

Satisfaction about antenatal care and associated factors among pregnant women who booked at public health institutions, Hossana Town, Southern Ethiopia

By:

Dagmawit Birhanu (BSc)

A thesis submitted to Jimma University, college of public health and medical sciences, department of nursing; in partial fulfillment of the requirements for the degree of masters in maternity nursing.

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By:

Dagmawit Birhanu (BSc)

ADVISORS: 1. PROF. TEFERA BELACHEW (MD, MSc, PhD)

2. DESTA WORKNEH (BSc, MSc)

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### **ABSTRACT**

**Background:** Woman's satisfaction with antenatal care service may have immediate and long-term impact on her and her baby's health. It also ensures further use of service. However it is not well studied in Ethiopia in general and the southern Region in particular. Therefore, this research is going to assess the level of client's satisfaction about antenatal care services

**Objective:** The objective of this study was to assess the level of pregnant women satisfaction and associated factors towards antenatal care provided in public health institutions among pregnant women in Hossana Town, South Ethiopia

**Method**: Institution based cross sectional study that involves both quantitative and qualitative method of data collection was employed .Interviewer administered questionnaire with an exit interview from March1 to 30, 2014 among 303 antenatal care service users were conducted in public health institutions of Hossana Town. Systematic sampling technique was used in sampling the study subjects. For the qualitative study four Focus Group Discussions (FGD) was conducted. Descriptive statistics, bivariate analysis and multivariable logistic regression analyses were employed to identify factors associated with client satisfaction on antenatal care. The qualitative data analyzed thematically and manually.

**Result:** overall 74% of clients were satisfied with antenatal care service rendered in public health institutions of Hossana Town. Younger age group between 25-29 were more satisfied than older (>35) years (AOR=5.584; 95% C.I:1.76, 17.7), those whose privacy was maintained were eight times satisfied than those privacy was not maintained (AOR=8; 95% C.I:3.375, 19.263), and those with travailing time less than 30 minutes (5Km) were two times to be satisfied than those with travel time greater than 30 minute (AOR=2.804; 95% C.I: 1.423, 5.522)

**Conclusion:** Generally, most of the respondents were satisfied with the service that they had received Relatively low satisfaction was reported on communication and information domain Age, education, living distance, maintenance of privacy, cleanness of the facility, and respect from provider were the significant factors affecting satisfaction. Improving care provider information and communication skill was recommended.

**Key words**: Antenatal care, Client satisfaction, Hossana Town.

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### **ACRINOMY AND ABRIVATIONS**

ANC: Antenatal Care

ETB: Ethiopian Birr

HC: Health Center

JUSH: Jimma University Specialized Hospital

MDG: Millennium Development Goal

MMR: Maternal Mortality Ratio

NEMMH: Nigist Elaine Mohamed memorial hospital

OR: Odds Ratios

SPSS: Statistical Package for Social Science

UCH: University College Hospital

UK: United Kingdom

UNICEF: United Nations international children emergency fund

**US:** United States

WHO: World Health Organization

### **CHAPTER ONE: INTRODUCTION**

### 1.1 Back ground

Antenatal care can be broadly defined as encompassing pregnancy-related services provided between conception and the onset of labor with the aim of improving pregnancy outcome and/or the heath of the mother or child (1).

The main aim of antenatal care is to prevent, alleviate or treat/manage health problems/diseases (including those directly related to pregnancy) that are known to have an unfavorable outcome on pregnancy, and to provide women and their families/partners with appropriate information and advice for a healthy pregnancy, childbirth and postnatal recovery, including care of the newborn, promotion of early exclusive breastfeeding and assistance with deciding on future pregnancies in order to improve pregnancy outcomes(2).

The measurement of clients' satisfaction is a common component of evaluations in quality care. It is a wholly subjective assessment of the quality of health care. Evidence has suggested that care, which is less than satisfactory to the clients, is also less effective, because dissatisfaction is associated with noncompliance with treatment instructions, delay in seeking further care and poor understanding and retention of medical information(3).

Ware *et al.* argued that client satisfaction was a function of clients' subjective responses to experienced care mediated by personal preferences and expectations. Linder-Pelz postulated it was mediated by personal beliefs and values about care as well as prior expectations of the care. Fox and Storms advocated that a person's orientation determined satisfaction; dissatisfaction, therefore, occurred where there was transgression of the relationship between expectation and experience. Fitzpatrick and Hopkins argued that expectations were socially mediated, reflecting the health goals of the client and the extent to which illness and health care violated the client's personal sense of self. Finally, Donabedian postulated it was based on personal relationships within health care systems and health care outcomes from treatment, where these were mediated by the values of the client(4).

The Robert Wood Johnson Foundation defines client satisfaction: "client satisfaction is a measurement designed to obtain reports or ratings from clients about services received from an organization, hospital, or health care provider". Research has developed the meaning of client satisfaction to be more precisely defined as the client experience. On a practical level, client satisfaction is equivalent to the actual measure. Client expectations of care and attitudes greatly contribute to satisfaction; other psychosocial factors, including pain and depression, are also known to contribute to client satisfaction scores. It is a key determinant of quality of care. Furthermore client satisfaction is critical to how well clients do (5).

It also has been showed that clients' reported levels of satisfaction reflect professional' technical competence as judged by independent assessors. Thus, satisfaction or dissatisfaction is an intermediate outcome that may reflect a failure to answer clients' needs, meet their expectations, or provide an acceptable standard of service.

Client satisfaction has become an important indicator of the quality of care because: It brings a consumer viewpoint policy to health care while also safeguarding clients' rights and taking their views into account, it is known that a satisfied client is more likely to comply with treatment and advice he or she receives from health care professionals, there is a high likelihood of a satisfied client returning to the same health facility when in need of health care, a satisfied client is more willing to recommend to the hospital that provided his or her care to others in need of health care(3).

### 1.2 Statement of the problem

Many maternal and prenatal deaths occur in women with low utilization of ANC; but utilization of ANC service is affected by client's satisfaction. Nevertheless, true progress has been made globally in terms of increasing access and use, a study in 2003 on antenatal care estimated that worldwide 70% of women ever receive any antenatal care, whereas in industrialized countries more than 95% of pregnant women receive ANC (2)

Antenatal care services for all pregnant women began in late 1930s in the United Kingdom (UK). However, worldwide, every day, approximately 800 women die from preventable causes related to pregnancy and childbirth. Some studies have estimated that ANC alone can reduce maternal mortality by 20% given good quality and regular attendance. In addition ANC attendance during pregnancy has been shown to have a positive impact on the use of postnatal healthcare services, which also play a key role in detecting risky conditions after child birth consequently leading to better maternal health outcomes(6).

Globally, there were an estimated 289 000 maternal deaths in 2013, (MMR of 210 maternal deaths per 100 000 live births). 99% of death occurs in developing countries and sub-Saharan Africa region alone accounting for 62% of maternal death. Maternal mortality is higher in women without skilled care before, during and after childbirth(7).

Ethiopia is one of the countries in sub-Saharan Africa with markedly high maternal mortality ratio. The maternal mortality ratio (MMR) estimated for the year 2013 was 420 per 100,000 live births. Efforts to reduce maternal mortality should focus on reducing the likelihood that a woman will have a high risk pregnancy; reducing the likelihood that a pregnant woman will experience a serious complication of pregnancy or childbirth and improving the outcomes for women with complications(7).

Ethiopia's Health Sector Development Program (HSDP) acknowledges the importance of increasing access to high quality antenatal and post-abortion care, strengthening reproductive health care and family planning, increasing access to skilled delivery care, and providing education about family planning are key areas of interest in order to bring down the high maternal mortality in the country(8).

Women die as a result of complications during and following pregnancy and childbirth. Most of these complications develop during pregnancy. Other complications may exist before pregnancy but are worsened during pregnancy. Abortion, obstetric complications such as hemorrhage, dystocia, eclampsia, sepsis and infections such as tuberculosis and HIV are the major causes of maternal deaths in developing countries(9). Although antenatal care (ANC) is not in itself very effective in reducing maternal mortality, it provides an entry for interventions which give health workers the opportunity to detect these risky conditions and therefore refer them for early management leading to better maternal outcomes(10).

ANC attendance is an important entry point to convince expectant mothers about the health benefits of attended delivery. However, use of ANC service by pregnant women could be affected by the level of their satisfaction by the service provided at the health care facility. Previous studies revealed that clients who were dissatisfied with the service were less likely to utilize health care services. In 2008 in southwestern Nigeria only 44% of respondents utilized health care facilities. This was attributed to various factors causing dissatisfaction with services rendered at these centers(11). Since client dissatisfaction leads to less utilization, it hampers the attainment of health (12).

Clients' use of health care is affected by the quality of care; those who are not satisfied with their providers may be less likely to continue with treatment or seek further services. According to U.S. Agency for Healthcare Research and Quality, National CAHPS Benchmarking Database In 2008, 35% of women were not satisfied with their experiences of care, including receiving needed information or help and being treated with courtesy and respect.(13)

The degree of client satisfaction can be used as a means of assessing the quality of health care and the personnel. It reflects the ability of the provider to meet the clients' needs. Satisfied clients are more likely than the unsatisfied ones to continue using the health care services, maintaining their relationships with specific health care providers and complying with the care regimens(14).

Sociodemographic background of the client, expectations of care, organizational (facility related factors), provider related factors (communication and information, participation and

involvement, interpersonal relationships) are a very important aspect or factors on which client satisfaction depends(3).

Despite the fact client satisfaction on antenatal care service is one of the measures of quality care and is essential for further improvement of maternal and child health and it is not well studied in Ethiopia in general and southern Region in particular. Therefore, this study is aimed to assess the level of client's satisfaction about antenatal services and its associated factors in public health facilities of Hossana Town.

## **CHAPTER TWO: LITERATURE REVIEW**

Addressing client concerns is as essential to good quality health care as technical competence. Quality largely depends on client interaction with provider, such attributes as waiting time and privacy, ease of access to care and, at its most basic; whether they get the services they want. Proportion of pregnant women satisfied with ANC services they receive increase from baseline value is one the major outcome indicators of ANC services improvement(2). Although there is much debate about how quality of care should be measured, levels of user satisfaction are highly relevant signals because they reflect clients' perceptions of the standards achieved, their judgments of the "goodness" of care, and the success of providers at meeting client values and expectations(15). Measuring satisfaction is a way of assessing the process of care, describing the user's viewpoint, and evaluating care. However, the outcomes that are important to professionals and users of the health care system may differ, and there is value in exploring and reflecting on the assumptions underlying the various perspectives on care of the groups involved(16).

Documenting their experience of care using quantitative and qualitative methods provides a window or source of information for health professionals, managers, and policy makers that can be directed at, in this instance, improving the quality of maternity care and thus the experience of women and their families at this important time in their lives (16). A better understanding of determinants of client satisfaction should help policy and decision makers to implement programmers tailored to clients needs as perceived by clients and service providers (9).

#### 2.1 levels of client satisfaction

The level of client satisfaction to ANC service vary from country to country and region to region according to a study done in developed countries for example, a study done in Swedish which aimed to investigate how satisfied Swedish women ware with their antenatal care showed that the majority of the women (82%) were satisfied with the medical aspects of care and 77% of the women were satisfied with the emotional aspects of care (17)

Also Ghobashi and Khandekar in 2005 assessed expectant woman's satisfaction on ANC services in the Musandam region of Oman They found that 81% of participants were satisfied with the services 59% reported an 'Excellent' grade of overall satisfaction. The rest of the participants reported 'Very good' levels of satisfaction. Long waiting time, poor laboratory services and language barrier are the leading causes of dissatisfaction. The positive behavior of the health staff and the warm reception mothers received in the antenatal care unit (attitude of the doctors and nursing staff) were the most satisfying parts of the services (18)

Another study in 2005 conducted in Malaysia found that more than half of the respondents were satisfied with the service that they received (56.7%), while the others (43.3%) not satisfied. Generally, most of the respondents were satisfied with interpersonal aspects from the staff (62%), technical quality of the doctors (79.3%), efficacy (78%), availability (50.7%), and the financial aspect (70%). Meanwhile, the respondents were not satisfied with the several aspects i.e. accessibility (61.3%), convenience (51.3%), and continuity of care (81.3%). (19).

