).

Knowing antenatal HIV testing is optional was found to be associated with the likelihood of perceived ability to decline HIV testing which is in agreement with the study conducted in rural Kenya (34). This finding suggests that the voluntary nature of routine HIV testing is not fully understood.

In this study discussion with the partner about HIV before coming for ANC was associated with the likelihood of making informed choice to decline HIV test in the bivariate analysis but it turned insignificant when adjusted for other variables unlike the study conducted in rural Kenya where it has been revealed that it is significantly associated with making informed choice to decline HIV testing (34).

9. Strength and Limitation

Strength

Mixed study design was used that helped to overcome the weakness of using a single method and triangulate the finding as both the service providers and women were included. The in-depth interview with women elicited their experience regarding the consent process, the pretest counseling and the fear related to declining the offer of HIV testing. Measures were taken to prevent possible sources of bias including the social desirability bias, recall bias and interviewer bias. In order to prevent social desirability bias, the data collectors were recruited from health facilities other than the ones where data were collected. Only women who were tested during the data collection were included in the study that helped to avoid the possibility of recall bias. Closed ended pretested questionnaire was used for this research that helped to avoid the possible interviewer bias.

Limitations

Studies have limitations, so the finding of this research should be interpreted in this context. Though data collectors were recruited from other health facilities (not included in the study), there might be possibility of social desirability bias as the interviews were held at health facilities. Other studies have shown that clients are reluctant to express negative opinions regarding services when interviewed at health facilities (46). Although this study was held at the health facilities that serve majority of the population, caution should be taken in the generalization of the study finding.

10. Conclusion

This study revealed that women are tested in the expense of their right to make informed choice for HIV testing that contradicts with the basic principles of HIV testing. In this study significant number (40.1%) of women didn't consider acceptance of HIV testing as of their own personal decision and majority (53.2%) believed that they could not refuse the HIV test.

Perceived women's ability to make informed choice to decline HIV testing was positively associated with being asked if agreed to be tested (consent asked), knowing that antenatal HIV testing is offered for PMTCT, urban residence, and knowing that antenatal HIV testing is optional.

The finding of this research also revealed that nearly one third of women were tested for HIV without understanding the purpose of antenatal HIV testing. In addition, this research indicated that women were tested without pretest information, and they were not aware of the fact that antenatal HIV testing is independent of other health services and fear that refusal has negative impact on other health services that they get.

11. Recommendations

Women should be actively involved during the consent process and given a chance to make informed choice for HIV testing which is important for PMTCT of HIV as interventions directed at the fetus are necessarily interventions on the pregnant woman and cooperation of pregnant mothers in the whole package of PMTCT program is as equally important as increasing the uptake of HIV testing.

While facilitating HIV testing during pregnancy, the minimum components of counseling (including the reason why HIV testing and counseling is being recommended, that client has the right to decline the test and declining an HIV test has no effect on clients access to other services) should be provided to protect the autonomy of pregnant women and to ensure fully informed consent for HIV testing in pregnancy. Group pretest counseling and providing brochures to women when they arrive could be an alternative where it is impossible to provide individual pretest counseling.

Adequate training of the health workers on latest information about advance in PMTCT of HIV including the benefits of providing pretest information is essential to clear the confusion related to the opt-out approach/routine antenatal HIV testing.

Increasing the awareness of the community about the meaning of routine antenatal HIV testing and the purpose of provision of HIV testing during pregnancy through mass media would help women to make informed choice about the test.

There is a need to evaluate the quality of PMTCT service provision and conduct a research that assess the impact of HIV testing without the active involvement of the clients on the acceptance of ARV among those who are infected with HIV.

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Annexes

Annex I: Participant Information sheet and consent form

This information sheet is prepared for study participants on institutional based cross-sectional study of factors associated with women's ability to make informed choice for HIV testing among pregnant women attending ANC at government health facilities in Ghimbi Town.

The aim of this study is to assess women's ability to make informed choice to decline HIV testing and associated factors among ANC attendees at government health facilities in Ghimbi Town. To increase the uptake of HIV testing and achieve high coverage of PMTCT of HIV/AIDS HTC is routinely offered as part of general medical care. HTC is offered to all pregnant women attending ANC respecting their right to say no (opt-out). However, pregnant women's ability to make informed choice for HIV testing is not well studied in Ethiopia and here in Ghimbi Town. The finding of the study will help health planners to formulate feasible and effective strategies to support women infected with HIV and ensure they gain access to HIV treatment services.

