

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCE
SCHOOL OF ALLIED HEALTH SCIENCES
DEPARTMENT OF NURSING AND MIDWIFERY

ASSESSMENTS OF KNOWLEDGE AND ATTITUDES OF
PREGNANT WOMEN ON THE BENEFITS OF ANTENATAL CARE
UTILIZATION, IN ADDIS ABABA, ETHIOPIA

BY: FANTANESH DESALEGN (BSc.)

A THESIS TO SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY
DEPARTMENT OF NURSING AND MIDWIFERY FOR PARTIAL FULFILLMENT TO THE
REQUIREMENTS FOR DEGREE OF MASTERS OF SCIENCE IN MATERNITY AND
REPRODUCTIVE HEALTH NURSING

JUNE, 2015

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This thesis by Fantanesh Desalegn is accepted in its present form by the board of examiners as satisfying thesis requirement for the degree of Masters of Science in Maternity and Reproductive Health.

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Abstract

Background: Antenatal Care means care before birth and includes education, counseling, screening and treatment to monitor and to promote the well - being of the mother and fetus. Most previous studies done on knowledge and attitude of women toward ANC were community based done on general women of child bearing age. Until now little has been known about knowledge and attitude of women who are currently using ANC services.

Objective: The aim of this study is to assess knowledge and attitudes of pregnant women regarding the benefits of Antenatal care in Addis Ababa, Ethiopia.

Methods: Cross-sectional study was conducted among 405 pregnant women from March to April, 2015. Participants were interviewed using structured questionnaire. Twenty five nurses were trained and involved in data collection process. Data was entered using Epi-data and analyzed using Statistical Package for Social Sciences (SPSS) version 21. Descriptive statistics was used to describe the study variables. Logistic regression analysis was used to assess the relative effect of determinants. $P < 0.05$ was considered statistically significant in all tests of significance.

Result: From total of 405 women interviewed 59.3 percent of them were found to have good knowledge and 55.3% had good attitude about ANC services. Related to determinant factors women who had partner support were found to have both good Knowledge and good attitude towards ANC [AOR 6.78(3.44, 13.3)][AOR 2.18(1.19, 3.97)]. Women with less than grade 8 were less likely to have good attitude than those who were grade 9 and above [AOR 0.51(0.27, 0.98)]. Compared to women who did not attend ANC during their most recent pregnancy, women who attended were 0.28 times less likely to have good attitude [AOR 0.28(0.10, 0.82)].

Conclusion: According to this study three out of five women were found to have good Knowledge of ANC and slightly greater than half of the study participant had good attitude of ANC utilization. Their knowledge on certain aspects of antenatal care were still poor. Partner support educational level and health facility visit for their most recent pregnancy were the determinant factors good attitude and good knowledge

Recommendation: As a long term strategy to reaching all segments of the population, women empowerment through education and income generating activities as well as with involvement of husbands during information education and communication would have to be intensified on ANC programs.

Key words: Knowledge, Attitude

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Acronyms and Abbreviations

AAU	Addis Ababa University
ANC	Antenatal care
EDHS	Ethiopian Demographic and Health Survey
GHC	Governmental health center
HC	Health center
HIV	Human immune deficiency virus
MOH	Ministry of Health
STI	Sexual transmitted infection
SPSS	Statistical Package for Social Science
UNICEF	United Nations International Children's Fund
WHO	World Health Organization

CHAPTER ONE

1. INTRODUCTION

1.1 Background

Antenatal Care (ANC), is given different meanings by different scholars, among others the meaning that says, " Antenatal Care means care before birth and includes education, counseling, screening and treatment to monitor and to promote the well - being of the mother and fetus"(1).

In short it is the care that a woman receives during pregnancy that helps to ensure healthy outcomes for women and newborn (1).

It is a key entry point for pregnant women to receive a multiple range of health services such as nutritional support and prevention or treatment of anemia; prevention, detection and treatment of malaria, tuberculosis and sexually transmitted infections (2).

Antenatal Care is an opportunity to promote the benefits of skilled attendance at birth and to encourage women to seek postpartum care for themselves and their newborn. It is also an ideal time to counsel women about the benefits of child spacing (3).

However, Antenatal Care have such attractive benefits and strategies, according to the United Nations Millennium Development Goals, every year, at least half a million women and girls die as a result of complications during pregnancy, childbirth or the six weeks following delivery. Almost all (99%) of these deaths occur in developing countries. This shows that the Antenatal care activity is very weak in developing country.

The main reasons that hinder the use of Antenatal Care are different from Country to Country. But the reason experienced in developing countries are nearly similar such as; hemorrhage, followed by eclampsia, infection, abortion complications and obstructed labor. Other issues are

lack of knowledge and preparedness about reproductive health in the family, community and health provider (4).

To alleviate such factors, Antenatal Care is the most important method for detecting pregnancy problems in the early period. Because Antenatal care is the best mechanism to minimize maternal mortality, and give a good information for pregnant women about their birth and how to prevent related problems. The best and most advantage of Antenatal Care is to protect the health of women's and their infants as well as indicating the danger signals that will be occurred and needs to be further treated by advanced health professionals (5).

A number of studies indicate that the Antenatal Care utilization rate is still low due to many factors that need to be examined such as socio demographic factors, knowledge of social support. They conclude that eliminating such factors is important to increase the women's participation in Antenatal Care.

When we come to Ethiopia, although, access to health care services is improving, the country has faced challenges in increasing health care utilization and the proportion of women who give birth with the assistance of skilled attendants is the lowest in Sub-Saharan Africa (6).

1.2. Statement of the Problem

An estimated 515,000 women die of pregnancy-related causes, a rate of over 1,400 maternal deaths each year. The overwhelming majority of these deaths and complications occur in developing countries. Effective antenatal care(ANC), appropriate emergency treatment of complications and competent referral level encompass the most effective answers to reduction of maternal deaths (2).

Every minute, at least one woman dies from complications related to pregnancy or child birth that means 529 000 women a year. In addition, for every woman who dies in childbirth, around 20 more suffer injury, infection or disease approximately 10 million women each year. Studies reveal that the cause of maternal mortality in developing countries is mostly due to poor accessibility to maternal health's service poor referral to appropriate antenatal and delivery care unit, and inadequacies of available care. These studies suggested that most of the maternal deaths were preventable with improved coverage of antenatal care, safe delivery and postpartum care. There are regional variations in antenatal care utilization rate basically due to differences in the availability of health care facilities, among the regions during 1985-1990, antenatal coverage rate for the whole Africa was 60% compared to 99% for developed countries(7).

Based on EDHS 2011 report, in Ethiopia the maternal mortality rate has been estimated to be 676 per 100,000 live births. This is one of the highest rates in the World. In addition women's reproductive health problems are a timely and serious matter of concern, for any health professionals, the government as well as the society (8).

Antenatal Care related problem parameters are very sensitive because it have directly related with maternal morbidity and mortality, and loss of fetus. It is a necessary component of maternal

health in order to identify complications. According to the 2011 Ethiopia demographic and health survey (DHS) Antenatal care Coverage of Ethiopia was 43%. Regular Antenatal Care visits can provide some benefits for the women such as a care provider that can result in reducing complications during pregnancy the absence of this activity affects millions of mothers in the rural as well as urban areas (8).

Many women from different studies have mentioned that women's are embarrassed when visiting an ANC. With improved knowledge about the benefits of ANC and the importance of a positive attitude toward it, these women will come to understand that ANC's medical procedures and interventions will do much to save their lives and improve their children's health. In this way they will be motivated enough to overcome their reluctance. In many ways, changing attitudes and behavior are the most challenging tasks, but are also the least costly. Proper educational campaigns and the improved dissemination of information are investments for the long-term.

Most previous studies done on knowledge and attitude of women toward ANC were community based done on general women of child bearing age. Until now little has been known about knowledge and attitude of women who are currently using ANC services. Therefore this study will help to know how much percentage of women came to benefit from this very important service of women's health know about it and have good attitude about ante natal care services. The aim of this study is to assess knowledge and attitudes of pregnant women regarding the benefits of Antenatal care utilization in Addis Ababa, Ethiopia.

1.3. Significance of the study

Having positive attitude and good knowledge is the most valuable precondition for any healthy behavior including ANC service. Different studies have shown that women who had a positive attitude towards ANC had a higher proportion of ANC visits than those with a negative attitude. Therefore knowing about prevalence of women who has positive attitude and good knowledge and identifying the associated factors in a given society has important contribution in addressing maternal health need of the women.