A study done on Bangladesh by Hasen on women's satisfaction on MHC services showed that 76.6% of the respondents were highly satisfied with the provider support and 57.8% were satisfied with the facilities of the service center there were significant association between satisfaction and good facilities of the service but no significant association between satisfaction and age, education, income, occupation and service expectation(20). However being a quantitative study over a short period of time may not reflect all dimension of the situation

On the other hand a cross-sectional study that involved 317 clients in Malaysia showed that majority of the clients (93.1%) was generally satisfied with the overall services. Among the different dimensions clients were most satisfied with the doctors, but only 35.6% of the clients were satisfied with the facilities. The proportions of clients who were satisfied with other dimensions: 86.1% (appointment), 82.0% (nurses) and 68.1% (accessibility). There was a significant association between each of the dimensions and the general satisfaction for doctors, nurses, accessibility(21)

Also some of the studies conducted in developing counters were reported. For example a study aimed to answer Women Satisfaction with Antenatal Care Services at Primary Health Centers in Mushin; Lagos (Nigeria), overall satisfaction with services was 98.5% most respondents (31.1%) waited for between 31 and 60 minutes; 30.1% waited for 91 to 120 minutes; and 29.8% waited for 30 minutes or less before accessing care at the various health centers. The expectations of 88.0% of clients were satisfied in the course of service utilization. Almost all respondents were willing to recommend the services received to others. About half of clients were very satisfied with the cost of services and the facilities' opening hours, while 43.5% as well as 44.1% were satisfied with the cost of services and opening hours respectively.(22).

Another study in 2012 conducted on shawa village of Egypt named Egyptian women's satisfaction and perception on ANC services indicates that a high satisfaction (>90%) for waiting time, laboratory results, answering inquiries cleanness of the center and privacy. Less satisfaction (<30%) reported on location of the center health education method and explanation of problem by physician (23). However since this was across sectional study it would be better if it was supported by qualitative study to explore those variables who have strong relation with the dependent variables

Also Zeidan *et al* 2010 did a study on Satisfaction among pregnant women towards antenatal care in public and private care clinics in Sudan, Khartoum. 400 pregnant women ware participated in the study, Prevalence of satisfaction was (22%) among pregnant women who visited public Antenatal Care Clinics, compared to (54%) among those who attended Private Antenatal Care clinics. (24)

On the other hand a study on ten health centers in Addis Ababa by Workinesh Sinishaw 2009 to assess the quality of antenatal care through care provider's competency, facility and level of satisfaction showed that overall satisfaction of client in antenatal care was as high as 89%. 18.8% of interviewed women have spent dissatisfied with the waiting time; 58. 45% were spent two hours and less and they were satisfied more 25.18% of clients were spent 0-9min for consultation and examination with health care providers and they are dissatisfied, greater percentage of women were satisfied with the examination time and consultant time was (25).

### 2.2 factors associated with client's satisfaction

Study done on women's perception and satisfaction with the quality of ANC service at university collage Nigeria, this study evaluated clients' perception of antenatal care quality at the University College Hospital (UCH), Ibadan and determined levels of client satisfaction. Items in the study included were sociodemographic and obstetric variables, assessment of quality of amenities, waiting time and level of satisfaction. The only significant association with client satisfaction was the desire to register in the same facility in the next pregnancy. Its finding has implication for practice, research finding and recommendation (26). However this study has its own methodological fallacy in which non-probability sampling were used which may not be representative to target population.

Another study done on women's satisfaction with the current state of prenatal care for pregnancies complicated by fetal anomalies which is a Survey of five academic perinatal units in Ontario. The aim of this study was to assess the level of satisfaction with prenatal care in women with pregnancies complicated by congenital anomalies the study show that there was a statistically significant association between women's opinion and women's knowledge of prenatal care and their level of satisfaction with prenatal care. Women who had difficulty understanding what a doctor or midwife was telling them were less satisfied with prenatal care than women without such difficulty these study identifies that Language and ethnic diversity were not associated with the level of satisfaction (27).

Also study on the statues of client of satisfaction in client attending governmental health facilities in Agra District aimed to assess the level of satisfaction of clients and identify areas of dissatisfaction. A total of 600 client were interviewed in this study it was found that there were a high level of satisfaction with courtesy and respect given by doctor, overall time duration given by doctor, skill of care provider, cost incurred on health services, whereas comparatively low satisfaction was found regarding registration process, waiting time, cleanness, and comfort of waiting area and examination room the finding of these study suggest that to rise level of client satisfaction measures should be taken by policy makers and administrators in capacity building, training and orientation programs for health professionals (28).

A study conducted on clients' satisfaction in antenatal clinic Hospital University, Malaysia showed that factors affecting client satisfaction were charge of service, number of visit, and health status.

On the other hand educational statues, age, occupation and number of children have impact on client level of satisfaction these result was revealed by dr.sahar lamadah in 2012. The study observed those who are older, low educated, housewives women and those with small number of children were more satisfied with health care providers ' interaction and the quality of antenatal care services provided to them. The study also identifies that more than two thirds of the clients and slightly less than two thirds of them respectively were very satisfied with provider-client interaction and quality of antenatal care services(29). However this study used a very small sample size in which its representativeness is under question.

Also Hildingsson & Radestad in 2000 showed that residence was one of the factors that affect women's level of satisfaction. Based on their study on Swedish women's satisfaction on the medical and emotional aspects of ANC found that Women living in a large or middle-sized city were more likely to be dissatisfied with the emotional aspects of care, compared with those living in a rural area. The strongest factors of dissatisfaction were women's opinions that midwives had not been supportive and had not paid attention to their partners' needs. Similar to lamadah (2012) this study identified that level of education as one predictor of satisfaction. It was found that those with low levels of education were more likely to be dissatisfied with both medical and emotional aspects of antenatal care (17).

Past experience has no significant association with client satisfaction this was discussed by Anjum Javed in 2005. This study was conducted in Pakistan institute of medical sciences, Islamabad to determine the level of client satisfaction and associated factors towards outpatient department. Variables that had significant association with client satisfaction was sociodemographic factors age, marital status, education occupation, and family income(30).

A study to evaluate the level of outpatients' satisfaction with physiotherapy service at Al-Shifa Hospital and Al-Wafa Medical Rehabilitation Hospital in Gaza consists of 151 client which was

selected conveniently showed that significant relationships between residency place and occupation with client satisfaction level. While there were no significant statistical differences between waiting time and the demographic variables (gender, age groups, marital status, and educational level (31). However the study participants for this study ware had drawn conveniently which may not be representative.

A study conducted in Addis Ababa on Quality of reproductive health services at private forprofit institutions reported that significant factors affecting satisfaction were waiting time, polite treatment, satisfactory response for client's questions and short consultation time

A study on assessment of Quality of Care in Antenatal Services in Adama special Zone of Oromia Region, Ethiopia satisfaction of clients were more in those clients who perceived the distance from home to health facility as an average than those who perceived the distance as too far. Those clients who did not mention waiting time as a problem were more likely to be satisfied than who mentioned it as a problem.

More over client participation in the care enhances satisfaction. Clients' ability to participate and be actively involved in their care and decision making, has an influence on their perception of satisfaction. Clients need to be included and involved in decision making and choices about their care and treatment. Organizational and environmental factors that influence client satisfaction included cleanliness, waiting time, the comfort and aesthetics of premises. This was discussed by Johansson, *et al*(3)

#### SIGNIFICANCE OF THE STUDY

In developing countries such as Ethiopia, few studies have sought clients' views on satisfaction with ANC services, and there is little effort to involve them in measuring satisfaction or defining health service standards.

As an implication, this research helps healthcare providers to understand client's preferences by measuring their satisfaction on the existing service. Finding of this study would help as a guide for the improvement of antenatal care since little is known about clients satisfaction and associated factors and as far as the investigators' knowledge no published study in the study area it provide information by reflecting the level of client satisfaction on antenatal care in Hossana town public health institutions. The finding would delineate areas of further improvement particularly at clinical sites, antenatal clinics

Findings of this study will also share the gathered information with healthcare providers and stakeholders in health sector as an input for the improvement of quality of healthcare services offered in Hossana town public health institutions in terms of clients view

## Theoretical model used for the construction of a conceptual framework

The Precede proceed model

Modified precede- proceed model designed by Lawrence Green and Marshall Kreuter was used for developing the conceptual framework. This Framework has three categories: predisposing, enabling and reinforcing factors. But in this current study on client's satisfaction on Antenatal care service (ANC) services out of three the categories predisposing and enabling factors were used.

Predisposing characteristics are those that exist prior to need that describe the propensity to use health care services (Examples Knowledge toward health care, employment status, and educational level).

Enabling factors are factor antecedent to behavior that allows a motivation. Include personal skills; barriers that can help or hinder the desired behavior change Example of antecedents to behavior that enables a motivation to be realized including the availability, income level and accessibility(32)

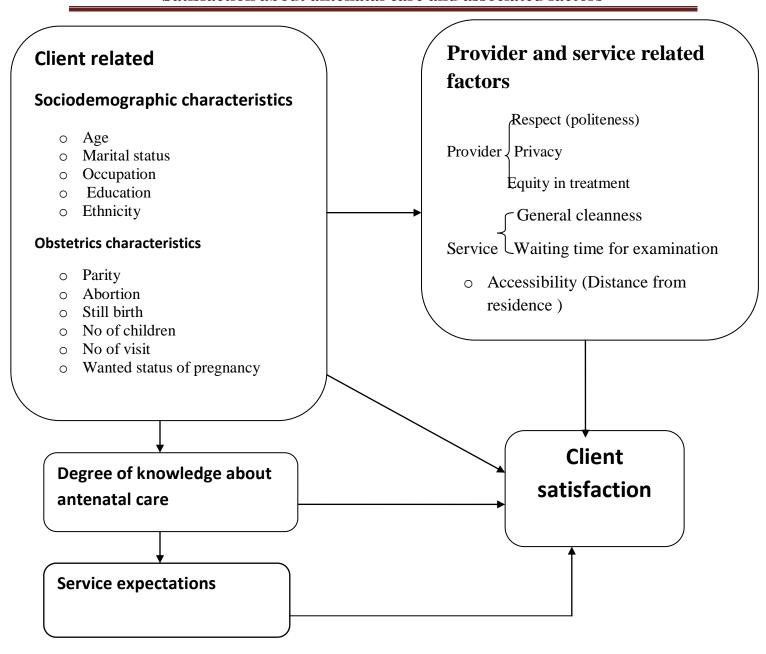


Figure 1 Conceptual Frameworks to assess pregnant women satisfaction about Antenatal care service in Hossana town Public health facilities, Southern Ethiopia, 2014

### CHAPTER THREE: OBJECTIVE OF THE STUDY

## 4.1 General objective:

• To assess client satisfaction about ANC service provided at public health facilities in Hossana Town and associated factors in 2014.

# **4.2 Specific objectives:**

- To determine the level of pregnant women satisfaction on antenatal care services provided in Hossana Town public health institutions.
- To identify factors affecting pregnant women satisfaction on antenatal care provided in Hossana Town public health institutions.

**CHAPTER FOUR: METHODS AND MATERIALS** 

4.1 Study area and period

Hossana town is one of the political and administrative Town of Hadiya zone. It lies 230 Km

southwest of the capital city, Addis Ababa. The Town is divided in to three sub cities and eight

Kebles. The total population size of the Town projected to the year 2013 according to the 2007

population and housing census was 102238 of which 5097 are male and 52144 are female with

an annual growth rate of 5%. The census revealed that the town has a proportion of sex 51:49

females to males. The population of women in the reproductive age (WIRA) was 23821 and the

proportion of pregnant women constitutes 3.9% of the total population. The main occupations of

the people in the Town are merchant, Health care services, teaching with some of them

employed in Banking. The Town has a hospital, three health centers and sixteen private clinics.