Participants will be invited given that they understood consent form and asked their willingness to participate in the study. Pregnant women tested for HIV and willing to participate will be interviewed using interviewer administered structured questionnaire.

The responses will be kept confidential and will not be used for other purpose other than the aim of the study. Respondents have full right to refuse participating in the study. Their right to withdraw from this study at any time during interview is fully respected. Refusal of participating in this study and withdrawing from this study will not affect services that they get by any means.

Participants will not face problem due to their participation in this study. It takes only 25 minutes to finish the interview.

Participants can contact any of the following individuals at any time if they have any concern and/or need further explanation.

1. Mr. Israel Mitiku (principal investigator)
Addis Ababa University, Telephone number: +251911077070
2. Dr. Adamu Addisie (Advisor)
Addis Ababa University
Telephone number: +251911404954

Consent form

My name is _____. I am nurse working at _____ health center/hospital. I am interviewing pregnant women attending ANC at _____ health center/hospital. Only pregnant women tested for HIV will be interviewed after giving blood for HIV testing but before accepting test result. Now, I will ask you about your knowledge on HIV/AIDS, routine antenatal HIV testing, mother-to-child transmission and your view on pretest HIV counseling. You will not be asked your name, the confidentiality of your responses will be maintained, and your responses will not be used for other purpose other than the aim of the study. Your right not to answer questions you do not want to answer and to withdraw at any time during interview is fully respected. Your honest response is essential for this study. We would like to thank you in advance.

Are you willing to participate?

- 1. Yes
- 2. No

If yes, continue, stop if not

Date of interview _____

Interviewer name and signature: _____

Participant outcome:

- 1. Complete
- 2. Refused
- 3. Unable to complete

Annex II: English Questionnaire for Quantitative method

Section I: Socio-demographic information

NO	Question	Coding and Classification
101	How old are you? (AGEN)	_____ years
102	What is your residence? (RES)	1. Urban 2. Rural
103	What is your current marital status? (MRST)	1. Married, living with spouse 2. Married, not living with spouse 3. Divorced/separated 4. Widowed 5. Not married, living with sexual partner 6. Not married, not living with sexual partner
104	What is the highest level of education you attended? (SCHL)	1. Can't read and write 2. Read and write only 3. Primary 4. Secondary 5. Technical/vocation 6. Higher education
105	What is your religion? (RLGN)	1. Protestant 2. Muslim 3. Orthodox 4. Catholic 5. other _____
106	What is your ethnicity? (ETHN)	1. Oromo 2. Amhara 3. Tigre 4. Other _____
107	What is your occupation at this time? (OCUP)	1. House wife 2. Student 3. Unemployed 4. Merchant 5. Government employee Others (specify)
108	What is your average monthly household income (total wages/income earned by all living with you)? (HINC)	_____ birr
109	How many times did you receive antenatal care during this pregnancy? (AVIST)	_____

Section II: KNOWLEDGE REGARDING HIV/AIDS and MTCT

I will now ask you some questions about what you know about HIV and AIDS (CKWL)

NO	Questions	Coding and classification
201	Have you ever heard of illness called AIDS?	1. Yes 2. No
202	Can people reduce their chance of getting the AIDS virus by abstaining from sexual intercourse?	1. Yes 2. No 8. Don't know
203	Can people reduce their chances of getting the AIDS virus by having just one uninfected sex partner who has no other sex who has no other sex partners?	1. Yes 2. No 8. Don't know
204	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	1. Yes 2. No 8. Don't know
205	Is it possible for a healthy-looking person to have the AIDS virus?	1. Yes 2. No 8. Don't know
206	Can people get the AIDS virus from mosquito bite?	1. Yes 2. No 8. Don't know
207	Can people get the AIDS virus by sharing food with a person who has AIDS?	1. Yes 2. No 8. Don't know
208	Have you ever heard HIV/AIDS transmission from infected pregnant women to her baby?(MTCT)	1. Yes 2. No
209	When have you heard about MTCT HIV/AIDS? (MTCT1)	1. After pretest counseling 2. I heard before ANC visit