This study is intended to extract out the knowledge and attitude of pregnant women on the benefits of ANC utilization during antenatal visit. The findings of this study will serve as a reference for giving intervention accordingly by the health care providers and others who concerned; for conducting further researches; the findings of this study will have special importance for health care providers because it will serve as base line for filling gaps of the actual practices on antenatal care. The findings with relevant recommendations will be also submitted to the Addis Ababa regional health bureau, and in advance to the ministry of health(MOH).

CHAPTER TWO

2. LITERATURE REVIEW

To combat the major maternal health problem and tackle unwanted outcomes of pregnancy, antenatal care (ANC) is the only and most important method in detecting and treating pregnancy problems in its earliest period.(6,7,8) ANC is a critical element for reducing maternal mortality, and for providing pregnant women with a broad range of health promotion and preventive health services.(4,6,7). One of the most important functions of ANC is to offer health information and services that can significantly improve the health of women and their infants. ANC is also an opportunity to inform women about the danger signs and symptoms for which immediate assistance should be sought from a health care provide (9).

Antenatal care (ANC) is an important determinant of safe delivery. Although certain obstetric emergencies cannot be predicted through antenatal screening, women can be educated to recognize and act on symptoms leading to potentially serious conditions (4, 11).

2.1. Knowledge of women towards ANC care

Health knowledge is considered to be one of the key factors that enable women to be aware of their right and health status in order to seek appropriate health services. Study conducted in different part of the world has discovered that level of knowledge of mothers toward ANC is important for utilizing ANC service. The level of knowledge of pregnant mother also varies in deferent part of the world (5).

An institutional based cross sectional study conducted in north central Nigeria to investigate knowledge and utilization of ANC service has revealed that 87.7% of women in child bearing

age were aware of the benefits of antenatal care out of which 25.9% had fair knowledge about the activities carried out during the antenatal care services, 69.9% had good knowledge while only 4.2% had poor knowledge(10, 5). Similarly a study that was conducted in Tunisia to investigate mothers' knowledge about preventive care indicated that 95% of women knew the importance of antenatal examination(4).

Different to these findings a cross-sectional study conducted using two-stage cluster sampling at 24 selected villages in the Kham District, Nagoya, Japan found that most of the respondents 73.9%, lacked sufficient knowledge towards ANC (11). In another cross-sectional study conducted in Metekel zone, North West Ethiopia, 65.6% of women interviewed knew at least half of the knowledge questions on ANC and so labeled as knowledgeable (12).

2.2. Determinants of knowledge of women towards ANC

Knowledge of the women towards ANC service can be influenced by different factors. In study done on knowledge and practice of ante-natal care in an urban area of India revealed that the primipara had more knowledge than the multipara although it was not statistically significant. This study also revealed that women having adequate knowledge on ANC were found to be statistically associated with their educational status, religion, age at marriage and house ownership. With increase in the educational status, the adequacy of knowledge also increased correspondingly (12). However, the multipara were found to have poorer knowledge on ANC in a study done in Shanghai, China (13, 14).

2.3. ANC knowledge and its utilization

In study done in Metekel Zone, Northwest Ethiopia, Among the socio-demographic factors; being in urban residence, possessing radio and educational status of secondary school and above

were more than 4 times, two times, and three times more likely to be knowledgeable about ANC (12).

It could be in realization that knowledge of pregnant mothers is a major factor in determining the extent of utilization of antenatal services. Reports from different part of the world have indicated that increased level of pregnant mothers toward ANC care service has an influence on its utilization.

Study done in Copper belt Province of Zambia to identify factors associated with late antenatal care attendance in selected rural and urban communities found that inadequate knowledge about ANC resulted into 2.2 times high odds for late ANC attendance than women who had adequate knowledge in urban district. The perception of no benefits derived from commencement of ANC early was associated with 4 times likelihood of late attendance in the urban district (13, 14).

According to report from study done in Kham District, Xiengkhouang Province, Nagoya, Japan, the levels of education and knowledge were the most important predictors of ANC utilization. Educated women were 6.8 times more likely to receive ANC services than those who had no education, and women who were highly knowledgeable were 6.5 times more likely to do so than those who were deficient in knowledge (3).

2.4. Attitude of women towards ANC care

“Attitude” is a state of readiness or tendency to respond in a certain manner when confronted with certain stimuli, is mostly dormant and is expressed in speech or behavior only when the object or situation is encountered (15). It is person's affective feelings of like and dislike. So in this study, attitude refers to expectant mother's affective feelings of like and dislike to antenatal services. Thus, the pregnant women's personal experience to antenatal services can be positive or negative.

In JhalMagsi District of Balochistan province of Pakistan community-based survey on provision and utilization of routine antenatal care has described that attitude towards ANC at government health facilities was mostly negative 57.7%. In another cross-sectional study conducted using two-stage cluster sampling at 24 selected villages in the Kham District of Xiengkhouang Province, Nagoya, Japan, 61.9% of study participant had harbored a negative attitude towards the ANC(16).

Previous studies in rural areas of the developing world have shown an association of specific attitudes with utilization of and access to health services. The attitude towards ANC at government health facilities was significantly associated negatively with ANC and shows low utilization of ANC. Studies have reported negative attitudes as a major barrier to ANC utilization (17).

Based on Kham District of Xiengkhouang Province, Nagoya, Japan, women who had a positive attitude were 3.0 times more likely to receive ANC services than those who had a negative attitude. Other studies in Indonesia has also reported similar finding in which respondent's attitude was a critical factor in encouraging pregnant women to receive ANC service (17).

Level of education has a significant influence on the attitude of pregnant women to antenatal services. Pregnant women with basic education usually manifest positive attitude(18). Pregnant mothers with secondary and tertiary education qualification had positive attitude to antenatal services while the attitude to antenatal services by pregnant women with no formal education and primary education showed negative (16).

According to the study conducted in Nigeria attitude of pregnant women towards antenatal services was positive. It reveals attitude of pregnant women with secondary school and tertiary

education was positive while pregnant women with no formal education and primary educations were negative respectively (13).

Generally different studies in different countries showed that there was similarity and differences on knowledge and attitude of pregnant women on the benefits of antenatal care. The study conducted in same area found good knowledge and attitude and other findings were the opposite. There for these review helps to compare the finding of our study.

2.5. Conceptual frame work

Based on review of literatures done in Ethiopia and other part of the world knowledge and attitude of women towards anti natal care use can be affected by Socio demographic characteristics, Socio economic information and media exposure, Obstetric history and previous health service utilization.