4.2 Study Design

Facility based cross-sectional study that involve both qualitative and quantitative method of data

collection was conducted in four public health institutions within Hossana Town, from March

1to 30 to determine the level of client satisfaction towards antenatal care and associated factors

4.3 Population and sample

4.3.1 Source population:

All pregnant women attending antenatal care services at four public health institutions in

Hossana Town during the study period.

4.3.1 Study population

All sampled pregnant women attending antenatal care services at four public health institutions

in Hossana Town and met the inclusion criteria were included in the study.

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#### 4.4 Inclusion and exclusion criteria

#### 4.4.1 Inclusion criteria

All pregnant women who received antenatal care services in the selected four public health facilities

#### 4.4.2 Exclusion criteria

Pregnant women who were critically sick to be interviewed during date collection period.

## 4.5. Sample size and sampling technique:

### 4.5.1 Sample Size determination

The sample size for the quantitative study was determined using a formula for estimation of single population proportion considering the assumptions:

$$n = \underline{(Z\alpha/2)2 \times p (1-p)}$$

$$d^2$$

Where n = Sample size

 $Z\alpha/2$  = Confidence level at 95% = 1.96

P = Proportion of satisfaction of women which is Unknown; Assumption of 50% (p=0.5)

d = margin of error of 5%

$$n = (Za/2)^2 * P (1 - P), n = (1.96)^2 * 0.5(1-0.5)$$

$$d^2 (0.05)^2 n=384$$

Since the source population is less than 10,000, an adjustment formula (FPC),

n

 $\mathbf{nf} = \mathbf{1} + \mathbf{n/N}$  is used, where,  $\mathbf{N} = \mathbf{Source}$  population- all estimated pregnant women,  $\mathbf{nf} = \mathbf{Required}$  Sample Size, n=calculated sample size, Hence, the sample size was calculated at total of source population  $\mathbf{N} = \mathbf{1280}$  and  $\mathbf{n} = \mathbf{384}$  and  $\mathbf{nf} = \mathbf{295}$  Considering non-response rate of 10%, the total sample size was  $\mathbf{325}$  pregnant women.

### 4.5.2 Sampling technique

The entire four public health facilities in the town were included in the sampling process. Sample size was determined proportionately from each four health facilities and selection was performed using systematic sampling technique. The number of clients in each health facilities was determined by reviewing the annual document of each health facilities and the number of subjects to be included in study from each facility was calculated using the proportionate to size allocation technique. The first participant was randomly selected using lottery method in the first date and then every four ANC clients selected.

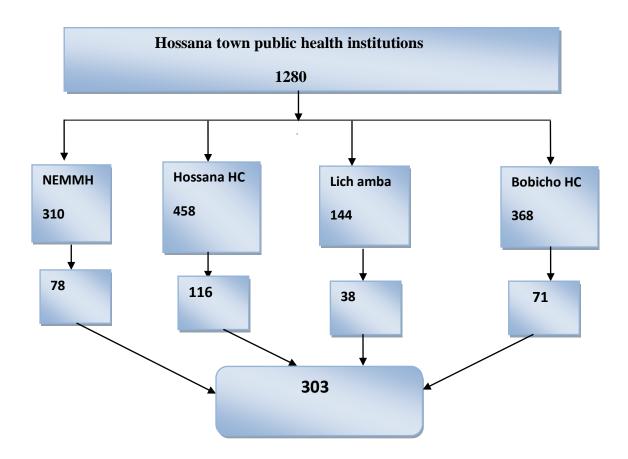


Figure 2Proportional allocation of sample size to each of Public health facilities in Hossana town, southern Ethiopia, 2014

### 4.6 Study variable

## 4.6.1 Dependent variable:

Client satisfaction on ANC

### 4.6.2 Independent variables

- Socio-demographic variables (Age, Marital status, Occupation, monthly income, Educational status, Ethnicity, religion and residence)
- **Obstetric variables** (parity, abortion, still birth, No of visit, No of children and wanted status of pregnancy).
- **provider Related factors:** (respect, privacy, and equity in treatment)
- facility Related factors: (waiting time, general cleanness)
- **Service expectation:** (cleanness of the facility, supply of medicine and support of service provider
- Degree of knowledge

### 4.7. Data collection instrument and procedures.

#### 4.7.1 Data collection instrument:

For the quantitative study the instrument used for data collection was a structured questionnaire. The questionnaire was adapted by reviewing relevant literatures on measures of satisfaction and modified to local context (PSQ 18, PSQ-46, PSQ II SERVQUAL). The questionnaire consists of 27 items which measures level of satisfaction with the different factors that contribute for client satisfaction of ANC services i.e. provider related factors and facility related factors Sociodemographic variables clients degree of knowledge and service expectation of the respondents before utilizing the institution service were also included in the questionnaire. Questionnaire was first developed in English for the interview with pregnant women then translated first into Amharic and Hadiyesa and back translated to English by someone who was

native to those local languages to ensure its consistency and to make it simple during administration. The questionnaire was pre-tested on 5% of sample in Balesa Town before the data collection period to ensure clarity of the questionnaires and then necessary modifications and correction was made to ensure its validity. The reliability (internal consistency of the instrument) was cheeked by Cronbach's alpha. It measures the reliability of the instrument between each domain and the whole of the instrument. All domains had Cronbach's alpha greater than 0.7

Table 1Cronbach's Alpha of satisfaction domains with Antenatal care services

No	Domains	Total No of items	Cronbach's Alpha
1	Approaches of care	5	0.93
2	Approaches of care	3	0.73
	Interpersonal and technical aspects	6	0.884
3	Communication and information	5	0.789
4	Privacy	2	0.881
5	Physical facility	10	0.815
6	Overall satisfaction	27	0.942

The questionnaire consisted of five points Likert scale items, with 1 and 5 indicating the lowest and highest levels of satisfaction, respectively. Level of satisfaction was indicated by selecting responses ranging from 5= strongly agree 4= agree 3= uncertain 2= disagreed 1= strongly disagreed

Five clinical nurse data collector were selected from the health institution with two supervisors. They were oriented for a day by the principal investigator about the study instrument, consent form, how to interview and data collection procedure.

For qualitative data focus group discussion (FGD) was conducted among clients that did not participate in quantitative study in the same time period. Four FGD was carried out, in the selected two public health facilities by taking educational status as homogeneity criteria. Each

group had 6-10, an average of 8 female ANC users. The FGD was mediated by the principal investigator, the discussion of the participants was both audio taped and manually written by two other note takers and analyzed thematically and manually.

## 4.7.2 Data quality control

To ensure data quality, data were collected by trained data collectors and pretesting of the instrument was made out of the study site before the actual data collection. Every day, questionnaires was reviewed and checked for its completeness by the selected and trained supervisors and principal investigator then the necessary feedback was offered to data collectors in the next morning before data collection. The data were thoroughly cleaned and carefully entered in to computer for analysis. During entry of data, double entry verification was checked using Epidata 3.1 and then exported to SPSS version 16.0 for analysis. Data checked on the spot, errors were rectified and missing data's were incorporated in to a form. The researcher with the supervisor checked the data collection procedure and counter checked the entries at random to ensure quality of data collection

### 4.7.3 Data processing and analysis

Data were analyzed by using SPSS 16.0 statistical software. The normality of data was tested using Kolmogorov-Smirnov test. All the quantitative data were found to be not normally distributed ( $p \le .000$ ). Descriptive statistics was used for determining frequency, percentage, mean and standard deviation. Bivariate logistic regression analyses were used to see significance of association between dependent and independent variables. Independent variables with p-value less than 0.05 under 95% CI was considered as having significant association with dependent variable and were reported using both p-value and odds ratios. All independent variables with p value of less than 0.25 were entered in to multivariable logistic regression models to determine their independent association with client satisfaction about antenatal care P-value < 0.05 was considered as statistical significance in this study

### 4.8 Operational definition and definition of terms

**Waiting time:** the time in which clients wait before getting the service short (acceptable) waiting time <= 30 minute and long waiting time > 30 minute (20)

**Distance from home to facility:** refers to the distance in which clients residence held from the facility acceptable distance is within 5Km or <=30 minute walking time acceptable (accessible) above 30 minute considered as unacceptable (not accessible) or far from their place of residence(20)

**Provider related factors:** it refers to the view of the respondents about interpersonal aspects of how much respect, privacy, and equity they are getting from service provider

**Facility related factors:** it refers to the view of the respondents about the facility of the hospital i.e. waiting time and general cleanness,

**Service expectation:** it refers to the expectation of the respondents towards ANC service before coming to the center about the cleanness of the facility, supply of medicine and support of service provider

**Degree of knowledge:** refers to client's degree of knowledge towards antenatal care a total of seventeen items were used one point was given for the correct answer and zero for incorrect and then summed up

Client satisfaction on antenatal care: The extent to which client expectation was meet in relation to provider related factors and facility related factors. The level of client satisfaction was measured by using Likert's scale. All 27 questions were scored from 5 to 1 and individual score was summed up and cut of point was calculated using the demarcation threshold formula: {(total highest score-total lowest score)/2} + Total lowest score (19) The respondent securing a score of cut of point and above was considered as satisfied while those securing less than the cut of point was labeled as dissatisfied

### 4.9 Ethical consideration

Ethical clearance was obtained from ethical committee of Jimma University, College of Public Health and Medical Science. A formal letter, from the college of Public Health and medical sciences of Jimma University, submitted to each concerned bodies to obtain their co-operation. Explanatory letter was added to each questionnaire to maintain participants rights, also, all clients asked to participate in the study and received full explanations about the research purposes respect, anonymity and confidentiality were given and maintained by consent form for each participants and the liberty to withdraw at any stage of the interview and their participation was undergo to any pressure.

## 4.10 Dissemination plan

The findings of this study will be disseminated to the zonal health department; to all public health facility of Hossana Town and to Jimma university collage of public health and medical sciences of graduate studies and finally efforts will be made to present the study for national and international journals.

### **CHAPTER FIVE RESULT**

The data were collected from a total of 325 pregnant women attenuating ANC in Hossana town public facilities from March 1 to march 30, 2014 but 22 questionnaire were incomplete and excluded from the analysis i.e. 303 that makes the response rate of 93 % and four FGDs consisting of 6-8 members. The results are presented under subheadings as follows

### 5.1 Socio-demographic characteristics

Of the 303 women, 40.3% were below 24 years of age, 37.3% were between 24 and 29 years the rest are above 30 years of age (22.5%), and the median age of exit interview was 25 years. Two third of the study subjects (64.7%) were protestant followed by orthodox 21.8%, and the majority (98%) of the women were currently married. Regarding educational status only 35(11.6%) were illiterate, 28% were primary school level the rest 64.4% were secondary school and above. In their ethnicity the majority (69%) were Hadiya followed by Amhara (8.6%) and kembata (7.3%). More than half of the study subjects (56.1%) were currently unemployed. 88.4% of the respondent's lives in urban the rest lives in rural (table 2)

Table 2–Socio –Demographic characteristics of respondents in Hossana Town; Public health centers March 20014

Characteristics	Number(n=303)	Percentage
Age (N=303)		
<24	122	40.3
25-29	113	37.3
30-34	46	15.2
>=35	22	7.3
Mean 25 SD $\pm$ 5		
Marital status		
currently Married	297	98.0
currently Unmarried	6	2
Educational status		
Illiterate	35	11.6
primary school	85	28.1
Secondary school	104	34.3
Tertiary school	79	26.1
v		
Religion		
Orthodox	66	21.8
Protestant	196	64.7
Muslim	28	9.2
Catholic	13	4.3
Ethnicity		
Hadiya	209	69.0
Amhara	26	8.6
Silte	23	7.6
Gurage	19	6.3
Kembata	22	7.3
Oromo	4	1.3
Occupation		
currently unemployed	170	56.1
currently employed	133	43.9
Residence		
Urban	268	88.4
Rural	35	11.6
Health facility		
NEMH	79	26.1
Hossana HC	116	38.3
Lichamba HC	39	12.9
Bobuco HC	69	22.8