Section III: Routine Antenatal HIV testing

NO	Questions	Coding and Classification
301	Have you ever heard of routine HIV testing? It means that almost everyone who visits a health clinic or hospital will get HIV test, unless they say no to it.(OPT)	1. Yes 2. No
302	Did you know that HIV testing is done at ANC before coming for ANC visit?(OPT1)	1. Yes 2. No
303	Why HIV test is offered to pregnant woman?.....(OPT2)	1. To prevent mother to child transmission 2. I don't know
304	Do you know that antenatal HIV testing is optional? Do you know that you can choose to HIV test or not?(OPT3)	1. Yes 2. No
305	During any of the antenatal visits for your last birth, were you offered a test for AIDS virus as part of antenatal care?(OPT4)	1. Yes 2. No
306	Have you ever been tested for HIV as part of your antenatal care?.....(E TEST)	1. Yes 2. No
307	Are you in favour of an HIV test being available to all pregnant women?(OPTA)	1. Yes 2. No
308	We want to ask your opinion of routine testing. I will read you statements, let me know whether you agree or disagree. 1. Routine HIV testing helps people get access to ART 2. Routine HIV testing makes it easier for people to get tested 3. Routine HIV testing makes it harder for people to get tested 4. Routine HIV testing results in less discrimination (bad treatment) of HIV-positive people 5. Routine HIV testing leads to more violence against women 6. Routine HIV testing leads to less violence against women 7. Routine HIV testing will cause people to avoid seeing doctor or nurse for fear of being tested	1. Yes 2. No 1. Yes 2. No 1. Yes 2. No 1. Yes 2.No 1. Yes 2. No 1. Yes 2. No 1. Yes 2. No

Section IV: Satisfaction with and understanding of basic contents of pretest counseling/discussion

NO	Questions	Coding and classification
401	Did you receive counseling before being tested for HIV?	1. Yes 2. No
402	How was the counseling done?	1. One-to one 2. In Group
403	Were you satisfied that you had adequate information to make a decision about HIV testing?.....(SATS)	1. Yes, enough information 2. Yes, partially satisfied but would have liked more information 3. No, not enough information
404	Did you feel you had adequate time with the counselor to get all the information you wanted to know?.....(SATS1)	1. Yes 2.No
405	Did you feel you could ask the counselor questions if you wanted to?(SATS2)	1. Yes, could ask anything 2. Yes, but could not ask some questions 3. Yes, but with difficulty 4. No
406	If a friend or relative who is pregnant, would you recommend her to come for HIV test?.....(SATS3)	1. Yes 2. 2.No
407	Do you think you understood pretest-counseling discussion?.....(UNDST)	1. Yes 2. No

Section V: Discussion with partner, Consent and client's decision for HIV testing

NO	Questions	Coding and classification
501	Have you discussed about HIV testing with your partner before coming for ANC visit?.....(PDISC)	1. Yes 2. No
502	Did the counselor ask you if you agreed to test?(ACONS)	1. Yes 2. No
503	Did you make the decision to get the HIV test? /Was it your decision to be tested for HIV?	1. Yes 2. No
504	Did you feel you could say no to get the HIV test?.....(ICTD))	1. Yes 2. No
505	What made you to get tested without your consent? 1. Did the counselor made a choice for you 2. Did the counselor pressurized you to take the test 3. Did you feel that agreeing to a test will improve the care they receive	1. Yes 2.No 1. Yes 2.No 1. Yes 2.No

This is the end of the questionnaire. Thank you very much for taking time to answer these questions.

Annex III: Afaan Oromo participant information sheet and consent form

Unka Odeeffanoo Hirmaattotaa

Unki odeeffannoo kun kan qophaa'ee qorannoo manneen yaalaa mootummaa magaalaa Gimbii keessatti argaman irratti adeemsifamu keessatti dubartoota hirmaataniif.

Kaayyoon qorannoo kanaas kan xiyyeeffatu dubartootni ulfaa dhiiga isaanii vaayirasii HIV tiif akka qoratamuuf fedha hin qabne gorsa hogeessi fayyaa qorannoo dhiigaa vaayirasii HIV ilaalchisee isaaniif kennu ammam diduu danda'u kan jedhuu dha.