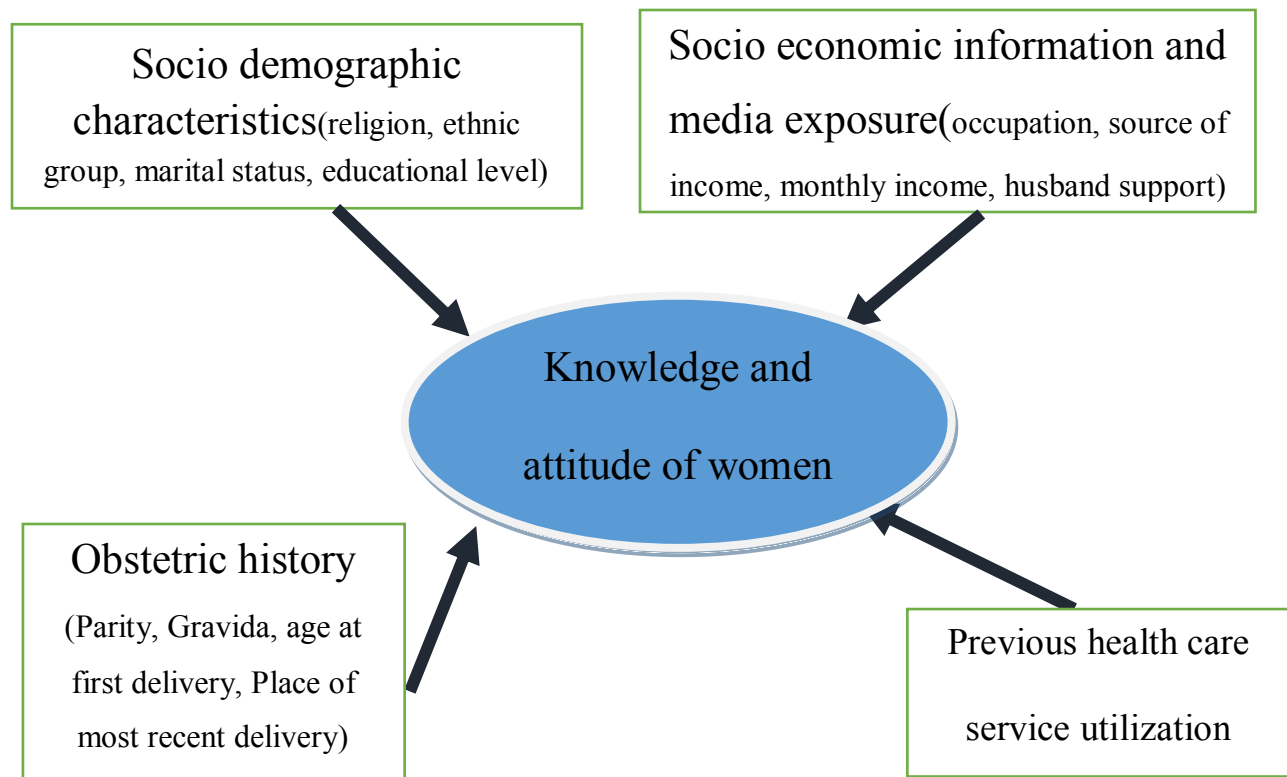


Figure 1. Conceptual frame work showing factors affecting knowledge and attitude of women towards anti natal care use (constructed after reviewing literatures)

CHAPTER THREE

3. OBJECTIVE OF THE STUDY

3.1. General Objective

The overall objective of the study was to assess the knowledge and attitudes of pregnant women about the benefits of antenatal care utilization in Addis Ababa, Ethiopia.

3.2. Specific Objectives

- To identify the pregnant women's knowledge about antenatal care utilization.
- To assess pregnant women's attitude towards the use of antenatal care.
- To determine the factors associated with knowledge and attitude of pregnant women on antenatal care utilization.

CHAPTER FOUR

4. METHODS AND MATERIALS

4.1. Study area and period

The study was conducted in Addis Ababa, the capital city of Ethiopia with total population of more than 3 million. There are ten sub cities and 116 woredas. The city has 6 hospitals and 84 health centers under Addis Ababa regional health bureau, 5specialized referral hospitals, 2 defense forces referral hospital and 1 Federal police hospital under respected government organizations. In addition there are 2 hospitals, 3 health centers and 31 different level clinics established by nongovernmental organization (NGOs). There are also 30 private hospital and more than 700 different level private clinics in Addis Ababa city administration. The study was carried out among women attending ANC in selected health center from January to May 2015.

4.2. Study design

Institution based cross-sectional study with quantitative methods was conducted to assess the knowledge and attitude of pregnant women on the benefit of ANC utilization in Addis Ababa.

4.3. Population

4.3.1 Source population

All pregnant women who visited health centers that are found in Addis Ababa for the purpose of anti-natal care service from March to April, 2015

4.3.2. Study population

All pregnant women attending ANC in selected health centers who were randomly selected to be included in the study from March to April, 2015.

4.4. Inclusion and exclusion criteria

Inclusion criteria

- Pregnant women who had at least one previous ANC visit during their current pregnancy
- Pregnant women who were willing to participate

Exclusion criteria

Clients that are too ill to participate in an interview and first visit were excluded from the study

4.5. Sample size determination

Sample size is calculated using single population proportion:

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

Where: n is sample size, Z is standard normal distribution corresponding to significance level at $\alpha = 0.05$, d is margin of error assumed to be 5% and p is proportion pregnant women reported to be knowledgeable about ANC and has positive attitude. Hence proportion of women who had good knowledge and attitude toward ANC among women attending ANC clinic were not found 50% proportion is considered to get maximum sample size.

Therefore with 10% non-response rate the final sample size was found to be 422

5.6. Sampling procedure

From the total of 84 health centers that are found in Addis Ababa 25 health centers were randomly selected and number of women to be included in these health centers were determined by using proportion to size allocation technique. The total number of women to be included in

each health center were determined based the average number women expected to be seen during the data collection period based on the previous three month data from the respected health center. Interval sampling was used to select women to be included in the study. To identify the interval the average number of women expected per day in each health center was divided by number of women to be interviewed per day from respective health center. The first woman was selected by lottery method and then every k^{th} women (which was calculated for each health center) visiting the health center was selected for the study. The immediately next woman was used if the woman is interviewed previously or she refused to participate in the study.

4.7. Study Variables

Dependent variable:

- Knowledge of pregnant women
- Attitude of pregnant women

Independent variables:

- Women and partner socio economic factors (religion, ethnic group, marital status, educational level)
- Socio economic information and media exposure (occupation, source of income, monthly income, husband support)
- Obstetric history (parity, Gravida, age at first delivery, Place of most recent delivery)
- Previous health care service utilization (those mothers who were received antenatal care for their most recent pregnancy in the health facility)

4.8. Operational definitions

Knowledgeable: 20 questions were asked for the knowledge part, each correct answer were given one mark and no mark were given for wrong answer and women with mean score for knowledge questions of 0.5 is considered to be knowledgeable.

Attitude on antenatal care: There were 14 statements with 5-point Likert Scale agreement options to measure the attitude level which were given 1 to 5 marks. The attitude score were further be divided to two levels which are good attitude and poor attitude using the mean attitude score.

4.9. Data collection instrument

Interviewer administered structured questionnaire was used with modification from other researches as presented in literature review. The questionnaire was prepared originally in English and then translated to Amharic language and then back to English. Five percent of the questionnaires were pretested for clarity and consistency of the questions in none selected health center week prior to the actual data collection. Then necessary correction was made based on the feedback of the data collectors.

4.10. Data Collectors

A total of 25 nurses one for each health center who are not working in maternal and child health service area were interview the women. One days training was given for data collectors and three supervisor on the objective and relevance of the study, how to gather the appropriate information, procedures of data collection techniques and the whole contents of the questionnaire. The supervisor monitored the overall data collection presses during the data collection period.

4.11. Data processing & analysis

Epi data version 3.5 and SPSS version 21 was used for data entry and analysis. After cleaning the data, frequencies and percentages was calculated to all variables which were related to the objectives of the study. Odds ratio with 95 % confidence interval was computed to assess the presence and degree of association between dependent and independent variables. P-value less than 0.05 was considered significant. Moreover, logistic regression analysis was also be employed to control the possible confounding effect and assess the separate effects of the variables.

4.12. Ethical consideration

Ethical clearance was obtained from Addis Ababa University, college of health science, department of nursing and midwifery ethical review committee. Permission was obtained from Addis Ababa health bureau and from respective health institutions, and informed consent was obtained from individual respondent. Questionnaire were analyzed, and the respondents were told that they have the right to be involved or not to be involved in the study, and that non-involvement otherwise will not affect the clinical care they might receive.

4.13. Dissemination plan

The result of the study will be submitted to Addis Ababa University, college of health science, department of nursing and midwifery. It will also be disseminated to the Addis Ababa health bureau and the respective health institutions & other concerned and interested organizations. Publication in peer reviewed, national or international journals will also be considered

CHAPTER FIVE

5. RESULT

5.1. Characteristics of the Respondents

Out of 422 calculated sample size calculated a total of 405 women agreed to participate in this study making response rate 95.9%. The mean age for the study subject was 27.63 (\pm 5.07) majority 268(66.2%) of them being greater than 25 years of age. The majority 316(78.0%) were currently living with their partners and 215(53.1%) had educational status of greater than 9th grade .The largest number of the respondents 138(34.1%) were housewife's followed by government employee 99(24.4%). Two hundred twenty four (55.3%) of the women were followers of orthodox Christianity. Regarding their ethnic group 173(42.7%) of them were from Amhara followed by Oromo which accounts for 103(25.4%) of the study participants. Two hundred eighty four (70.1%) of the women had reported as they have seen, heard or read about ANC in the past three months. And 284(70.1%) of the women has said that they get any support they need related to ANC from their partner. (Table 1).