## **5.2** Obstetric characteristics of the respondents

About 66% of the study subjects, interviewed after antenatal care service were Multipara, while about 34% women had come for their second or third pregnancy. This study found that about 64% of participants who ever gave birth had one or more children and the median number of births were 1.48 + SD 1.6.At the time of the study, 90.8% of study subjects reported that their pregnancy was planned and about 77.6% had their repeated visits of antenatal care. Study subjects were also asked about their history of abortion which showed that 52 (17.2%) had abortion history while only 9% of study subjects had history of still birth.77.6% of the respondents had a repeated visit and the rest (22.4%) were new comers (table 3)

Table 3-Obstetric characteristics of respondents in Hossana Town; Public health centers Southern Ethiopia, March 20014

Characteristics	Number(n=303)	Percentage
Parity		
Primipara	103	34.0
Multipara	200	66.0
Wanted status of pregnanc	$\mathbf{y}$	
Yes	275	90.8
No	28	9.2
No of children		
0	109	36.0
1-2	121	39.9
>2	73	24.1
Mean 1.48	Min 0	Max 7
Abortion		
No	251	82.8
Yes	52	17.2
Still birth		
No	275	90.8
yes	28	9.2
No of visit		
First visit	68	22.4
Repeated visit	235	77.6

### 5.3 Health service related variables of the respondents

The majority of study subjects (87.8%) reported that they were treated respectfully by the service provider only 37(12.2%) said that the service provider were not respectful. 15.8% of interviewed women have spent greeter than30 minutes to be seen by the care provider,84.2% were spent less than 30 minutes for examination. Of the total study subjects 95(31.4%) spent more than 30 minutes to reach to the health facility from their home and 208(68.6%) of the respondents took less than 30 minutes to reach to the health facility 255(84.2%) spent less than 30 minutes to get the service the median waiting time was 15minutes. Regarding the respect of privacy by the service provider 266 (87.8%) reported that their privacy was maintained and 37 of the study subjects were not happy with privacy maintained by the care provider. The majority of respondents (77.6%) said that the institution was clean. 22.4% of them were reported that the institution was not clean (table-4)

Table 4- Distribution of respondents by health service related variables in Hossana Town, Southern Ethiopia, March 2014

Items	category	N (%) (n=303)
Privacy respected	Yes	266(87.8)
	No	37 (12.2)
Institution clean	Yes	235 (77.6)
	No	68 (22.4)
Respect of care provider	Yes	266 (87.8)
	No	37 (12.2)
Distance from home	<=30m	208(68.6)
	>30m	95 (31.4)
Waiting time	<=30m	255(84.2)
	>30m	48(15.8)
Mean waiting time 23m		

### 5.4 Expectation of clients before utilizing the health service

Clients were also asked about their expectation towards Antenatal care services provided by public health institution before they experienced the existent services. There were four questions about the expectation. Thirty percent of study subjects had a very good expectation about cost of the service before coming to the health facility only 2.3% had not very good expectation. About

cleanness of facility 52% of the respondents had a good expectation, 1.7% thought it will not be very good and 18.5% have no idea about cleanness of the facility. Forty nine point two of the participants had a good expectation about supply of medicine. While 5.3% of them expected that supply of medicine was not good. A little over half (52%) of the study subjects had a good expectation about support of service provider (table-5)

Table 5-Frequency and percentage distribution of the respondents about the expectation of services of the hospital in Hossana Town March 20014

characteristics	Not very good N (%)	Not good N (%)	No expectation N (%)	Good N (%)	Very good N (%)
Cleanness of facility	51.7	21(6.9)	56(18.5)	160(52.8)	61(20.1)
Supply of medicine	2(0.7)	16(5.3)	76(25.1)	149(49.2)	60(19.8)
Support of service provider	2(0.7)	6(2)	30(9.9)	158(52.1)	107(35.3)

### 5.5 Distributions of respondents with their degree of knowledge

The graph shows the distribution of study subjects with their degree of knowledge regarding antenatal care there were a total of seventeen items and 1 point was given for the correct answer and zero for the incorrect one the minimum score was five and the maximum score was seventeen. Mean score was 13.5 with  $SD\pm 2.9$  (figure-3)

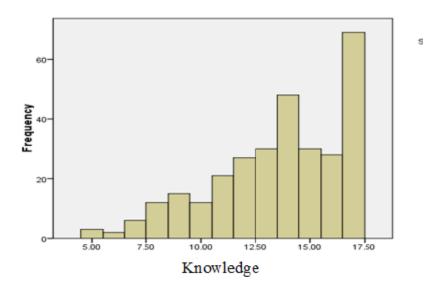


Figure 3 Distributions of respondents with their degree of knowledge Hossana Town Public health centers Southern Ethiopia, March 2014

### 5.6 Level of client satisfaction with different Domains of satisfaction

Table 5 shows that most of the study subjects were satisfied with Approaches of care by the Care provider (80.2%), Interpersonal and technical aspects (79.9%), Communication and information (75.2%), Privacy (91.4%), facility related factors (82.8%) and cleanness of the center (87.5%). By overall, more than 74% of the study subjects were satisfied with the service that they received while the others (25.4%) dissatisfied.

Table 6- level of client satisfaction with different Domains of satisfaction in Hossana town; Public health centers Southern Ethiopia, March 20014

Components	Level of satisfaction(n=303)			
	Satisfied N (%)	Dissatisfied N (%)		
Approaches of care	243(80.2)	60(19.8)		
Interpersonal and technical aspects	242(79.9)	61(20.1)		
Communication and information	228(75.2)	75(24.8)		
Privacy	277(91.4)	26(8.6)		
Physical facility	251(82.8)	52(17.2)		
cleanness	265(87.5)	38(12.5)		
Overall satisfaction	226(74.6)	77(25.4)		

# 5.7 Levels of pregnant women satisfaction with the different components of antenatal care services

The first component was approaches of care under this component 82.2% of the study subjects were completely satisfied with the general examination performed to them by the service provider only 14.8% of the respondents were dissatisfied with the explanation about what will be done during ANC follow up .81.2% of the study participants reported that the care provider was helpful. The second component was interpersonal and technical aspects, 79.9% of them reported that the care provider was respectful, 77.9% were completely satisfied with answers given to their questions. Almost half of the study subjects (49.2%) reported that the care provider favors one client over the other, 76.9% of them were completely satisfied with the time that the care provider spent with them. The third component were communication and information under this only 6(2%) were completely satisfied with the presentation of the care provider to them (great them by name) 98% were completely dissatisfied. Seventy three point six were completely satisfied with explanations of examinations which were done to them by the care provider. Only 9.9% of the respondents were completely dissatisfied with the easiness to exchange smile with care provider. The majority (89.5%) of study subjects were completely satisfied with privacy respected by the care provider .80.9% of them reported a complete satisfaction about cleanness of the facility. Regarding waiting time 69% of the participants were satisfied with the time they waited to get the service. 78.9% of them were completely satisfied with working hours of the facility (table 7)

Table 7-levels of pregnant women satisfaction with the different components of antenatal care services Hossana town; Public health centers Southern Ethiopia, March 20014

Items	Strongly disagreed N (%)	Disagreed N (%)	Uncertain N (%)	Agreed N (%)	Strongly agreed N (%)
	10(2.2)	22(7.2)	<b></b> (0 <b></b> 0)	<b>-</b> 0 (0 4 4)	4= -(=0, 4)
Satisfied with the general examination	10(3.3)	22(7.3)	22 (97.3)	73(24.1)	176(58.1)
Provider explains ANC schedule	12(4.0)	27(8.9)	17(5.6)	76(25.1)	171(56.4)
Care provider helpful	12(4.0)	21(6.9)	24(7.9)	80(26.4)	166(54.8)
Satisfied with explanations about what will	14(4.6)	31(10.2)	25(8.3)	60(19.8)	173(57.1)
be done to you during ANC follow up			()		=
Overall, you are satisfied with your	19(6.3)	30(9.9)	26(8.6)	61(20.1)	167(55.1)
experience with ANC	10/20	27/0.2	100(50)	( <b>-</b> 1 0)	
Feel the courtesy of the care provider	19(6.3)	25(8.3)	199(6.3)	66(21.8)	174(57.4)
The care provider respects you as a person	17(5.6)	23(7.6)	21(6.9)	65(21.5)	177(58.4)
The care provider listens to your inquiries	1494.6)	21(6.9)	21(6.9)	61(20.1)	186(61.4)
The care provider listens and answers all	12(4.0)	25(8.3)	30(9.9)	69(22.8)	167(55.10)
your questions	2=(2.0)	<b>-</b> 0/20 1)	<b></b> (10.00)	50 (4.0.0)	00(00.4)
The care provider favors some clients over	27(8.9)	70(23.1)	57(18.80)	60(19.8)	89(29.4)
others	10(10)	25(0.5)	21(10.2)	05(00.5)	1.45(40.0)
The care provider spends enough time with	13(4.3)	26(8.6)	31(10.2)	87(28.7)	146(48.2)
you	126(110)	111/266	50(165)	4/1-0	2(0.7)
Greet by name	136(44.9)	111(36.6)	50(16.5)	4(1.3)	2(0.7)
Provides clear explanations about the	12(4.0)	42(13.9)	26(8.6)	78(25.7)	145(47.9)
examinations	12/42)	C(11 0)	24(7.0)	0.5 (20.1)	1.45(47.0)
Explains things in simple and clear manner	13(4.3)	6(11.9)	24(7.9)	85(28.1)	145(47.9)
Satisfied about answers to your questions	10(3.3)	30(9.9)	25(8.3)	71(23.4)	167(55.1)
Easy to exchange smiles with the care	11(3.6)	19(6.3)	33(10.9)	98(32.3)	142(46.9)
provider	7(0.0)	10/2 2)	15(5.0)	00/20 4)	100(60.1)
Privacy was respected during your ANC	7(2.3)	10(3.3)	15(5.0)	89(29.4)	182(60.1)
session	c(2.0)	11(2.6)	10(5.0)	01/20 0)	177(50.4)
Privacy respected during physical	6(2.0)	11(3.6)	18(5.9)	91(30.0)	177(58.4)
examination	24(7.0)	31(10.2)	22(7.2)	94(31.0)	122(42.6)
Waiting area convenient	24(7.9)	` /	22(7.3)	` ,	132(43.6)
Satisfied regarding cleanliness of waiting	12(4.0)	24(7.9)	22(7.3)	102(33.7)	143(47.2)
room Weiting room has anough sitting sheir	25(11.6)	47(15.5)	10(6.2)	02(20.4)	110(26.2)
Waiting room has enough sitting chair	35(11.6)	47(15.5)	19(6.3)	92(30.4)	110(36.3)
Satisfied regarding cleanliness of examination room	11(3.6)	20(6.6)	21(6.9)	88(29.0)	163(53.8)
	20(0.0)	44(14.5)	24(7.0)	92(27.4)	122(40.2)
The waiting area comfortable	30(9.9)	44(14.5) 45(14.0)	24(7.9)	83(27.4)	122(40.3)
Happy with distance from home	20(6.6)	45(14.9)	27(8.9)	114(37.6)	97(32.0)
Happy with availability of drugs	9(3.0)	26(8.6)	35(11.6) 17(5.6)	112(37.0)	121(39.9)
Happy with the time you normally have to	39(12.9)	38(12.5)	17(5.6)	113(37.3)	96(31.7)
wait	16(5.2)	26(9.6)	24(7.0)	114(27.6)	122(40.6)
Happy with working hours of the facility	16(5.3)	26(8.6)	24(7.9)	114(37.6)	123(40.6)

### 5.8 Socio-demographic correlates of satisfaction

This study also examined the relationship between socio-demographic back grounds and their level of satisfaction, and the likelihood of satisfaction by antenatal care service was Higher among women aged group 25-29 than those greater than or equal to 35 years (OR = 3.7; 95% C.I: 1.4, 9.5), and among women illiterate (OR=2.4; 95% CI: 0.7, 7.1) and primary school (OR = 3.1; 95% CI; 1.4,7) than secondary school and above. Similarly, the odds of satisfaction by antenatal care service provided was higher to statistically significant level among women who live in Urban (OR = 2.2; 95% CI, 1.0, 4.5) than rural. However, there was not a significant difference in satisfaction level by difference in marital status, occupation and religion, of the women (table-8)