Tajaajjili gorsaa fi qorannoo dhiigaa vaayirasii HIV dubartoota ulfaa gargaasa fayyaa yeroo ulfaa kennemu hordofuuf gara mana yaalaa dhufan maraaf ni kennama. Haata'utii, dubartootni ulfaa dhiiga isaanii vaayirasii HIV tiif akka sakattaasisaniif hin dirqisiifaman.

Qorannoon biyyoota adda addaa keessatti adeemsifaman tokko tokko akka agarsiisanitti yeroo tokko tokko dubartootni fedhii isaaniin ala dhiigi isaanii vaayirasii HIV tiif akka sakatta'amu agarsiisu. Kana malees, dubartootni qorannoon dhiigaa vaayirasii HIV tiif yeroo ulfaa kennamu fedhii irratti kan hundaa'ee ta'uu beekuu dhabuu fi beekanis gaaffii hogeessi fayyaa isaaniif dhiyeessu diduun akka itti ulfaatu qorannooleen dabalani agarsiisu.

Haata'uu malee dhimmi kun Itooppiyaa fi magaalaa Gimbii dabalatee sirriitti hin qoratamne. Egaa, argamni qorannoo kana qaamoni tajaajila fayyaa uummataaf laatan tarsiimoo hojiitti jijjiiramuu danda'uu fi bu'a qabeessa ta'ee kan dubartoota ulfaa vaayirasii HIV tiin hubaman gargaaruu danda'u akka baasuu danda'aniif ni gaargaara. Kana malees, qorannichi dubartootni kunniin tajaajila wal'aansaa argachuu isaanii mirkanneessuuf qooda guddaa qaba.

Dubartootni ulfaa erga unka odeeffanoo kana hubachuun isaanii mirkanaa'ee booda akka qorannoo kana keessatti hirmaataniif afeeramu. Qorannoo kana keessatti kan hirmaatan dubartoota ulfaa dhiiga isaanii qorannoo vaayirasii HIV tiif kennuun isaanii beekamee fi fedhii hirmachuu qaban qofa ta'a. Odeeffannoon qorannoo kanaaf barbaachisu kan argamu nomootni dhimma kanaaf ramadaman gaaffilee isaan hirmaattotaaf dhiyeessanin ta'a.

Odeeffannoon hirmaattota irraa argamu hiccitaan/dhoksaan kan qabamuu fi dhimma kayyoo qorannoo kanaan ala ta'eef itti hin fayyadamamu.

Mirgi dubartootaa qorannoo kana keessatti hirmaachuu dhiisuu fi yoo fedhan hirmaattumma isaanii yeroo kamitti iyyuu addaan kutuu guutumaa guutuutti kan kabajamee dha. Hirmaachuu diduunis ta'ee hirmaanaa addaan kutuun gonkumaa tajaajila fayyaa dubartootni argatan irratti dhiibbaa hin qabaatu.

Dubartootni sababa hirmaannaa isaaniitiin kan ka'ee rakkoon isaan mudatu hin jiraatu. Gidduu galeessatti odeeffennoon hirmaattota irraa funaanamu daqiiqaa 25 fudhata.

Hirmaattotni quuqqaa/komee qaban yookiin ibsa dabalataa barbaadan namoota maqaan isaanii kanaa gaditti tarreefaman karaa teessoo isaanii quunnamuu danda'u.

1. Obbo Isiraa'el Mitikkuu
Yunivarsiitii Finfinnee; Lakkoofsa bilbilaa +251911077070
2. Dr. Addaamuu Addisee
Yunivarsiitii Finfinnee; Lakkoofsa bilbilaa +251911404954

Seensa: Maqaan koo _____ jedhama. Yeroo ammaa buufata fayyaa/hospitaala _____ tti ogeessa fayyaati. Qorannoo tajaajila qorannoo dhiigaa vaayirasii HIV gaaffii ogeessa fayyaatiin dubartoota ulfaa tajaajila hordoffii ulfaatiif gara mana yaalaa dhufaniif kennamu ilaalchisee manneen yaalaa motummaa irratti adeemsifamuuf odeeffannoo funaanuufan as jira. Qorannoo kana keessatti kan hirmaatan dubartoota dhiiga isaanii qorannoo vaayirasii HIV tiif kennan qofa. Gaaffii fi deebiin kun kan adeemsifamu hirmaattotni osoo bu'aa qorannoo dhiigaa isaanii hin fudhatin dura. Gaaffii fi deebiin kun mata dureewwan kanneen akka hubannoo walii galaa HIV/AIDS, haala tajaajila qorannoo HIV, daddarbii vaayirasii HIV haadhaa gara mucaa fi ilaalcha dubartootni tajaajila qorannoo vaayirasii HIVtiif kennamu irratti qaban of keessatti kan hammateedha. Gaaffii fi deebii kana keessatti maqaan hirmaattotaa kan hin gaafatamnee fi odeeffannoon hirmaattotni laatan hiccitaan/dhoksaan kan qabamu ta'a. Hirmaattotni gaaffii isaniif hin galle deebisuu dhiisuuf akkasumas hirmaannaa addaan kutuu yoo fedhan mirgi isaanii kan kabajamee dha. Hirmaattotni odeeffannoo isaan amanammumaan laatan bu'aa qorannoo kanaaf murteessa dha.