Table 1: Socio-demographic characteristics of women attending ANC services in selected health center, Addis Ababa, Ethiopia, 2015 (N= 405)

Characteristics	Frequency	Percentage
Age		
15-24	137	33.8
25+	268	66.2
Current marital status		
Currently living with partner	316	78.0
Currently not living with partner	89	22.0
Educational status		
Less than grade 8	190	46.9
Grade 9 and above	215	53.1
Occupation	75	24.1
House wife	138	34.1
Government employee	99	24.4
Privet employee	91	22.5
Merchant	57	14.1
Others	20	4.9
Religion		
Orthodox	224	55.3
Muslim	111	27.4
Protestant	67	16.5
Others	3	.7
Ethnicity		
Amhara	173	42.7
Oromo	103	25.4
Tigre	56	13.8
Gurage	57	14.1
Others	15	3.2
In the past three months, have you seen, heard or read anything		
Yes	284	70.1
No	121	29.9
Partner support		
Yes	284	70.1
No	121	29.9

5.2. Reproductive history

Regarding history of previous pregnancies, from 405 women who responded to the questionnaire 210(51.9) of them reported as they have been pregnant before. From these 210 women 113(53.8%) of them had been pregnant for less than or equal to two times. The number of the respondent's children ranged between one and seven per women with 16.2% of them having more than three children. A total of 186 women (88.6%) had visited health facilities for ANC services during their most recent pregnancy. Related to place of the most recent delivery 103(51.2%) of them delivered at health center and 11(5.5%) of them delivery at home with the main reason for this being precipitated labor.

Table 2: Reproductive history of women attending ANC services in selected health center, Addis Ababa, Ethiopia, 2015 (N = 405)

Characteristics	Frequency	Percentage
Previous pregnancy (N=405)		
Yes	210	51.9
No	195	48.1
Number of pregnancy (N=210)		
≤ 2	113	53.8
≥ 3	97	46.2
Number of children (N=210)		
≤ 2	176	83.8
≥ 3	34	16.2
Years between delivery (N=203)		
≤ 2 years	110	54.2
> 2 years	93	45.8
Health facility for ANC during your most resent(n=210)		
Yes	186	88.6
No	24	11.4
Place of most recent delivery (n=201)		
Home	11	5.5
Health center	103	51.2
Hospital	51	25.4
Private hospital	36	17.9

5.3. Knowledge on antenatal care

Table 3 shows women’s responses to the question on knowledge regarding antenatal care. There were 20 questions on knowledge, each correct answer was given one mark and no mark was given for wrong answer. In this study, the knowledge score of the respondents ranged between 7 and 18 with the mean of 13.01 (SD=3.976) and median of 13.0 (Interquartile Range, IQR=5). The score was normally distributed. The knowledge score was further divided to two levels which are good knowledge and poor knowledge using the mean knowledge score as the cutoff point. The proportion of respondents with good knowledge was 59.3 percent with 95% confidence interval of 54.3 to 64.0 percent. Further analysis of the questions on knowledge revealed that majority (96.8%) of the women know that pregnant women need to go for antenatal check-up. However, only 40.2% know that the first antenatal check-up should be done in the first three months and about a quarter of the women know how many times does pregnant woman need to come for antenatal follow up throughout her pregnancy.

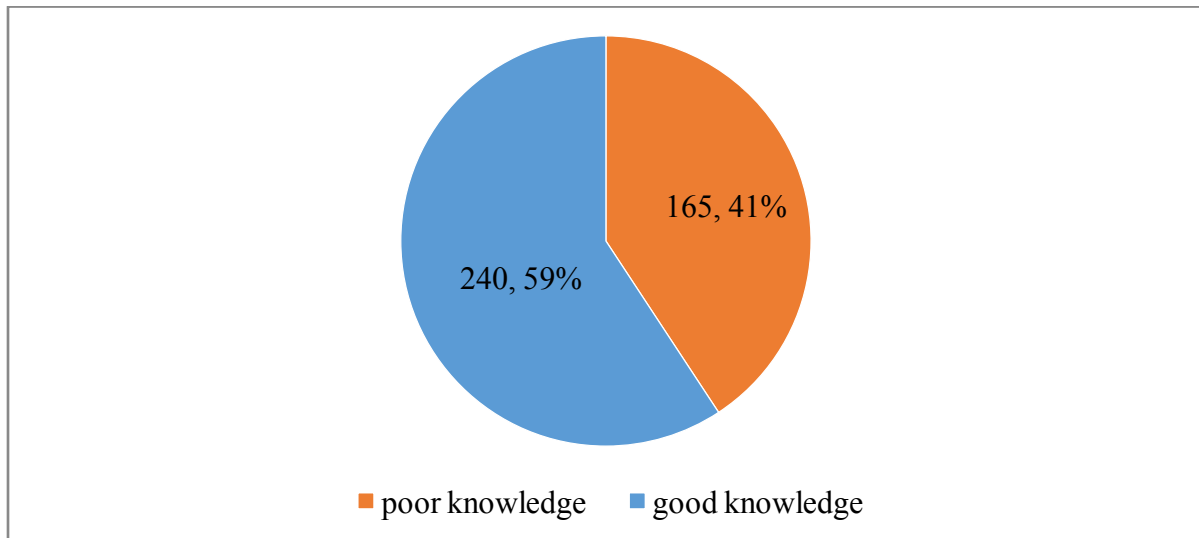


Figure 2. Knowledge on antenatal care among women attending ANC services in selected health center, Addis Ababa, Ethiopia, 2015

Table 3. Knowledge on antenatal care among women attending ANC services in selected health center, Addis Ababa, Ethiopia, 2015 (N=405)

Knowledge on antenatal care	No. of subjects with correct answer	Percentage (%)
Do pregnant women need to go for antenatal check-up?	392	96.8
If yes is it required to go for ANC even if there is no complication during pregnancy?	305	75.3
Should first antenatal check-up be one in the first 3 months?	163	40.2
For at least how many times does pregnant woman need to come for antenatal follow up throughout her pregnancy?	105	25.9
Is it necessary to give inj. TT during pregnancy?	294	72.6
If yes, how many times inj. TT should be given?	117	28.9
Does pregnant woman need vitamin supplement?	295	72.8
Is it necessary to take iron folic acid tablet during pregnancy?	281	69.4
If yes how many iron folic acid has to be taken during pregnancy?	226	55.8
Do pregnant woman need to take extra food as compared to non-pregnant state?	322	79.5
Does pregnant woman need to undergo the following test during her antenatal check-up?		
Blood screening for HIV infection	377	93.1
Blood screening for hemoglobin level	202	49.9
Blood pressure examination?	324	80.0
Blood sugar level?	140	34.6
Can high blood pressure affect the fetus growth?	303	74.8
Do diabetic women have higher risk of having big babies?	164	40.5
Is ultrasound scan safe for the fetus?	194	47.9
Is antenatal class good to prepare expecting mothers mentally?	361	89.1
Can emotional disturbance affect fetal growth?	214	52.8
Where is the ideal place a pregnant woman should deliver her baby?	362	89.4

5.4. Attitude on antenatal care

There were 14 statements with 5-point Likert Scale agreement options to measure the attitude level which were given 1 to 5 marks. For the purpose of this paper, the response to the option for strongly agree and agree were reported cumulatively so as the response to strongly disagree, neutral and disagree. The minimum possible score was 13 and the maximum possible score was 75. Result shows that the attitude level of the women ranged from 13 to 65 with the mean score of 48.1 (SD=9.4) and median of 49 (IQR=10). The score was normally distributed. The attitude score was further divided to two levels which are good attitude and poor attitude using the mean attitude score. The proportion of respondents with good attitude was 224(55.3%) with 95% confident interval of 50.4 to 59.5 percent. For the individual questions, it was noted that there was a good response to the statement on allowing doctors to check my blood pressure where 83.0% of the respondents agreed to it.