Table 8-Comparison of satisfaction of client with their sociodemographic characteristics of antenatal care attendees in health facilities, Hossana Town, March 2014 (n=303)

Characteristics		Level of satis	faction		•
		Satisfied Number (%)	Dissatisfied Number (%)	p-value	COR (95% CI)
	<=24	94(77%)	28(22%)	0.039*	3.3(1, 8.5)
Age	25-29	89(78%)	24(21%)		3.7(1.4, 9.5)
	30-34	32(69.5%)	14(30%)		2.2(0.8, 6.5)
	>=35	11(50%)	11(50%)		1
Religion	Muslim	21(42.8%)	7(25%)	0.958	1.024(0.418,2.513)
	Christian	205(74.5%)	70(25%)		1
Marital	Married	221(74%)	76(25.5%)	0.623	0.582(0.067,5.057)
status	Not married	5(83%)	1(16.6%)		1
	Illiterate	30(85.7%)	51(4%)	<=0.0001*	2.4(0.8,7.1)
Educational	primary school	75(88%)	10(11.7%)		3.1(1.4,7.0)
status	Secondary school	65(64.3%)	39(38.6%)		0.6(0.3,1.2)
	Tertiary school	56(73.6%)	23(29.11%)		1
	Urban	205(76.5%)	63(23.5%)	0.038*	2.2(1.0,4.5)
Residence	Rural	1(0.4%)	14(33%)		1
	unemployed	128(75%)	42(24.7%)	0.749	0.919(0.54,1.545)
occupational	employed	98(73.7)	35(26%)		1
status					

<sup>\*</sup> P-value <0.05 COR= crude odds ratio

### 5.9 Obstetrics correlates of satisfaction

Comparison in antenatal care service satisfaction level was made by women's obstetric history the chance of satisfaction on the service rendered was higher to a statistically level among women who had planed pregnancy (OR = 2.049; 95 % CI, 0.914, 4.594). However, the odds of satisfaction was not different among women with different parity, number of children, difference in number of visits of antenatal care history of abortion or still birth(Table-9)

Table 9-Comparison of satisfaction of client with their obstetric characteristics of antenatal care attendees in health facilities, Hossana Town, March 2014

characteristics		level of Satisfaction (n=303)				
		Satisfied Number (%)	dissatisfied Number (%)	Р	COR (95% CI)	
Parity	Primipara	81(78.6%)	22(21%)	0.246	1.397(0.794, 2.455)	
	Multipara	145(72.5%)	55(27.5%)		1	
Wanted status of	Yes	209(76%)	66(24%)	0.082	2.049(0.914, 4.594)	
Pregnancy	No	17(60.7%)	11(39%)		1	
No of -ioi4	First visit	53(79%)	14(20.8%)	0.301	1.413(0.734, 2.719	
No of visit	Repeated visit	172(73.2%)	63(26.8%)		1	
No of children	0	85(77.95%)	24(22%)	0.56	1.43(0.725, 2.822)	
	1-2	89(73.5%)	32(26%)		1.123(0.587, 2.147)	
	>2	52971%)			1	
			21(28.8%)			
Abortion	No	185(73.7%)	66(26%)	0.439	0.752(.365, 1.549)	
	Yes	41(78.8%)	11(21%)		1	
Still birth	No	205(74.5%)	70(25%)	0.958	0.976(0.398, 2.395)	
	Yes	21(75%)	7(28%)		1	

**COR=crude odds ratio** 

### 5.10 Facility Service correlates of satisfaction

Comparison in antenatal service satisfaction level was also made by service related factors of antenatal care the likelihood of satisfaction by antenatal care service was higher among women whose privacy was respected by the service provider (OR=8.5; 95%C.I , (4,18) and among women who reported that the care provider was respectful (OR= 3.3; 95%,C.I:1.6,6.7 ) than those who said the care provider was not respectful similarly the odds of satisfaction was higher among women who waited less than 30 minute to get the service (OR= 2.481; 95% C.I, 1.302, 4.729) than their referents and the chance of satisfaction on the service rendered was higher to a statistically level among women who travel more than 30 minutes to reach to the facility (OR= 2.306; 95% C.I, 1.348, 3.945) than those who travel greater than 30 minutes to reach to the health institution also study subjects who reported that the institution was clean were 1.8 times satisfied than who reported that institution was not clean.(Table 10)

Table 10-Comparison of satisfaction of client with service related factors of antenatal care attendees in health centers, Hossana Town, March 2014

characteristics			level of	Satisfaction	(n=303)
		Satisfied Number (%)	Dissatisfied Number (%)	Р	COR (95% CI)
Privacy respected	Yes	214(80.4%)	52(19.5%)	0.000*	8.5(4,18)
	No	12(32%)	25(67.5%)		1
Cleanness of the	Yes	182(77%)	53(22.5%)	0.035*	1.87(1,3.35)
institution	No	44(64.7%)	24(35%)		1
Respect of care	Yes	207(77.8%)	59(22%)	0.001*	3.3(1.6,6.7)
provider	No	19(51%)	18(48.6%)		1
Waiting time	<=30m	198(77.6%)	57(22%)	0.006*	2.481(1.302, 4.729)
	>30m	28(58%)	20(41.7%)		1
Distance from home	<=30m	166(79.8%)	42(20.2%)	0.002*	2.306(1.348, 3.945)
	>30m	60(63.2%)	35(36.8%)		1

<sup>\*</sup>p-value <0.05 COR= crude odds ratio

Table11 shows Comparison of satisfaction of client with their degree of knowledge and expectation of antenatal care service. Satisfaction is significantly associated with women's expectation before experiencing the existing service (OR= 1.13; 95% C.I, 1.021, 1.25). However likelihood of satisfaction by antenatal care service was not different with clients varying degree of knowledge (OR=1.067; 95% C.I, 0.98, 1.161).

Table 11-comparison of satisfaction of client with their degree of knowledge and expectation of antenatal care attendees in health centers, Hossana Town, March 2014

characteristics	Р	C OR(95% C.I) (n=303)
Knowledge	0.135	1.067 (0.98, 1.161)
Expectation	0.019*	1.130(1.021,1.25)

<sup>\*</sup>p<0.05 COR= crude odds ratio

Table –12 shows result of multivariate analysis all independent variables with p-value less than 0.25 were included in the model and all the variables with p-value < 0.05 were taken as statistically significant from the table it can be understood that after adjusting for other variables age is statically significant with level of satisfaction (AOR= 5.584; 95% C.I 1.76, 17.7) younger were more likely to be satisfied than the elder one. Another variable which is statically significant with satisfaction is educational states those who are illiterate were four times more likely to be satisfied than those who were in primary school and above (AOR=4.53; 95% C.I: 1.228, 16.751). Privacy is significantly associated with level of satisfaction Study subjects who reported that their privacy was maintained were more likely to be satisfied than those whose privacy not maintained (AOR=8; 95% C.I 3.375, 19.263). Cleanness of the institution is also independent predictor of satisfaction those who feel that institution is clean were more likely to be satisfied than who said that institution is not clean (AOR=3.596; 95% C.I: 1.424, 9.079). Distance from home to facility is associated with satisfaction to a statically significant level (AOR=2.804; 95% C.I: 1.423, 5.522) study subjects who travel less than 30 minutes to reach to facilities were two times more likely to be satisfied than who travel greater than 30 minutes. Respect has also a statically significant association with satisfaction (AOR=2.578:95% C.I: 1.249, 5.325) those who reported that care provider was respectful were more satisfied than who reported that care provider was not respectful.

Table 12-a multivariable analysis to determine factors affecting of satisfaction on antenatal care in health centers, Hossana Town, March 2014

Variables	Satisfied N (%)	COR(95%CI)	AOR(95%C.I)
Age			
<=24	94(77%)	3.3(1, 8.5)	5.584 (1.76, 17.7)
25-29	89(78%)	3.7(1.4, 9.5)	8.6(2.5, 28)
30-34	32(69.5%)	2.2(0.8, 6.5)	2.6(0.757,9.287)
>=35	11(50%)	1	1
<b>Educational status</b>			
Illiterate	30(85.7%)	2.4(0.8,7.1)	4.53(1.228, 16.751)
primary school	75(88%)	3.1(1.4,7.0)	3.082(1.169, 8.124)
Secondary school	65(64.3%)	0.6(0.3,1.2)	0.538(0.247, 1.17)
Tertiary school	56(73.6%)	1	1
Residence	205(76.5%)	2.2(1.0,4.5)	1.987(0.785, 5.0)
Urban	` '		
Rural	1(0.4%)	1	1
Wanted status of pregnancy	200(7.6)()	2 0 4 0 / 0 0 1 4 4 7 2 2	1.055(0.651.5.023)
Yes	209(76%)	2.049(0.914, 4.594)	1.977(0.671, 5.823)
No	17(60.7%)	1	1
Parity			
Primipara	81(78.6%)	1.397(0.794, 2.455)	1.112(0.511, 2.422)
Multipara	145(72.5%)	1	1
Privacy respected	214(00.40()	0.5(4.10)	0 (0 0== 10 0 (0)
Yes	214(80.4%)	8.5(4,18)	8 (3.375, 19.263)
No	12(32%)	1	1
Care provider was			
Respectful			
Yes	207(77.8%)	3.3(1.6,6.7)	2.578(1.249, 5.325)
No	19(51%)	1	1
Institution clean			
Yes	182(77%)	1.87(1,3.35)	3.596(1.424, 9.079)
No	44(64.7%)	1	1
	.(= / • /		
Distance from home	166(79.8%)	2.306(1.348, 3.945)	2.804(1.423, 5.522)
< =30 minute		,	
>30 minute	60(63.2%)	1	1
Waiting time			
< =30 minute	198(77.6%)	2.481(1.302, 4.729)	2.17(0.967, 4.878)
>30 minute	28(58%)	1	1
Expectation		1.067(0.98,1.161)	1.118(0.986, 1.269)
Knowledge		1.130(1.021,1.25)	1.07(0.956, 1.198)

### Findings of the qualitative data

Four FGD in two of the health facilities were done by taking educational status as homogeneity criteria for qualitative study. The study participants was selected by Criterion purposive sampling technique Selection was done by their No of antenatal visit, those who are in repeated visit was recruited in the group.

### Theme 1 facility related factors

In this the study participants were discussed about different aspects of the facility such as waiting space, cleanness of the health institution distance from their home and waiting time to get the service most of the study participants were very satisfied regarding waiting time to get the service a 25 year old women said

".....as to me I didn't wait much time in the facility to be seen by the care provider for me being seen within 15 minutes and go back home in about half an hour really make me very happy".

### Another primipara lady Saied that

".....I think the most important thing for me to select this facility is there quick work they always call my name as soon as they received my cards from the registration room and it is what a care seeking needs from someone who try to help him".

A 34 year old participant under her third visit has an opposing idea she said that

".....You know always when my appointment date reached I always becomes afraid of being late for my two other babies to leave them alone and am always in harry to go back home but when I came here there was a lot of clients and I always spend more than half an hour to get the service this makes me so board of coming her".

Most of the discussants were very satisfied regarding waiting time at the facility to get the service this was also true in the quantitative finding almost 70% of the participants were completely satisfied regarding waiting time. The group also discuss about distance of the facility from their home most of the study participants were satisfied.

A32 year old women in her third visit said that

"....In the previous time we did not come to hospital when we need care because we need to travel long to reach to the health institution, but now the institution is near to our home so that we always came whenever we are in need"

Another participant also share this women's idea she said that

"....It only took me ten minutes to reach to the health institution it is very important that facilities were near to your home if someone get seek or in need of immediate care it is easy you don't cost for traveling and even more than that you reach as fast as possible so that someone's life will be saved in those minutes"

### Theme 2 provider related factors

Participants were asked about how the care provider treats them (the courtesy, respect maintenance of privacy etc. one participant said that

".....She was very respectful and very polite to me when I came from home I was you know very sick and I thought my baby comes early prematurely but she (the nurse) politely told me that it was a false labor, she told me that this happens sometimes. I understand that a smile and friendly behavior would make a big difference".