Osoo gara gaaffii fi deebiitti hin seenin galataa fi kabaja isiniif qabnu isiniif ibsina.

Hirmachuudhaaf fedha qabduu? 1. Eeyyee fedha qaba 2. Lakki hirmaachuuf fedha hin qabu

Deebiin isaanii “eeyyee” yoo ta’ee gaffilee itti fufi. Deebiin isaanii “fedha hin qabu” yoo ta’e galatoomaa jedhiitii geggeessi.

Guyyaa gaaffii fi deebii _____

Maqaa fi mallattoo nama unka gaaffii fi deebii guute: Maqaa _____

Mallattoo _____

Haala hirmaattotaa:

1. Gaaffii fi deebii guututti kan xumuran
2. Gaaffii fi deebii kan hin xumuurre/addaan kutan
3. Hirmachuuf fedha kan hin qabne

Annex IV: Afaan Oromo Questionnaire

Kutaa Iffaa: Odeeffanoo hawwaas- dinagdee

Lakk	Gaaffilee	Deebii ta'uu kan danda'an
101	Umuriin keessan anatti himuu dandeessuu? (AGEN)	_____ waggaa
102	Bakka jireenyaa? (RES)	1. Magaalaa 2. Baadiyyaa
103	Haala gaa'elaa? (MRST)	1. Kan heerumte 2. Kan hiikte 3. Abbaan manaa kan boqote 4. Kan hin heerumne garuu hiriyya waliin kan jiraattu 5. Kan hin heerumnee fi hiriyya waliin jiraachaa kan hin jirre
104	Yoo kan heerumtan ta'e, yeroo ammaa kan jiraattan abbaa warraa keessan waliinii?	1. Eeyyee 2. Hi'inkoo/lakki
105	Sadarkaa barnootaa? (SCHL)	1. Dubbisuu fi barreessuu hin danda'u 2. Dubbisuu fi barreessuu qofan danda'a 3. Sadarkaa 1 ^{ffaa} 4. Sadarkaa 2 ^{ffaa} 5. Ogummaa teekinikaa 6. Sadarkaa ol'aanaa
106	Amantii kamiin hordoftu? (RLGN)	1. Protestant 2. Isilaama 3. Ortodooksii 4. Kaatolikii 5. Kan biraa _____
107	Sabni keessan maali? (ETHN)	1. Oromoo 2. Amaaraa 3. Tigiree 4. Kan biraa _____
108	Haala hojii? (OCUP)	1. Hojii mana keessaa 2. Barattuu 3. Kan hojii hin qabne 4. Daldaltuu 5. Hojjettuu mootummaa 6. Kan biraa _____
109	Giddu galeessatti matiin keessan baatii tokkotti qarshii meeqa argata? (HINC)	_____ qarshii
110	Ulfa kanaaf yeroo meeqa hordoffii tajaajila fayyaa yeroo ulfaa kennamuu argattan? (AVIST)	_____

Kutaa 3^{ffaa}: Odeeffannoo walii galaa Tajaajila gorsaa fi qorannoo dhiigaa vaayirasii HIV gaaffii ogeessa fayyaatiin yeroo ulfaa kennamu