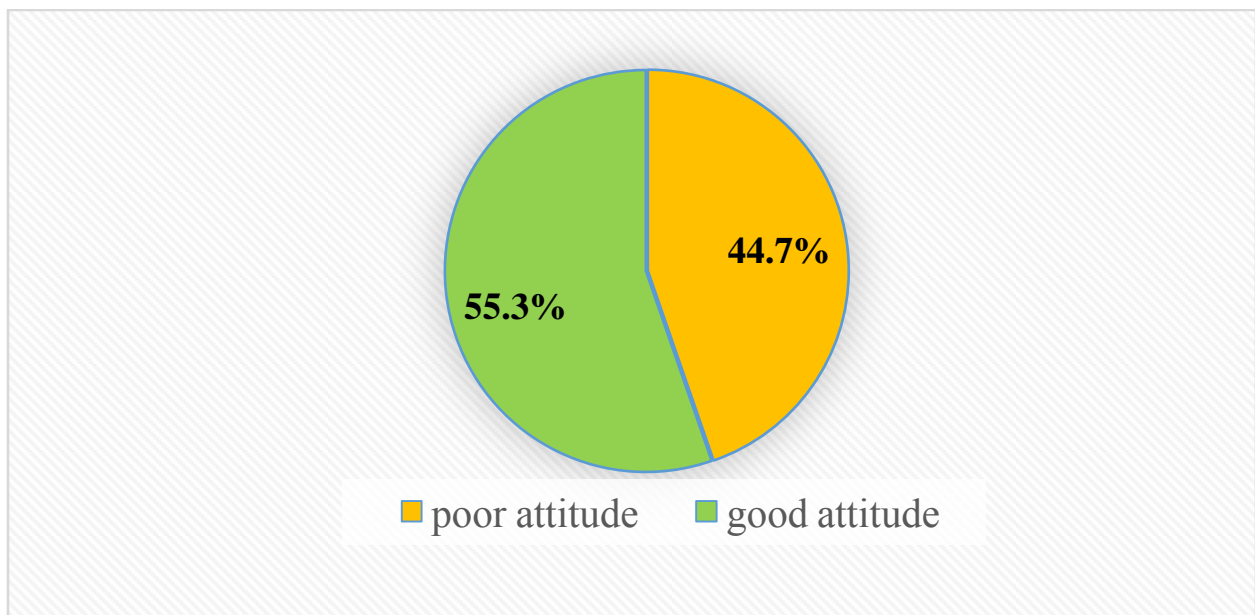


Figure 3. Attitude towards antenatal care among women attending ANC services in selected health center, Addis Ababa, Ethiopia, 2015

Table 4. Attitude towards antenatal care among women attending ANC services in selected health center, Addis Ababa, Ethiopia, 2015 (N=405)

Statements	Strongly Disagree, Disagree & Neutral	Strongly Agree & Agree
Early antenatal booking is good for my pregnancy	111(27.4)	294 (72.6)
I will go for antenatal booking before the third month of my pregnancy	241(59.4)	164 (40.5)
I believe that vitamin supplement is good for the fetus	138(34.1)	267(65.9)
I believe alcohol drinking will affect fetal growth	226(55.8)	179(44.2)
I should go for antenatal checkup if I am pregnant	48 (39.2)	246(60.7)
Antenatal follow up is good to monitor mother's and fetus' health	30(20.5)	322(79.5)
I will allow the doctor to take my blood for screening	98(24.5)	307(75.5)
I will allow the doctor to check my blood pressure	69(17.0)	336(83.0)
I will check my blood sugar level if I am pregnant	172(42.5)	233 (57.5)
I am willing to do ultrasounds can during my pregnancy	113(27.9)	292(72.1)
I plan to deliver in the hospital if I am pregnant	113(27.9)	292 (73.1)
I will do early preparation for the delivery	110(27.2)	295 (72.9)
I am ready to face any pregnancy and delivery complication	118(29.1)	287 (70.9)

5.5. Factors associated with knowledge and attitude of women

The same factors were used during binary and logistic regression to identify factors that are associated with knowledge and attitude of the women who visited selected health centers for ANC checkup.

During binary regression educational status, partner support and health facility visit for ANC during most recent pregnancy were found to be associated with attitude of the women. Accordingly, compared to women who has studied grade 9 and above those who studied grade 8 and less are 0.54 times less likely to have good attitude [COR 0.54 (0.37, 0.81)]. Similarly women who visited health facilities for ANC purpose during most recent pregnancy were 0.37 times less likely to have good attitude about ANC services COR 0.37(0.14, 0.94)]. On the other hand women who get support from their partner were 2.14 times more likely to have good attitude [COR 2.14(1.43, 3.20)].

During multiple logistic regression women who get support from their partner were 2.18 times more likely to have good attitude [AOR 2.18(1.19, 3.97)]. Women with grade 8 and less and those who visited health facilities for the purpose of ANC during their previous pregnancy were less likely to have good attitude [AOR 0.51(0.27, 0.98)] [AOR 0.28(0.10, 0.82)]. Table 5

Table 5: Factors associated with attitude of women attending ANC services in selected health center, Addis Ababa, Ethiopia, 2015

Characteristics	Attitude of women (%)		COR (95%CI)	AOR (95%CI)
	Good	Poor		
Age group				
15-24	77(56.2)	60(43.8)	1.06(0.70, 1.60)	1.91(0.79,4.64)
25+	147(54.9)	121(45.1)	1.00	1.00
Educational status				
Less than grade 8	90(47.4)	100(52.6)	0.54 (0.37,0.81)*	0.51(0.27,0.98)*
Grade 9 and above	134(62.3)	81(37.7)	1.00	1.00
Number of children				
≤ 2	94(53.4)	82(46.6)	0.80(0.38, 1.69)	0.87(0.34,2.26)
≥ 3	20(58.8)	14(41.2)	1.00	1.00
Occupational status				
House wife	75(54.3)	63(45.7)	0.94 (0.62, 1.43)	0.92(0.47,1.77)
Others	149(55.8)	118(44.2)	1.00	1.00
Partner support				
Yes	118(65.6)	62(34.4)	2.14(1.43, 3.20)*	2.18(1.19,3.97)*
No	106(47.1)	119(52.9)	1.00	1.00
In the past three months, have you seen, heard or read anything				
Yes	156(54.9)	128(45.1)	1.05(0.68, 1.61)	0.62(0.31,1.22)
No	68(56.2)	53(43.8)	1.00	1.00
Health facility for ANC during your most resent				
Yes	96(51.6)	90(48.4)	0.36(0.14,0.94)*	0.28(0.10,0.82)*
No	18(75.0)	6(25.0)	1.00	1.00
Years between delivery				
≤ 2 years	56(49.6)	57(50.4)	0.66(0.38,1.14)	0.59(0.29,1.17)
> 2 years	58(59.8)	39(40.2)	1.00	1.00

* Significant at p<0.05

When we see factors that are associated with knowledge of the women about ANC services by using similar variables used during attitude, partner support was found to be significantly associated in binary regression. Women's who get support from their partner were 3.96 times more likely to have good knowledge [COR 3.96(2.57, 6.11)]. When we control for other variables, this variable remain to be significantly associated. Women with partner support were 6.78 times more likely to have good knowledge compared to those who had no support from their partner [AOR 6.78(3.44,13.33)]. And other variables are not found to be significantly associated. (Table 6).

Table 6: Factors associated with knowledge of women attending ANC services in selected health center, Addis Ababa, Ethiopia, 2015

Characteristics	Knowledge of Women (%)		COR (95%CI)	AOR (95%CI)
	Good	Poor		
Age group				
15-24	83(59.9)	55(40.1)	1.04(0.68, 1.58)	1.89(0.69,5.16)
25+	158(59.0)	110(41.0)	1.00	1.00
Educational status				
Less than grade 8	108(56.8)	82(43.2)	0.83 (0.56, 1.23)	1.11(0.56,2.23)
Grade 9 and above	132(61.4)	83(38.6)	1.00	1.00
Number of children				
≤ 2	107(60.8)	69(39.2)	1.75(0.83, 3.65)	1.61(0.58,4.49)
≥ 3	16(47.1)	18(52.9)	1.00	1.00
Occupational status				
House wife	80(58.0)	58(42.0)	0.92 (0.61, 1.40)	0.83(0.41,1.69)
Others	160(59.9)	107(40.1)	1.00	1.00
Partner support				
Yes	138(76.7)	42(23.3)	3.96(2.57, 6.11)*	6.78(3.44,13.3)*
No	102(45.3)	123(54.7)	1.00	1.00
In the past three months, have you seen, heard or read anything				
Yes	167(58.8)	117(41.2)	0.94(0.61, 1.45)	0.52(0.24,1.11)
No	73(60.3)	48(39.7)	1.00	1.00
Health facility for ANC during your most resent				
Yes	112(60.2)	74(39.8)	1.79(0.76, 4.21)	0.59(0.58,4.37)
No	11(45.8)	13(54.2)	1.00	1.00
Years between delivery				
≤ 2 years	68(60.2)	45(39.8)	1.15(0.67,2.00)	0.97(0.46,2.0)
> 2 years	55(56.7)	42(43.3)	1.00	1.00