Another participant expressed the care provider politeness and respect like this

"....I would say that she (the care provider) is a positive one because she greets me with a smile, and again, warm greets, even if she's really tired of too many clients she doesn't act like she was bored. I think that's really important because her energies can impact mine one."

".....When I enter to the examination room the nurse first close the door and told me to seat no one saw me while I am in the room Even if there is no separate room for abdominal examination there is a screen, you know it is nice to be treated her you feel safe and secured"

This was said by a 23 year old woman when she expresses how the care provider maintains her privacy. Most of the discussant argued that the care provider respect their privacy this is also true in the qualitative data that 91.4% of the study participants were very satisfied regarding the respect of privacy. But from the group one participant said the following

"....They were treating me badly especially staffs in the registration room were very rude they didn't consider that they were doing their job I feel like am asking them to do me some favor. Today for example they lost were they put my card. He search allot and finally he told me to take a new card imagine all the previous history lost this was really difficult."

### Theme 3 major cause of dissatisfaction

"....I think for me the most important aspects that would lead to dissatisfaction were when I was treated with someone who is rude, who show you his cold face, someone who do not understand you rather judge you as if he is your boss and also regarding the facility some unattractive environment, uncomfortable setting chairs or even nothing to be seat and take rest"

This was said by a primipara lady in her second visit. Most of the study participants share the same idea regarding major causes of dissatisfaction some of the points were lack of respect, long waiting time, poor laboratory service incompetent service provider, minimal number of health care workers facility which is less equipped with medical materials and unattractive (dirty) environment.

### CHAPTER SIX DISSCUSSION

Antenatal care (ANC) is the key entry point of a pregnant woman to receive broad range of health promotion and preventive services which provide the health of the mother and the baby(33) Quality of ANC is an important determinant of pregnancy outcome along with clean and safe delivery, essential obstetric care and family planning which could contribute to reduction of maternal mortality(34). Client satisfaction indicate clients' judgment about the strengths and weaknesses of the services (35) The aim of this study was to assess women's satisfaction with antenatal care at public health institutions of Hossana Town.

Only 15.8% of respondents spent greeter than 30 minutes to get the service the median waiting time was 15minutes. This is better from a study conducted in Lagos in 2012, 31% of participants spent more than 30 minutes for examination(22). This may be due to the difference in client follow. This was supported by a qualitative finding as a 25 year old woman said that as to me I didn't wait much time in the facility to be seen by the care provider for me being seen within 15 minutes and go back home in about half an hour really make me very happy".

266 (87.8%) reported that care provider was respectful this was supported by a qualitative finding as one participant said that "I could say that she (the care provider) is a positive one because she greets me with a smile, and again, warm greets, even if she's really tired of too many clients she doesn't act like she was tired".

68.6% of the respondents took less than 30 minutes to reach to the health facility. This was supported by the qualitative finding as one participant said that "it only took me around ten minutes to reach to the health institution it is very important that facilities were near to your home if someone get seek or in need of immediate care it will be easy to reach"

But this finding is lower than a study conducted in Pakistan 94% declared that it was easily accessible (within 30 minute) possible explanation for this might be the difference in infrastructure and economical difference in the countries.(30)

### Level of Client Satisfaction

In this study, overall about 74.6% women were satisfied with the antenatal care service rendered in the health institutions and 25.4% were dissatisfied. This finding is similar with study conducted in JUSH 77% of respondents were satisfied(36). Another study conducted by Mohammed Abdus Salam in Thailand showed that level of overall satisfaction were 71.8% (37). In 2005 a study conducted in Malaysia found that more than half of the respondents were satisfied with the service that they received 56.7% (19). A study on women satisfaction with Antenatal Care Services at Primary Health Centers in Mushin, Lagos find out a 98.5% overall satisfaction(22). It can be analyzed from this data that client satisfaction varies in different heath facilities and circumstances. This variation may be due to difference in quality of service provided in those different facilities.

Based on literature review the researcher used six domains of clients' satisfaction i.e. approaches of care, interpersonal and technical aspects, communication and information, privacy, facility related factors and cleanness. Regarding approaches of care domain 80.2% study subjects were satisfied. Which is in accord with the findings of J.mohammad (2008) who assessed clients' satisfaction with physiotherapy services in Gaza, showing that (78.2%) of the clients were satisfied with approach of care by service provider (31). In this study 79.9% of satisfaction were reported on interpersonal and technical skill domain this is in line with other satisfaction studies for example, Abu Saileek in 2004 study, the level of clients' satisfaction with nurse's skills and professionalism domain was (77.4%)(38). Relatively low level of satisfaction was indicated on communication and information domain (75.2%) this finding is better from a study done by J.mohammad participants reported 64.2% satisfaction on communication and information domain. This difference reflects that the care providers in the study area provides clear explanations about the examinations, spending adequate time with clients, answered the clients' questions, giving the clients' enough information about their condition that lead to bring client satisfaction. Under privacy domain the results showed that the clients have reported (91.4%) level of satisfaction. The findings of this study are closely similar with the reports of a study conducted in Egypt on client satisfaction on antenatal care 87.2% were satisfied regarding privacy(23). A study in Gaza also showed that 92.7% were satisfaction about

domain(31). This result is supported by a qualitative finding in which a 23 year old women said the following "....When I enter to the examination room the nurse first close the door and told me to seat no one saw me while I am in the room even if there is no separate room for abdominal examination there is a screen, you know it is nice to be treated her you feel safe and secured" The other domain was about facility services, in this study 82.2% level of satisfaction were reported. This is in contrast with a study done by A.Hasan (2007)in Bangladesh; client satisfaction on facility service was only 57.8%(20). This finding may be due to difference in expectations of the clients. The last domain is cleanness of the facility (87.5%) level of satisfaction was reported in this domain. This finding is in line with a study done by Montasser et al (88.5%) in Egypt(23).

### Factors correlated with ANC Satisfaction

In this study, it was found younger age groups below 34 years tend to get high satisfaction than older ages, this is also true after adjusting for the other variables included in the model (multivariate analysis), a significant association were shown the finding is in congruence with a study done in Addis Ababa the study revealed that age is negatively and significantly associated with satisfaction(25). Because the elders were more experienced than their youngest they may compare the service with the previous one they encountered so that this finding was true.

It was determined that clients who belonged to 'illiterate and primary' education level were more satisfied than the secondary and higher group and the association was also significant in multivariate analysis the finding is similar with several studies for example a study conducted by Javed in 2005 Hasen (2007)(20,30) and Elsaba in 2012(29).

The result of this study showed that clients who waits less than or equal to 30 minute were more satisfied compare to those waits greater than 30 minute however from multivariate analysis there was no significant association between waiting time and level of satisfaction This result also similar with previous study which conducted by Dyah Pitaloka and Rizal(2005) their study showed that no statistical significance between waiting time and satisfaction(19) but this is in contrary with a study conducted by sied yousef in Adama(2009), satisfaction were significantly

and negatively associated with waiting time(39). Possible reason for these is since his study involves private clinics in which most clients went to private clinics were very sensitive to long waits compared to those in government health facilities.

A study conducted in Pakistan by Javed (2005) showed that living distance from the health institution had a significant association with satisfaction. Another study in Adama, by yousef (2009) also revealed that those who reported that they live far (30minute of travel time) from health facility were highly dissatisfied than those who live near(30,40). It is also true for this study respondents who travel more than 30 minutes were two times to be satisfied than those with travel time less than 30 minute. Possible explanation for this is those who live near the health institution had the chance to use the facility any time they want which makes them more satisfied

This study revealed that clients respect were significantly associated with satisfaction those who reported that they were respected by the care provider were two times to be satisfied than those not respected. It is similar with Previous study by Tigist and Yilma in Addis Ababa(2011) the study reported that there was a correlation and significant relationship between level of satisfaction and respect clients who were respected by the service provider were more satisfied compare to those not respected(39)

Client satisfaction with the ANC services received was influenced by respect of privacy during ANC session. It is also true for this study. Satisfaction has a positive and significant association with privacy. Study subjects who feel secured regarding privacy were more satisfied than there referents. This finding is in congruence with study done in Bahir Dar (2013) respondents whose privacy was maintained were about two times more likely to be satisfied than those whose privacy was not maintained(41).

Findings of this study showed that cleanness of the facility had a significant association with satisfaction this is in line with a study conducted in Woliata(2013); respondents who reported

that the institution was clean were seven times as high as to be satisfied than those who reported that institution was not clean(42). It is obvious that clean and attractive environment will enhance someone's satisfaction on the existing service.

### Strengths and limitations of the Study

Study subjects may be affected by courtesy bias to answer dissatisfaction to a person whom they consider as employee of the health center however data collection was made in a separate room in which the interviewer did not wear gown also the purpose of the study and maintenance of confidentiality were ensured before data collection. Moreover subjective nature of measurement of satisfaction may make the study difficult to assess and compare satisfaction. The study involved both quantitative and qualitative methods of data collections

# CHAPTER SEVEN CONCLUSION AND RECOMMENDATION CONCLUSION

Generally, 76% of the respondents were satisfied with the service that they received. According to the seven dimensions, the result showed that most of the clients were satisfied with privacy, approaches of care from the Care provider, interpersonal and technical aspects, facility related factors and cleanness of the center. Relatively low satisfaction was reported on communication and information domain. Age, education status, distance, respect of privacy, cleanness of the facility, and provider respectfulness were the significant factors affecting client satisfaction on ANC service.

### RECOMMENDATION

The researcher set some recommendations which might help service providers and policy makers, to improve clients' satisfaction level with ANC services and develop the quality of services

### RHB, ZHD and Woreda health Office

1. Antenatal care services should be made more accessible to all women of reproductive age, who require such services at an accessible (within 30 minute) of travel time of their place of residence

### Other relevant bodies:

2. ANC staff and ANC managers need to concentrate on the weakness domains of clients' satisfaction to develop their abilities especially in: interpersonal, communication and information skill by reinforce interaction and communication skills through training courses

#### For researchers:

**3.** Client satisfaction studies should be carried out in all aspect of health care to improve the quality of services.

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# Annex I: Questionnaire English version JIMMA UNIVERSITY COLLEGE OF PUBLIC HEALTH AND MEDICAL SCIENCES DEPARTMENT OF NURSING AND MIDWIFERY POST GRADUATE SCHOOLS

Study Title: Assessment of level of pregnant women's satisfaction and associated factors on antenatal care provided in public health institutions of Hossana Town southern Ethiopia.

Introduction and Purpose of the study	
Dear women:	
<b>Consent Form</b>	
My name is	I am interviewing pregnant women who
came to this institution for antenatal care se	ervice to assess the level of satisfaction on the service
The objective of this study is to determine	ne level of satisfaction on antenatal care service in
Hossana Town I am going to ask you	some questions that are very important for the
programmers in antenatal care service to	plan improved intervention. Your name will not be
written in this form and the information y	you give is kept confidential. If you do not want to
answer, all or some of the questions you do	o have the right to do so. However, your willingness
and support to answer all of the questions	would be appreciated and thank you on the behalf of
Hossana Town pregnant women's	
Did you agree? 1. Yes	2. No
Interviewer name	signature Date
Thank you for your o	cooperation!!!

JU,

# 1. Instruction: please encircle the letter in the appropriate column and fill the blank space for Qeus. No 1 and 8 according to the participant's response.

Table 1. Socio demographic characteristics of mothers who came for ANC service in Hossana Town public health facilities, southern Ethiopia, March 2014.

S.Nº	Sociodemographic characteristics	
	Health facility	Code No
1	Age (years)	
2.	Marital status	a) Married
		b) Single
		c) Divorced
		d) widow
3.	Religion	a) Orthodox
		b) Protestant
		c) Muslim
		d) Others, Specify
4.	Ethnicity	a) Oromo
		b) Amhara
		c) Tigray
		d) Gurage
		e) Other, specify
5.	Educational status	a) Illiterate
		b) Primary School
		c) secondary school
		d) tertiary school
6.	Occupation	a) Housewife
		b) Private Employee
		c) Government employee
		d) Student
		e) Farmer

		f) Merchant
		g) Others, Specify
8.	Residence	a) Urban b) rural

Table 2. Obstetrics characteristics of mothers who came for ANC service in Hossana Town public health facilities, Southern Ethiopia, March 2014.