Lak k	Gaaffilee	Deebii ta'uu kan danda'an
301	Tajaajila qorannoo dhiigaa vaayirasii HIV gaaffii ogeessa fayyaan kennamu kanaan dura dhageessanii beektuu(OPT)	1. Eeyyee 2. Dhaga'ee hin beeku
302	Hordoffii ulfaaf osoo hin dhufin dura tajaajilli qorannoo dhiigaa vaayirasii HIV mana yaalaa kanatti akka kennemu beektu turtanii?(OPT1)	1. Eeyyee 2. Lakki
303	Tajaajilli qorannoo dhiigaa vaayirasii HIV dubartoota ulfaaf maaliif akka laatamu beektuu?.....(OPT2)	1. HIVn haadhaa garaa mucaatti akka hin dabarreef 2. Hin beeku
304	Qorannoon dhiigaa vaayirasii HIV yeroo hordoffii ulfaa kennamu fedhii irratti kan hundaa'e ta'uu isaa beektuu.....(OPT3)	1. Eeyyee 2. Lakki hin beeku
305	Kanaan dura hordoffii ulfaaf mana yaalaa gaafa dhuftan dhiiga keessan vaayirasii HIV tiif akka qorachiiftaniif gorfamtanii beektuu?(OPT4)	1. Eeyyee 2. Gaafatamee hin beeku
306	Gorsa isinii kenname fudhattanii dhiiga keessan vaayirasii HIVtiif qorachiiftaniittuu?.....(EEST)	1. Eeyyee 2. Hin qorachiifne
307	Dubartoota ulfaa hundaaf tajaajilli qorannoo dhiigaa vaayirasii HIV jiraachuu isaa ni deggertuu?.....(OPTA)	1. Eeyyee 2. Hin deggeru
308	Tajaajila gorsaa fi qorannoon dhiigaa vaayirasii HIV gaaffii ogeessa fayyaatiin kennamu ilaalchisee yaadota kanaan gadiitti walii galtuu? 1. Qorannoon dhiigaa vaayirasii HIV gaaffii ogeessa fayyaatiin taasifamu dubartootni ulfaa qoricha farra Eedsii salphaatti akka argataniif ni gargaara 2. Qorannoon dhiigaa vaayirasii HIV gaaffii ogeessa fayyaatiin taasifamu dubartoonni ulfaa qorannoo vaayirasii Eedsii salphaatti akka argataniif ni gargaara 3. Dubartoonni ulfaa qorannoo vaayirasii eedsii salphaatti akka hin arganne taasisa 4. Qorannoon dhiigaa vaayirasii HIV gaaffii ogeessa fayyaatiin taasifamu loogii namoota dhiiga isaanii keessatti vaayirasichi argame irra ga'u ni xiqqeessa 5. Qorannoon dhiigaa vaayirasii HIV gaaffii ogeessa fayyaatiin taasifamu miidhaa dubartoota irra ga'u ni hir'isa 6. Qorannoon dhiigaa vaayirasii HIV gaaffii ogeessa fayyaatiin taasifamu miidhaa dubartoota irra ga'u ni dabala 7. Qorannoon dhiigaa vaayirasii HIV gaaffii ogeessa fayyaatiin taasifamu dubartoonni ulfaa qorannoo HIV sodaachuudhaan gara mana yaalaa akka hin deemne taasisa	1. Eeyyee 2. Hin gargaaruu 1. Eeyyee 2. Hin gargaaru 1. Eeyyee 2. Akka argatan taasisa 1. Eeyyee 2. Lakki 1. Eeyyee 2. Ni dabala 1. Eeyyee 2. Ni hir'isa 1. Eeyyee 2. Lakki