* Significant at p<0.05

CHAPTER SIX

6. DISCUSSION

The importance of knowledge and awareness among different groups of women as factors affecting the acceptance and utilization of health services has been shown in other studies [18, 19]. Similarly, appropriate knowledge and attitude is vital in ensuring sustainable acceptance of antenatal services among women. This study revealed that 59.3 percent of the respondents have good knowledge regarding the antenatal care. This finding is almost similar with cross-sectional study conducted in Metekel zone, North West Ethiopia, in which 65.6% of women interviewed knew at least half of the knowledge questions on ANC and so labeled as knowledgeable [8]. This finding was higher than result of study done by Yang, Yoshitoku and his colleagues, in Khan District, Xiengkhouang province Nagoya, Japan, stating that prevalence of good knowledge among mothers who received ANC care being 45.5% [14]. Similarly prevalence of good knowledge was lower 44.2% in Jempol, Negeria Semilan [19]. In another our hand finding was lower than study done in South-West Nigeria in which over all knowledge was reported to be 74.6%. And again another study from north central Nigeria reported good knowledge of 69.9% [20]. This difference may be due to difference in study population and instruments used to measure knowledge.

The result on attitude towards ante-natal care showed that 55% of the interviewed women had attitude score of more than half value. This is also supported by Rosalia and Muhammed (2011) in their study on attitude towards ANC which revealed positive respondents attitude was 53.8% [19]. Result from cross sectional study conducted in IkotEkpene south east of Nigeria, in attitude towards ANC was not in agreement with the above findings when the study discovered that majority of the respondents 56.7% showed negative attitude towards ANC [21]. In another study

on antenatal care services among women in Kham district, Xiengkhouang province, Nagoya, Japan, showed that 62.2% of ANC receivers had good attitude towards ANC services [14]. The disparity between the two results may be attributed to the fact that traditional ante-natal care gives them the opportunity to have regular contacts with their doctors and also seeing other clients with help to allay their anxiety.

In this study only 40.2% Of the women had knowledge of that first antenatal check-up has to be done in the first 3 months of pregnancy. Similarly, 40.5 % of women agreed or strongly agreed as they will go for antenatal booking before the third month of their pregnancy. And only 25.9% and 28.9% of them mentioned correctly the minimum recommended number of ANC visit and responded how many times injection tetanus toxoid (TT) should be given during pregnancy respectively. Although study participants were women attending ANC service and they probably had received iron folic acid tablet, slightly greater than half of them correctly answered how iron folic acid has to be taken during pregnancy. Similar finding was obtained from study done in an urban area of Imphal East, India in which 55.2%, 34.2% and 54.1% of the women interviewed knew correctly the minimum ante-natal checkup during pregnancy, injection (TT) should be given during pregnancy and knew correct doses of folic acid needed during pregnancy respectively [9]. These finding might give insight as there is still need for more effort for improving the women's knowledge on this important contributors of maternal health.

It is believed that women's education is important for understanding health messages and to be able to make decisions regarding their health and care. The findings on determinant factors shown that, although significant association was not found between educational status and knowledge of the women, attitude was found to be affected by education status. As education level decrease the probability of having good knowledge also decreases. This finding is in line

with study conducted in Nsukka local government area of Enugu state, Nigeria [7]. Education not only transforms, but also empowers women and improves their self-esteem. It is expected that educated women are more likely to be aware about their health status and seek health knowledge and this will contribute on positive attitude of the women.

Partner support during pregnancy and ANC visit was found to be significant determinant of both knowledge and attitude of mother towards ANC. Women with partner support had better knowledge and attitude. Previous exposure and utilization of ANC services may help in clearing myths about the service and help to appreciate the advantage of using the services. But, these mothers who were not well treated and fail to receive the care they wanted to get or they think they should get, they will go home with less satisfaction and similar poor service might be expected by these mothers. Accordingly in this study it was found that women who had visited health facilities during their previous pregnancies were less likely to have positive attitude for attending antenatal care services.

Strength and Limitation

Strength of the study

- There was high response rate
- Adequate sample was used to represent the total population.(more than 30 percent of the institution were included in the sample)

Limitation of the study

- As study is conducted in Addis Ababa health centers only, generalization of this finding to the city may be difficult.
- As the study was conducted among women currently attending ANC care from the health centers social desirability bias may not have been completely eliminated but proper training of research assistants helped in minimizing this.

CHAPTER SEVEN

7. CONCLUSION AND RECOMMENDATION

7.1. Conclusion

According to this study three out of five women were found to have good Knowledge of ANC and slightly greater than half of the study participant had good attitude of ANC. Their knowledge on certain aspects of antenatal care was still poor.

Partner support was found to a significantly affect Knowledge and attitude of woman towards ANC. In both cases women who has partner support had higher likely hood of having good knowledge and attitude. Compared to women with educational status greater than secondary school those with less than elementary school were less likely to have good attitude. And also women who visited health facility for ANC during her most recent pregnancy were less likely to have good attitude.

7.2. Recommendation

- In a long run, women empowerment through education and income generating activities as well as involvement of husbands during information education and communication are recommended
- Information, education and communication on ANC must be intensified in order to reach all segments of the population.
- Community health practitioners, public health educators and social workers should plan appropriate technique to modify the attitude of some pregnant women on the concept of antenatal services.
- Awareness creation should be need to continue through mass media campaigns highlighting on topics like when to start ANC, minimum number of visit expected to attend, advantage of TT vaccine and other components of ANC services.
- Future research should be directed to conducting including both urban and rural community to provide national data.

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Annex I Consent form

Client consent form to assess knowledge and attitude of pregnant women on benefits of ANC utilization in Addis Ababa Ethiopia

Introduction, My name is ----- I am working in research team which is conducted by Addis Ababa University for partial fulfillment of master's degree in maternity and reproductive health. We are interviewing currently pregnant women attending ANC service in _____ health center.

The objective of the study is to assess knowledge and attitude of pregnant women on benefits of ANC utilization in Addis Ababa. I am going to ask you some questions that are not difficult to answer. Your name will not be written in this form and will never be used in connection with any of the information you tell me. You do not have to answer any question that you do not want to answer and you may end this interview at any time you want to. However, your honest answers to these questions will help as in identifying the magnitude and determinants of unmet need for ANC services in the future. We would appreciate your help in responding to this survey questions .The interview will take about 30 minutes. Would you be willing to participate [indicate by ticking the appropriate responses]?

Yes-----, no-----

Signature of the interviewer certifying that the informed consent has been verbally by respondents-----

Annex II Questionnaire English Version

Questionnaire use to assess knowledge and attitude of pregnant women on benefits of ANC utilization in Addis Ababa Ethiopia

Part I: Socio demographic characteristics

questionnaire code _____

No	Question	Answers and codes	Go to
101	How old are you?	_____ In completed Years I don't remember _____ 88	
102	What is your religion?	Orthodox _____ 1 Muslim _____ 2 Protestant _____ 3 Others(sepecify) _____ 4	
103	To which ethnic group do you belong?	Amhara _____ 2 Tigre _____ 3 Oromo _____ 1 Gurage _____ 4 Others(specify) _____ 5	
104	What is your marital status?	Never married _____ 1 Married _____ 2 Divorced _____ 3 Widowed _____ 4 Others(Specify) _____ 5	
105	What is your educational level?	Can't read and write _____ 1 Grade 1-6 _____ 2 Grade7-12 _____ 3 Diploma and above _____ 4 Others(specify) _____ 5	
106	What is your occupation?	Merchant _____ 1 Governmentemployee _____ 2 Housewife _____ 3 Student _____ 4 Privateemployee _____ 5 Others(specify) _____ 6	

107	What is your estimated monthly income?	500-1000 birr 1500- 3000 3500 and above I do not know -----8	
108	In the past three months, have you seen, heard or read anything about importance of attending ANC at health facility on radio or television or on the newspaper or anywhere else?	Yes _____ 1 No _____ 2 I don't remember _____ 3	
109	Did your husband support you in attending ANC?	Yes _____ 1 No _____ 2 I don't remember _____ 3	
110	In what ways did your husband support you in attending ANC?	_____	