S.Nº	<b>Obstetrics characteristics</b>	
1.	Parity	a) One
		b) Two to five
		c) More than five
2.	Wanted status of pregnancy	a) Wanted b)Unwanted
3.	Abortion	a)Yes b) No
5.	No of children	
6	No of visit	<ul><li>a) First visit</li><li>b) Second or more</li></ul>

3. Instruction: please based on women's respond of level of satisfaction, please ( $\sqrt{\phantom{0}}$ ) tick the level of your satisfaction against the following statements in the relevant box

Scale 5= strongly agree 4= agree 3= uncertain 2= disagreed 1= strongly disagreed

Table-3 Women's satisfaction on ANC service in Hossana Town public health facilities, Southern Ethiopia, March 2014

Part	I. provider related factors		satisfaction level			
Sr. N <sub>o</sub>	Items	SA =1	A= 2	UN=3	DA=4	SDA=5
1	You are satisfied with the general examination provided by your care provider					
2	The care provider explains your ANC schedule					
3	The instructions by your care provider help you.					
4	You are satisfied with explanations about what will be done to you during ANC follow up					
5	Overall, You are satisfied with your experience with ANC					
6	You feel the courtesy of the care provider					

7	The care provider respects you as a person			
8	The care provider listens to your inquiries			
9	The care provider listens and answers all your questions			
10	The care provider favors some clients over others			
11	The care provider spends enough time with you			
12	The care provider presents himself to you (greet you by name)			
13	The care provider provides you clear explanations about the examinations which were done to you			
14	The care provider explains things for you in simple and clear manner			
15	You are satisfied about answers to your questions			
16	It is easy to exchange smiles with the care provider			
17	Your privacy was respected during your ANC session			
18	Privacy respected during physical examination			
19	The waiting area is convenient			
20	You are satisfied regarding cleanliness of waiting room			
21	Waiting room has enough sitting chair			
22	You are satisfied regarding cleanliness of examination room			
23	The waiting area is comfortable			
24	You are happy with the time you normally have to wait			
25	You are happy with this distance			
26	You are happy with availability of drugs			
27	You are happy with working hours of the facility			

Table 4 Accessibility and Service related factors, Hossana Town public health facilities, Southern Ethiopia, March 2014

s.No	Items	Yes	No
101	Is your privacy respected		
102	Is the institution clean		
103	Is the care provider respectful		
104	Waiting time <=30minuts		
	>=30minuts		
105	Distance from home <=30minuts		
	>=30minuts		

Table 5 knowledge of pregnant women on antenatal care in Hossana Town public health facilities, Southern Ethiopia, March 2014

S.No	Items	Yes	No	DN
201	Do pregnant women need to go for antenatal check-up?			
202	Should first antenatal check-up be done in the first 3 months?			
203	Does pregnant woman need iron supplement?			
204	Does maternal smoking harmful to the fetus?			
205	Should you take alcohol to provide extra energy during pregnancy?			
206	Does pregnant woman need to come for at least four antenatal follow up throughout her pregnancy?			
207	Should a pregnant woman see the doctor for antenatal care only if she has pregnancy complication?			
208	Does pregnant woman need to undergo the following test during her antenatal check-up?			
208.1	Blood screening for Hepatitis B infection			
208.2	Blood screening for HIV infection			
208.3	Blood screening for hemoglobin level			
208.4	Blood pressure examination			
208.5	Blood sugar level			
208.6	Urine test for bacterial infection,			
209	Can high blood pressure affect the fetus growth?			
210	Do diabetic women have higher risk of having big babies?			
211	Is ultrasound scan safe for the fetus?			
212	Can emotional disturbance affect fetal growth?			

Table 6 Service expectation (NVG= not very good, NG=not good, NE=no expectation, G= good, VG= very good)

S.No	Before coming to this facility what was your expectation towards the	NVG	NG	NE	G	VG
301	Cost of the service					
302	Cleanness of facility					
303	Supply of medicine					
304	Support of service provider					

### FGD guide(probes) (24)

- 1. How is the courtesy and respect by the health workers and the registration room workers?
- 2. Can you please tell me about the provision of information of the services of the ANC (e.g., in locating rooms for registration, examination rooms, lab. And drug dispensing)
- 3. Would you please tell me about the time spent and completeness of the physical examination and privacy by the health workers?
- 4. What about availability of drugs and other supplies?
- 5. Can you please tell me about the waiting time to get the services in the ANC of the health facilities?
- 6. What are the major factors that you think contribute to the dissatisfaction of clients?
- 7. What is your suggestion in order to improve the services in the ANC of the health facilities?

### THANK YOU

NAME OF INTERVIEWER_	
SIGNATURE	
DATE	

# **Annex II Questionnaire Amharic version**

ጅማዩኒቨርሲቲ

የህብረተሰብ ጤና እና የህክምና ሳይንስ ኮሌጅ

የነርስ እና ሚድዋይፈሪ ትምህርት ክፍል

በአማርኛ የተተረጎመ የስምምነት ቅፅ	
ያላቸውን እርካታ እና ተዛማጅ መ	ና ደርጅቶች ለቅድመ ወሊድ ክትትል የሚመጡ እናቶች በሚስጠው አገልግሎት ላ! ንስአዎቻቸዉ በሚል ርዕስ ለቀረበ ጥናት መረጃ ለማስባስብ የተዘ <i>ጋ</i> ጀ መጠይቅ
ሕህ <b>ቴ</b>	
ላይ ያላቸውን እርካታ እና ተዛጣ፤ እና ጣደባ የሚበጁ መሰረታዊ ጥ ይጠበቅሎታል ለአንዱ ወይም ለ	ም ወሊድ ክትትል ወደእዚህ ጤና ድርጅት የሚመጡትን ነፍስጡር እናቶች በ አገልግሎ ና መንስእዎቻቸዉን ለማወቅ  ቃለ መጠይቅ እያደርኩ እንኛለሁ ለአገልግሎቱ ጥራት መሻሻለ የቈዎችን እጠይቆታለሁ ስሞዎት እዚ ቅጽ ላይ አይጠቀስም የሚጡኝ መረጃመም በሚስጢ ሁሉም ጥያቅዎች መልስ መስጠት ካልፈለጉ መብቶዎ የተጠበቀ ነው ነገር ግን ሁሉንፃ ሆኑ በሆዕሳና ክተጣ ነፍስጡር እናቶች ስም ከፍተኛ ምስጋና እናቀርባለን
ይስማማሉ?	
1. አዎ	2. አልስማማም
<i>መ</i> ጠይቁን የሚሞላዉ ሰዉ ስም	ፊርማ

ስለ ትብብርዎ አመሰግናለሁ

# ትዕዛዝ ${f 1.}$ የጥናቱ ተሳታፌ በሚሰጡት ምላሽ መሰረት በማክበብ ወይም ባዶ ቦታውን በመሙላት ሰንጠረዥ ${f 1.}$ እና ሰንጠረዥ ${f 2.}$ ያሉትን መጠይቆች ይሙሉ

ሰንጠረዥ 1፡-በሆዕሳና ክተማ በመንግስት ጤና ደርጅቶች ለቅድመ ወሊድ ክትትል የሚመጡ እናቶች ስነማህበረሰባዊ ባህሪ ደቡብ ኢትዮጵያ፤ የካቲት 2006 ዓ.ም።

ተ.ቁ	ስነ-ማህበረሰባዊ ባህሪ	<b>ምር</b> ጫ
	የጠና ድርጅቱ መለያ ቁጥር	
1	እድ <i>ሜ</i> በዓ <i>ሙ</i> ት	
2.	የኃብቻ ሁኔታ	1. ያንባች
		2. ያላገበቸ
		3. አባብታ የፈታች
		4. ባል የሞተናት
3.	ሃይማኖት	1. አረቶዶክስ
		2. ፐሮቴስታነት
		3. ሙስሊም
		4. ሌለ ካለ ይ <i>ገ</i> ለፅ
4.	ብሄር	1. ሀድያ
		2.አማራ
		3.ስልጤ
		4.ጉራጌ
		5.ከምባታ
		6.ሌለ ካለ ይ <i>ገ</i> ለፅ
5.	የትምህርት ሁኔታ	1. መደበኛ ት/ት ያልተማረች
		2. አንደኛ ደረጃ
		3. ሁለተኛ ደረጃ
		4. የኮሌጅ ት/ት
6.	የሰራ ሁኔታ	1. የቤት እመቤትት
		2. የግል ሰራተኛ
		3. የመንግስት ሰራተኛ
		4. ተማሪ
		5. አረሶ አደር
		6. <i>ነጋ</i> ዴ
		7. ሌላ ካለ ይ <i>ገ</i> ለፅ
8.	የሚኖሩበት ቦታ	1. ከተማ 2. <i>ገ</i> ጠር

ሰንጠረዥ 2፡-፡-በሆዕሳና ከተማ በመንግስት ጤና ደርጅቶች ለቅድመ ወሊድ ክትትል የሚመጡ እናቶች የእርግዝና እና ወሊድ ሁኔታ ደቡብ ኢትዮጵያ፤ የካቲት 2006 ዓ.ም።

ተ.ቁ.	የእርግዝና እና ወሊድ ሁኔታ	ምርጫ
1.	የወሊድ ብዛት	1. አንድ
1.		2. ከሁለት-አምስት
		3. ከአምስት በላይ
2.	የታቀደ  እርግዝና ነዉ	1. አዎ
		2. አይደለም
3.	የልጆች ብዛት	·
4.		1. አንደኛ
	ስንተኛ ምር <i>ጦራዎት ነ</i> ዉ	2.ከ አንደኛ በላይ
		1.አለ
5.	<b>ወር</b> ጀ	2.የለም
		1.አለ
6.	ሞቶ የተወሰደ ልጅ	2.የለም

# ትዕዛዝ 2. የተናቱ ተሳታፊዎች በሚሰጡት ምላሽመሰረት በጣም እስማማለሁ (በእ) እስማማለሁ (እ) እርባጠኛ አይደለሁም (እአ) አልስማማም (አ) በጣም አልስማማም (በአ) የሚሎትን መልሶች በተሰጠዉ ረድፈ ላይ ( $\sqrt{\phantom{a}}$ ) ምልክት ያስቀምጡ።

ሰንጠረዥ 3፡-በሆዕሳና ከተጣ በመንግስት ጤና ደርጅቶች ለቅድመ ወሊድ ከትትል የሚመጡ እናቶች በአገልግሎቱ ላይ ያላቸዉን የእርካታ መጠን ከተዛጣጅ መንስአዎቻቸዉ ጋር ያለዉን ሁኔታ ለጣወቅ የተዘጋጀ መጠይቅ ደቡብ ኢትዮጵያ፤ የካቲት 2006 ዓ.ም።

ተ.ቁ	መ <sub>ጠ</sub> ይቆቸ	በእ	λ	እአ	አ	በአል
1.	የጤና ባለሞያዉ ባደረ <i>ገ</i> ሎት አጠቃላይ የሰዉነት ምር <i>መ</i> ራ ተደስተዋል					
2.	የጤና ባለሞያዉ ሰለ ቅድመ ወሊድ ክትትል ባደረገሎት ገለጻ ተደስተዋል					
3	የጤና ባለሞያዉ የሰጠዎት ምክር ጠቅምዎታል					
4.	በቅድመ ወሊድ ክትትል ወቅት ስለሚሰጦዎት አንልግሎት በተደረገሎት <i>ገ</i> ለጻ ተደስተዋል					
5.	በአጠቃላይ በበቅድመ ወሊድ ክትትል ቆይታዎ ተደስተዋል					
6	የጤና ባለሞያዉ ባሳየዎት ትህትና ተደስተዋል					
7	የጤና ባለምያዉ ባሳየዮት አክብሮት ተደስተዋል					
8	የጤና ባለሞያዉ ጥያቄዎትን በ ጥሞና አዳምጦዎታል					
9	የጤና ባለሞያዉ ለሁሉም ተያቄዎት ምላሽ ሰተዎታል					
10	የጤና ባለሞያዉ አንድን አንልግሎት ተጠቃሚ ከሌላዉ ያበላልጣሉ					
11	የጤና ባለሞያዉ ከእርሶ <i>ጋ</i> ር በቂ ጊዜን አሳልፈዋል					
12.	የጤና ባለሞያዉ በስም ተዋዉቆዎታል					
13	የጤና ባለሞያዉ ለሚደረባሎት ምርመራ በቂ የሆነ ገለጻ አድርገዉሎታል					
14	የጤና ባለሙ አጠቃላይ ሁኔታዎችን በግልጽ ሁኔታ አስረድቶዎታል					