Kutaa 4^{ffaa}: Ga'umsaa fi hubatamummaa marii qorannoo dhiigaa HIV dura laatamu

Lakk	Gaaffilee	Deebii ta'uu kan danda'an
401	Osoo dhiigni keessan Vaayirasii HIV tiif hin sakatta'amin gorsi isiif kennemeeraa?	1. Eeyyee 2. Hin laatamne
402	Gorsichi haala akkamiitiin isiniif kenname?	1. Dhuunfaan 2. Walduukaa/gareedhaan
403	Gorsi laatame dhiiga keessan vaayirasii HIV tiif qorachiisuu murteessuuf quubsa/ga'aa dha jettanii yaadduu ?.....(SATS)	1. Eeyyee 2. Eeyyee, garuu odeeffannoo dabalataa argachuu barbaadeen ture 3. Quubsa miti
404	Odeeffannoo barbaaddan argachuuf hojjetaa fayyaa wajjin yeroo ga'aa argadheera jettanii yaadduu ?.....(SATS1)	1. Eeyyee 2. Lakkii
405	Osoo waan isin sirriitti hin hubanne jiraatee hojjetaa/tuu fayyaa gorsa isiinif kennan gaaffii gaafachuu nan danda'a jettanii yaaddaniittuu?(SATS2)	1. Eeyyee 2. Eeyyee, garuu gaaffiin gaafachuu hin dandeenye qaba 3. Eeyyee, garuu gafaachuuf anatti ulfaateera 4. Gaafachuu hin danda'u
406	Osoo hiriyyaa ykn fira dadhabbii qabdu qabaattanii akka as dhufanii dhiiga isaanii vaayirasii HIV tiif qorachiisan ni gorsituu?.....(SATS3)	1. Eeyyee 2. Akka dhuftuuf hin gorsu
407	Gorsa qorannoo dhiigaan dura isinii kenneme hubadheera jettanii yaadduu ?.....(UNDST)	1. Eeyyee 2. Lakkii

Kutaa 5^{ffaa}: Marii abbaa warraa/hiriyyaa, fedhii fi murtii qorannoo dhiigaa vaayirasii HIV

Lakk	Gaaffilee	Deebii ta'uu kan danda'an
501	Gara mana yaalaa kana osoo hin dhufin dura abbaa warraa/hiriyyaa keessan waliin waa'ee qorannoo vaayirasii HIV irratti dubbattaniittuu?.....(PDISC)	1. Eeyyee 2. Hin dubbanne
502	Dhiiga keessan vaayirasii HIV tiif qorachiisuun fedhii keessan ta'uu hojjetaan fayyaa isin gaafateeraa?(ACONS)	1. Eeyyee 2. Nan gaafanne
503	Dhiigi keessan vaayirasii HIV tiif akka qoratamu ofii keessaniin murteessitanii?	1. Eeyyee 2. Fedhii koon miti
504	Dhiiga keessan vaayirasii HIV tiif qorachiisuun fedha keessan yoo hin taane diduu nan danda'a jettanii yaaddaniittuu ?.....(ICTD))	1. Eeyyee 2. Diduu nan danda'a jedhee hin yaanne
505	Fedhii keessan ala dhiiga keessan qorannoo vaayirasii HIV tiif akka kennitan kan isin taasise maali? 1.Hojjetaa/ttuu fayyaattu anaaf file 2. Akkan dhiiga koo laadhuuf hojjetaan fayyaa dhiibbaa anaratti waan godheef/teef 3. Gaaffii hojjettaa fayyaaf tole jechuun tajaajila biraa an argadhu fooyyessuu danda'a jedhee waanan yaadeef	1.Eeyyee 2.Lakkii 1.Eeyyee 2.Lakkii 1.Eeyyee 2.Lakkii

Gaaffileen keenya as irratti raawwatu. Yeroo fudhattanii gaaffilee kanneeniif deebii waan laattaniif galanni keenya guddaadha.

Annex V: English version of Interview guide for in-depth interview

Participant ID: _____

Site: _____

Date of interview: _____

1. Have you ever heard of routine antenatal HIV testing before coming for ANC visit?

If yes, how have you heard about it?

2. Do you think that HIV testing is important during pregnancy?

If yes why?

3. Have you ever tested for HIV as part of your antenatal care during any of your previous pregnancies?

4. Did you think HIV testing is available at this center/health facility?

If no, what did you fill when you offered?

5. Has anybody told you why HIV testing is offered to pregnant women?

If yes, what was it?

6. Are there advantages of having blood test for HIV?

If yes, what are they?

What advantages are there for the baby? For you?

7. Did the counselor/health worker tell you the implications/meaning of HIV test result?

Did she/he raise what HIV negative or HIV positive means?

Have you discussed on available interventions/treatment if HIV is found in your blood?

8. Did the counselor ask you if you agreed to have blood test for HIV?

Did the counselor give a chance to you that anyone who wants to be tested can do so and anyone who do not want have the right not to tested or say no?

9. Did you feel that you could say no?

If not, why not?

Did you feel it has a problem if you refuse to be tested?

If yes, would you tell why?