Part III: obstetric information and health care service utilization

No	Question	Response and Code			Go to
201	How many times have you been pregnant	_____			
202	How many children do you have?	_____			
203	How many years between your deliveries in average?	_____ in months			
204	What was your age at first delivery?	_____ yrs.			
205	At what gestational age was your first visit?	_____ months I don't remember _____ 88			
206	During your antenatal visit or delivery at health institution, did the health professional informed about the following points at least once?				
	Counseling topics	Yes	No	I don't know	
	1. Need of pregnant women for antenatal check-up	1	2	88	

	2. When to start antenatal check-up	1	2	88	
	3. About importance STI and HIV test	1	2	88	
	4. About danger signs of pregnancy	1	2	88	
	5. About exclusive breast feeding	1	2	88	
207	Place of most recent delivery	Home _____ 1 Health center _____ 2 Hospital _____ 3 Others(specify) _____ 4			
208	If it is home, why?	No nearby health facility _____ 1 No transportation _____ 2 Precipitated labor _____ 3 Lack of money _____ 4 No partner for help _____ 5 I don't want to go health facility _____ 6 Other specify _____ 7			
209	Did you take the baby to health institution? For check up in the first one month?(postnatal checkup)	Yes _____ 1 No _____ 2 I don't remember _____ 88			

Part IV: Assessing the knowledge on ANC

No	Question	Response		Go to
		Yes	No	
301	Do pregnant women need to go for antenatal check-up?	1	2	
302	If yes is it required to go for ANC even if there is no complication during pregnancy?	1	2	
303	Should first antenatal check-up be done in the first 3 months?	1	2	
304	For at least how many times does pregnant woman need to come for antenatal follow up throughout her pregnancy?(<i>Is her answer correct? Correct if she answered four</i>)	1	2	

305	Is it necessary to give inj. TT during pregnancy?	1	2	
306	If yes, how many times inj. TT should be given? <i>(Is her answer correct? Correct if she answered five)</i>	1	2	
307	Does pregnant woman need vitamin supplement?	1	2	
308	Is it necessary to take iron folic acid tablet during pregnancy?	1	2	
309	If yes how many iron folic acid has to be taken during pregnancy? <i>(Is her answer correct? Correct if she says)</i>	1	2	
310	Do pregnant woman need to take extra food as compared to non-pregnant state?	1	2	
Does pregnant woman need to undergo the following test during her antenatal check-up?				
311	Blood screening for HIV infection	1	2	
312	Blood screening for hemoglobin level	1	2	
313	Blood pressure examination?	1	2	
314	Blood sugar level?	1	2	
315	Can high blood pressure affect the fetus growth?	1	2	
316	Do diabetic women have higher risk of having big babies?	1	2	
317	Is ultrasound scan safe for the fetus?	1	2	
318	Is antenatal class good to prepare expecting mothers mentally?	1	2	
319	Can emotional disturbance affect fetal growth?	1	2	
320	Where is the ideal place a pregnant woman should deliver her baby? <i>(Is her answer correct? Correct if the woman say at health institution)</i>	1	2	

Part V: Assessing Attitude towards antenatal care

No	Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
401	Early antenatal booking is good for my pregnancy	1	2	3	4	5
402	I will go for antenatal booking before the third month of my pregnancy	1	2	3	4	5
403	I believe that vitamin supplement is good for the fetus	1	2	3	4	5
404	I believe alcohol drinking will affect fetal growth	1	2	3	4	5
405	I should go for antenatal checkup if I am pregnant	1	2	3	4	5
406	Antenatal follow up is good to monitor mother's and fetus' health	1	2	3	4	5
407	I will allow the doctor to take my blood for screening	1	2	3	4	5
408	I will allow the doctor to check my blood pressure	1	2	3	4	5
409	I will check my blood sugar level if I am pregnant	1	2	3	4	5
410	I am willing to do ultrasound scan during my pregnancy	1	2	3	4	5
411	I plan to deliver in the health facilities	1	2	3	4	5
412	I will do early preparation for the delivery	1	2	3	4	5
413	I am ready to face any pregnancy and delivery complication	1	2	3	4	5

Annex III Consent Form Amharic Version

የሚስጥርአጠባበቅስምምነት

ጤናይስጥልኝ፡ እኔ _____ አባላለሁ፡

በአዲስአበባዩኒቨርሲቲየህክምናፋካሊቲየነርስናየሚድዋይፈሪሪትምህርትክፍልየድህረምረቃፕሮግራምተማሪነኝ፡፡

የዚህጥናትአላማለእርግዝናክትትልየሚመጡእናቶችንበእርግዝናምርመራጥቅምላይያላቸውንእውቀትናአመለካከትጥናትለማካሄድነው፡፡ እርስዎምበዚህጥናትላይእንዲሳተፉበትህትናእጠየቃለሁ፡፡

ይህምየእናቶችንየጤናአሰጣጥአገልግሎትለማሻሻልይረዳል፡፡

ይህጥናትጥያቄዎችቃለመጠይቅ _____ ደቂቃዎችንይፈጅብናል፡፡

በዚህጥናትላይለመሳተፍፍቃድዎንእንጠይቃለን፡፡

ከዚህምበተጨማሪበዚህጥናትላይበከፊልምሆነበሙሉያለመሳተፍሙበትዎየተጠበቀነው፡፡

በዚህጥናትላይለመሳተፍፍቃድኛከሆኑጥያቄዎችንበአጠቃላይነጥቦችንበማንሳትእጅምራለሁ፡፡

ትክክለኛመረጃመስጠትለጤናማሻሻልእንደሚረዳማሳሰብእውዳለሁ፡፡

በጥናቱለመሳተፍፍቃድኛነዎት ?

1. አዎከሆነወደሚቀጥለውጥያቄእለፍ/ፊ
2. አልስማማምከሆነአመስግነህ/ሽ ጥያቄውንአቋርጥ/ጩ

ለጥናቱፍቃድኛነትያረጋገጠውፊርማየሚስጥርአጠባበቅስምምነትእንደሰጠያረጋግጣል፡፡

ምስጥር _____ ፊርማ _____ ቀን _____

የጉብኝትውጤትተሟልተዋል 2. በከፊልተሟልተዋል 3. ተቃውሞ 4. ሌላ ካለይገለፅ

Annex III Questionnaire Amharic Version

በእርግዝናክትትልላይያሉነፍሰጡርሴቶችንስለእርግዝናምርመራጥቅምእውቀትናአመለካከትመጠይቅ

ክፍል I: የማህበረሰብስነሀዝብባህሪያትየጥያቄመለያ.ቁ _____

ተ.ቁ	ጥያቄ	መልስናመለያ	Go to
101	ለመጨረሻግዜልደትዎንሲያከብሩእድሜዎትስንትነበር?	_____ አመት አላስታውሰውም _____ 88	
102	ሃይማኖትዎ ?	ኦርቶዶክስ _____ 1 ሙስሊም _____ 2 ፕሮቴስታንት _____ 3 ሌላካለይገለፅ _____ 4	
103	የየትኛውብሄርአባልነዎት?	አማራ _____ 2 ትግሬ _____ 3 አሮሞ _____ 1 ጉራጌ _____ 4 ሌላካለይገለጹ _____ 5	
104	የጋብቻሁኔታ?	ያላገባች _____ 1 ያገባች _____ 2 የፈታች _____ 3 ባሏየሞተባት _____ 4 ሌላካለይገለፅ _____ 5	
105	የትምህርትደረጃዎ ?	ማንበብናመጻፍአልችልም _____ 1 ከ 1 ^ኛ - 6 ^ኛ ክፍል _____ 2 ከ 7 ^ኛ - 8 ^ኛ ክፍል _____ 3 ከ 10 ^ኛ - 12 ^ኛ ክፍል _____ 4 ዲፕሎማናከዛበላይ _____ 5 ሌላካለይገለፅ _____ 6	

ክፍል II. ማህበራዊናኢኮኖሚያዊእናየመገናኛብዙሃንምልከታ

ተ.ቁ	ጥያቄ	ምላሽ	Go to
106	በአሁኑስአትየሚሰሩትስራዎትምንድነው ?	ነጋዴ _____ 1 የመንግስትስራተኛ _____ 2 የቤትአመቤት _____ 3 ተማሪ _____ 4 የግልተቀጣሪ _____ 5	