10. Did you feel at ease to ask questions during your discussion with the counselor if you liked to?

If no, why

Annex VI: Afaan Oromo version of Interview guide for in-depth interview

Lakkoofsa addaa hirmaattotaa: _____

Bakka: _____

Guyyaa gaaffii fi deebii: _____

1. Tajaajila qorannoo dhiigaa vaayirasii HIV gaaffii ogeessa fayyaan kennamu kanan dura osoo tajaajila fayyaa hordoffii ulfaaf mana yaalaa kana hin dhufin dhageessanii beektuu?

Yoo dhageessanii beektu ta'e, akkamiin dhaga'uu dandeessani?

2. Dhiiga ofii yeroo ulfaa vaayirasii HIV tiif qorachiisuun barbaachisaadha jettanii yaadduu?

Eyyee yoo ta'e, akkamitti?

3. Kanaan dura hordooffii ulfaaf gara mana yaalaa gaafa dhuftan dhiiga keessan vaayirasi HIV tiif akka qaama tajaajila fayyaa yeroo ulfaatti qorachiistaniittuu?

4. Tajaajjilli qorannoo vaayirasii HIV mana yaalaa kanatti ni kennama jettanii yaaddaniittuu?

Jiraachuu isaa yoo beekne, gaafa hojjetaan fayyaa gaaffii qorannoo vaayirasii HIV isiniif kaasu maaltu isinitti dhaga'ame?

5. Dubartoonni ulfaa maaliif dhiiga isanii akka sakkataasisaniif waan gaafatamaniif namni isinitti hime jiraa?

Yoo jiraate, wanni isinitti himame maal ture?

6. Dhiiga ofii vaayirasii HIV tiif sakattaasisuun bu'aa/faayidaa qaba jettanii yaadduu?

Eyyee bu'aa qaba yoo ta'e, bu'aa akkamii qaba?

Mucaa keessaniif bu'aa maalii qaba? Isinnifoo?

7. Ogeessi fayyaa dhiiga keessan vaayirasiin argamuun yookiin argamuu dhabuun maal akka ta'e isinii ibsaniiruu?

Vaayirasichaan nama hubameef tajaajilli wal'aansaa jiran irratti haasoftaniittuu?

8. Ogeessi fayyaa dhiigaa keessan vaayirasii HIV tiif qorachiisuuf fedha kessan isin gaafateeraa/ttii?

Namootni hundumtuu mirga yoo fedhan vaayirasii HIV tiif qorachiisuu yookiin qorachiisuu dhiisu akka qaban ogeessi fayyaa isiniif ibseeraa?

9. Dhiiga keessan qorachiisuuf osoo hin qabaannee diduu nan danda'a jettanii yaaddaniittuu?

Diduu hin danda'u jettanii yoo yaaddu ta'e, maaliif?

Tajaajila qorannoo dhiigaa vaayirasii HIV tiif kennamu dduun rakkina qaba jettanii yaaddaniittuu?

Eyyee rakkoo qaba jettanii yaaddu yoo ta'e, anatti himtuu laata?

Yeroo ogeessi fayyaa gorsa isiniif laatu, waan siif hin galle soda tokko malee gaafachuu nan danda'a jettanii yaaddaniittuu? Sodaan isinitti dhaga'ameere yoo ta'e maaliif?

The theme, categories and codes identified from the qualitative and quantitative data

Theme: ‘Compromised women’s informed choice for HIV testing because of lack of pretest information and misconception about the independency of HIV testing from other health services’				
Categories	I. Offer of HIV testing without pretest information	II.HIV testing without asking consent	III.Compromised women’s right to make informed decision for HIV testing	IV. Routine antenatal HIV testing perceived as a prerequisite for other health services
Codes	<ul style="list-style-type: none"> • Misconception about PMTCT • Lack of awareness about the purpose of HIV testing • No discussion 	<ul style="list-style-type: none"> • Providers decision • Order • Told 	<ul style="list-style-type: none"> • Acceptance of request • Providers are knowledgeable • Difficult to say no 	<ul style="list-style-type: none"> • Concern • To get trusted • Partiality • Fear of lack of service

Declaration

I the undersigned, senior MPH student declare that this thesis is my original work in partial fulfillment of the requirement for the degree of Master of Public Health.

Name: _____

Signature: _____

Place of submission: School of Public Health, College of Health Sciences, Addis Ababa University

Date of Submission: _____

This thesis work has been submitted for examination with my/our approval as University advisor(s)

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Advisor/s

Name

Signature