		ሌላካለይገለፅ _____ 6	
107	የወርገቢዎስንትነው?	500-1000 ብር 1500-3000 ብር 3500 በላይ አላውቀውም	
108	ከሶስትወርበፊትስለእርግዝናምርመራጠቃሚነትበሬድዮወይምበቴሌቪዥንስምተወያወያውቃሉ?	አዎ _____ 1 አልሰማሁም _____ 2 አላስታውስም _____ 3	
109	ባለቤትዎየእርግዝናክትትልእንዲያደርጉይደግፍዎታል?	አዎ _____ 1 አልሰማሁም _____ 2 አላስታውስም _____	
110	ባለቤትዎየእርግዝናክትትልእንዲያደርጉበምንመልከታይደግፍዎታል?	_____	

ክፍል III: የፅንሰመረጃእናየጤናክብካቤአገልግሎትአሰጣጥ

ተ.ቁ	ጥያቄ	ምላሽናመለያቁ	Go to
201	ስንተኛእርግዝናዎነው?	_____	
202	ስንትልጆችአለዎት ?	_____	
203	ልጆችንሲወልዱበየስንትአመትልዩነትነበር?	_____ አመት	
204	መጀመሪያሲወልዱእድሜዎስንትነበር?	_____ አመት	
207	መጀመሪያወደጤናድርጅትየመጡትበስንተኛሳምንትእርግዝ ዎነበር ?	_____ ሳምንት አላስታውስም _____ 88	
208	በእርግዝናክትትልዎወቅትበጤናባለሙያዎችየሚከተሉትን ምክርአግኝተውነበርወይ		
	የመማከሪያርዕስ	አዎ አልተሰጠኝም አላስታውስም	
	ስለኤችአይቪናአባለዘርባሽታምርመራናጥቅም	1 2 88	
	ለስድስትወርጠትብቻማጥባትጥቅም	1 2 88	
	በእርግዝናግዜሊከሰቱስለሚችሉአደገኛምልክቶች	1 2 88	
	አራርቆስለመውለድጥቅም	1 2 88	
		1 2 88	

209	በቅርብ ጊዜ የወለዱት የትክክር?	እቤትዎት _____ 1 ጤና ጣቢያ _____ 2 ሆስፒታል _____ 3 ሌላ ካለ ይገለጹ _____ 4	
210	እቤትዎት ለምን ወለዱ?	ባጠገቤ ጤና ድርጅት ስለሌለ _____ 1 መጓጓዣ ስለሌለ _____ 2 ምጡ አጣድፎኝ _____ 3 የገንዘብ እጥረት _____ 4 የሚረዳኝ ስለሌለ _____ 5 በጤና ድርጅት መውሰድ ስላልፈለኩ _____ 6 ሌላ ካለ ይገለጹ _____ 7	
211	ሕፃኑን በመጀመሪያ አንድ ወር ጊዜው ስጥለክት ትል ጤና ድርጅት ወስደውት ነበር?	አዎ _____ 1 አልወሰድኩትም _____ 2 አላስታውስም _____ 88	

ክፍል IV: የእናትን ስለ የእርግዝና ክትትል እውቀት መጠየቅ

ተ.ቁ	ጥያቄ	ምላሽ	
		አዎ	አያስፈልግም
301	ነፍሰ ጡርሴት ለወሊድ ክትትል ወደ ጤና ድርጅት መሄድ አለባት ብለው ያምናሉ?	1	2
302	የጤና ችግር ባይኖር ባትም ለወሊድ ክትትል ወደ ጤና ድርጅት መሄድ አለባት ብለው ያምናሉ?	1	2
303	የነፍሰ ጡርሴት ወሊድ ክትትል በመጀመሪያ ዎቹ ስትወራት ቢሆን ጥሩ ነው ይላሉ?	1	2
304	ነፍሰ ጡርሴት በእርግዝና ዋናው ቅጥር ላይ ስትሆን ጊዜ ለክትትል ጤና ድርጅት መሄድ ይኖርባታል? (መልሷት ክከለነበር? ቢያንስ አራቴካለች 1 ያክብቡ)	1	2
305	የመንጋጋ ቆልፍ ክትትል (TT) በእርግዝና ጊዜ አስፈላጊ ነው ብለው ያምናሉ?	1	2
306	አዎከሆነ መልስ ይስጡት ጊዜ? (መልሷት ክከለሁለት ጊዜ ካለች 1 ያክብቡ)	1	2
307	ነፍሰ ጡርሴት ተጨማሪ ማሪቫይታ ሚን ያስፈልጋታል?	1	2
308	በእርግዝና ጊዜ ተጨማሪ የአይረን ክትትል ያስፈልጋታል?	1	2
309	አዎከሆነ መልስ ይስጡት ጊዜ? (መልሷት ክከለነበር? ባለሙያው እንዳይዘልኝ ካለች)	1	2
310	ነፍሰ ጡርሴት ነፍሰ ጡርካል ሆኑት ተጨማሪ ማሪቫይታ መውሰድ ያስፈልጋታል?	1	2

ነፍሰጡርሴትበእርግዝናወቅትየሚከተሉትምርመራዎችያስፈልጋታል?			
311	የኤችአይቪናየአባለዘርምርመራ	1	2
312	የደምማነስምርመራ	1	2
313	የደምግፊትምርመራ	1	2
314	የስኳርምርመራ	1	2
315	ከፍተኛየደምግፊትበፅንሱንእድገትላይተፅእኖያመጣልብለውያስባሉ?	1	2
316	እናትየስኳርህመምካላትበፅንሱላይተፅእኖያመጣልብለውያስባሉ?	1	2
317	የአልትራሳውንድምርመራለፅንሱችግርያመጣልብለውያስባሉ?	1	2
318	በእርግዝናወቅትየሚሰጡትምህርቶችለእናቶችይጠቅማልብለውያስባሉ?	1	2
319	የአእምሮአለመረጋጋትበፅንሱእድገትላይተፅእኖያመጣልብለውያስባሉ?	1	2
320	ለመውለድትከከለኛቦታየትነውይላሉ?(በጤናተቋምካለች 1 ያክብቡ)	1	2

ክፍል V: የእናትንስለየእርግዝናከትትልያላትንአመለካከትለማወቅየሚረዳመጠየቅያ

ተ.ቁ	ጥያቄ	በጣምአልሰማማም	አልሰማማም	አስተያየትየለኝም	እስማማለሁ	በጣምእስማማለሁ
401	ነፍሰጡርእንደሆኑ ሲያውቁበቶሎጤናድርጅትመሄድይጠቅማል?	1	2	3	4	5
402	ለእርግዝናከትትልከ 3 ወርከማለፉበፊትአሉዳለሁ	1	2	3	4	5
403	ተጨማሪሻይታሚንመውሰድለፅንሱይጠቅማልብዬአምናለሁ::	1	2	3	4	5
404	አልኮልመጠጣትበፅንሱእድገትላይተፅእኖያመጣልብዬአምናለሁ::	1	2	3	4	5
405	ነፍሰጡርመሆኔንእንዳወቅሁስሆንለከትትልጤናድርጅት መሄድአለብኝ::	1	2	3	4	5
406	የእርግዝናከትትልማድረግለእኔምለፅንሱምጠቃሚነው::	1	2	3	4	5
407	ለምርመራባለሞያዎችደሚንእንዲወስዱአፈቅዳለሁ::	1	2	3	4	5
408	ባለሞያዎችየደምግፊ፣ቴንኦኒዲላኩልኝእፈቅዳለሁ::	1	2	3	4	5
409	በእርግዝናጊዜዬየስኳርምርመራአደርጋለሁ	1	2	3	4	5
410	በእርግዝናጊዜዬየፅንሱሁኔታበአልትራሳውንድእንዲታይልኝአደርጋለሁ::	1	2	3	4	5
411	በጤናድርጅትውስጥለመውለድአቅጃለሁ::	1	2	3	4	5
412	ለመውለድየሚያስፈልገኝቅድመዝግጅትአደርጋለሁ::	1	2	3	4	5
413	በምጥጊዜየሚገጥመኝንችግርለመቋቋምዝግጃለኝ::	1	2	3	4	5

DECLARATION

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

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This thesis has been submitted for examination with my approval as university advisor.

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