15	ለጥያቄዎ በተሰጡ ምላሾች እረክተዋል			
16	ከጤና ባለሞያዉ <i>ጋር ፈገግታን መ</i> ለዋወጥ ቀላል ነበር			
17	በቅድመ ወሊድ ክትትል ክፍለ ጊዜ ግላዊ ክብሮዎ ተጠብቆዉሎታል			
18	በቅድመ ወሊድ ክትትል አካላዊ ምርመራ ወቅት ግላዊ ክብሮዎ ተጠብቆዉሎታል			
19	የመቆያ በታዉን ማግኘት ቀላል ነበር			
20	በመቆያ ቦታዉ ፅዳት እረክተዋል			
21	<i>መ</i> ቆያ በታዉ በቂ <i>መቀመ</i> ጫዎች አሉት			
22	በመርመሪያ ክፍሉ ፅዳት ተደስተዋል			
22	የመቆያ በታዉ ምቹ ነዉ			
24	ከምኖሪያ ቦታዎ ወደ ጠና ድርጅቱ ለምድረስ በፈጅቦት ሰአት ተደስተዋል			
25	አገልግሎቱን ለማግኘት በጠበቁት ሰአት ተደስተዋል			
26	በጤና ድርጅቱ የመዳኒት አቅርቦት ተደስተዋል			
27	በጤና ድርጅቱ የስራ ሰአት ተደስተዋል			

ትዕዛዝ 3 የጥናቱ ተሳታፊዎች በቅድመ ወሊድ አገልግሎት ላይ ያላቸዉን እዉቀት ለጣወቅ የተዘጋጀ መጠይቅ በምላሹ መሰረት በተሰጠዉ ረድፈ ላይ  $(\sqrt{})$  ምልክት ያስቀምጡ።

መጠይቅ	ትክክል ነዉ	ትክክል አይደለም	አላዉ <del>ቅ</del> ም
ነፍሰጡር አናች የቅድመ ወሊድ ክትትል ማድረግ ይኖርባታል			
የቅድመ ወሊድ ክትትል በመጀመሪያ ሶስት ወራት ዉስፕ መጀመር አለበት			
ነፍሰጡር አናቶች የቫይታሚን እንክብሎች ያስፌል <i>ጋ</i> ቸዋል			
የነፍሰጡር አናት ሲ <i>ጋራ ማ</i> ጨስ በፅንሱ ላይ <i>ጉዳት</i> የመጣል			
በእርባዝና ወቅት ተጨማሪ ጉልበት ለማግኝት የአልኮል መጠጦችን መዉሰድ አለብሽ			
ነፍሰጡር አናት ለቅድመ ወሊድ ክትትል ቢያንስ አራት ጊዜ ወደ ጤና ድርጅቱ መምጣት ይኖርባታል			
ነፍሰጡር አናት ለቅድመ ወሊድ ክትትል መምጣት ያለባት እርግዝናዋ ላይ ችግር ከተፈጠረ ብቻ ነዉ			
ነፍሰጡር አናት ለቅድመ ወሊድ ክትትል ስትመጣ የሚከተሉትን ምርመራዎች ማድረግ አለባት			
የሄፐታይተስ ቢ ኢንፌክሽን የደም ምረ <i>መ</i> ራ			
የኤች አይ ቪ ኢንፌክሽን የደም ምረመራ			
የደም ማነስ ምረ <i>መ</i> ራ			
የደም ባሬት ምረመራ			
የስካር ምረመራ			
የሽንት ምረ <i>መ</i> ራ			
የደም ግፊት የፅንሱ እድንት ላይ ተፅኖ ያሳድራል			
የስካር ህመም ያለባት ነፍሰጡር አናት ትልቅ ክብደት ያለዉ ልጅ የመዉለድ እድላ ከፈተኛ ነዉ			
	ነፍሰጡር አናቸ የቅድመ ወሊድ ከትትል ጣድረግ ይኖርባታል የቅድመ ወሊድ ከትትል በመጀመሪያ ሶስት ወራት ዉስፕ መጀመር አለበት ነፍሰጡር አናቶች የቫይታሚን እንከብሎች ያስፈልጋቸዋል የነፍሰጡር አናት ሲጋራ ጣጨስ በፅንሱ ላይ ጉዳት የመጣል በእርግዝና ወቅት ተጨጣሪ ጉልበት ለማግኝት የአልኮል መጠጦችን መዉሰድ አለብሽ ነፍሰጡር አናት ለቅድመ ወሊድ ከትትል ቢያንስ አራት ጊዜ ወደ ጤና ድርጅቱ መምጣት ይኖርባታል ነፍሰጡር አናት ለቅድመ ወሊድ ከትትል መምጣት ያለባት እርግዝናዋ ላይ ችግር ከተፈጠረ ብቻ ነዉ ነፍሰጡር አናት ለቅድመ ወሊድ ከትትል ስትመጣ የሚከተሉትን ምርመራዎች ማድረግ አለባት የሄፐታይተስ ቢ ኢንፌክሽን የደም ምረመራ የዴም ማኔት ምረመራ የደም ማነስ ምረመራ የደም ማኔት የዕንሱ አድነት ላይ ተፅኖ ያሳድራል የስካር ህመም ያለባት ነፍሰጡር አናት ትልቅ ከብደት ያለዉ ልጅ የመዉለድ አድላ ከፈተኛ	ንፍሰጡር አናቸ የቅድመ ወሊድ ክትትል ማድረግ ይኖርባታል የቅድመ ወሊድ ክትትል በመጀመሪያ ሶስት ወራት ዉስፕ መጀመር አለበት  ንፍሰጡር አናቶች የቫይታሚን እንክብሎች ያስፌልጋቸዋል  የነፍሰጡር አናቶች ሲጋራ ማጨስ በፅንሱ ላይ ጉዳት የመጣል በእርግዘና ወቅት ተጨማሪ ጉልበት ለማግኝት የአልኮል መጠጦችን መዉሲድ አለብሽ ነፍሰጡር አናት ለቅድመ ወሊድ ክትትል ቢያንስ አራት ጊዜ ወደ ጤና ድርጅቱ መምጣት ይኖርባታል ነፍሰጡር አናት ለቅድመ ወሊድ ክትትል መምጣት ያለባት እርግዘናዋ ላይ ችግር ከተፈጠረ ብቻ ነዉ ነፍሰጡር አናት ለቅድመ ወሊድ ክትትል ስትመጣ የሚከተሉትን ምርመራዎች ማድረግ አለባት  የሄፐታይተስ ቢ ኢንፌክሽን የደም ምረመራ የአች አይ ቪ ኢንፌክሽን የደም ምረመራ የድም ማኔት ምረመራ የድም ማኔት ምረመራ የስካር ምረመራ	አይደለም  ንፍሰጡር አናች የቅድመ ወሊድ ከትትል ማድረግ ይኖርባታል  የቅድመ ወሊድ ከትትል በመጀመሪያ ሶስት ወራት ዉስተ መጀመር አለበት  ንፍሰጡር አናቶች የቫይታሚን አንከብሎች ያስፈልጋቸዋል  የንፍሰጡር አናት ሲጋራ ማጨስ በፅንሱ ላይ ጉዳት የመጣል በእርግዝና ወቅት ተጨማሪ ጉልበት ለማግኝት የአልኮል መጠጦችን መዉብድ አለብሽ ንፍሰጡር አናት ለቅድመ ወሊድ ከትትል ቢያንስ አራት ጊዜ ወደ ጤና ድርጅቱ መምጣት ይኖርባታል  ንፍሰጡር አናት ለቅድመ ወሊድ ከትትል መምጣት ያለባት እርግዝናዋ ላይ ችግር ከተፈጠረ ብቻ ነዉ. ንፍሰጡር አናት ለቅድመ ወሊድ ከትትል ስትመጣ የሚከተሉትን ምርመራዎች ማድረግ አለባት የሄፐታይተስ ቢ ኢንፌክሽን የደም ምረመራ የኤች አይ ቪ ኢንፌክሽን የደም ምረመራ የደም ግነስ ምረመራ የደም ግነስ ምረመራ የስካር ምረመራ የስካር ምረመራ

211	የአልትራሳዉንድ ምርመራ ፅንሱ ላይ ጉዳት አያደርስም		
212	በእርግዝና ወቅት የስሜት መረበሽ በፅንሱ እድንት ላይ ተፅኖ ያሳድራል		

# ትዕዛዝ 4 ነፍሰጡር እናቶች ለቅድመ ወሊድ ክትትል በሚሰጠዉ አገልግሎት ላይ የነበራቸዉ ግምትበምላሹ መሰረት በተሰጠዉ ረድፈ ላይ ( $\sqrt{\phantom{a}}$ ) ምልክት ያስቀምጡ።

ተ.ቁ	ወደእዚህ ሔና ድርጅት ከመምጣቶ በፊት ስለሚከተሉት	በ.ፕሩ	<b>ጥ</b> ት	ባምት	ጥጐ	በ.ጥሩ
	አንልግሎቶች የነበረዎት ግምት	አልነበረም	አልነበረም	አልነበረም	ነበረ	ነበረ
1	ስለአንልግሎቱ ክፍያ					
2	ስለድርጅቶ ፅዳት					
3	የመዳኒት አቅርቦት					
4	የጤና ባለሞዉ እርዳታ					

### ትዕዛዝ 5-ለቅድመወሊድ ክትትል በሚሰጠዉ አንልግሎት ላይ የተያያዙ ጥያቄዎች

ተ.ቁ	ጥያ <b>ቄዎ</b> ች	አዎ	አይደለም
	<i>ግ</i> ላዊ ክብሮዎት ተጠብቆሎታል		
	የጤና ድርጅቱ ንፁህ ነዉ		
	የጤና ባለሞያዉ በትህትና የተሞላ ነዉ		
	አንልግሎቱን ለ ማግኘት የጠበቁት ሰአት		
	<= 30 ደቂቃ		
	>= 30 ደቂቃ		
	የጤና ድርጅቱ እስከ መኖሪያ ቦታዎ ያለዉ እርቀት		
	<= 30 ደቂቃ		
	>=30 ደቂቃ		

### የጋራ ዉይይት ለጣድረግ የተዘጋጀ መጠይቅ

- የጤና ባለሞዉ እና የመዝንብ ቤት ሰራተኞች ትህትናና አክብሮት እዴት ታያለሽ
- 2. ሰለ አንልግሎት መረጃ አሰጣጥ እንኤት ታያለሽ

- 3. በሔና ድርጅቱ የቆየሽበትን ሰአት,አጢቃላይ የሰዉነት ምር*መራ* በቂነትና ስለግላዊ ክብር አጠባበቅ ምን ትያለሽ
- 4. ስለጤና ድርጅቱ ላብራቶሪ ምርመራ አገልግሎት ምን ትያለሽ
- 5. ስለጤና ድርጅቱ *መ*ድሀኒት አቅርበት ምን ትያለሽ
- 6. ለ አገልባሎት ተጠቃሚዎች አለመርካት የሚያመጡ ዋነኛ መንስኤዎች ምንምን ናቸዉ
- 7. ለጤና ድርጅቱ አገልግሎቱን መሻሻል ምን ይደረግ ትያለሽ

# **Annex II: Questionnaire Hadiyisa version (local language)**

Jimmi unveresti minadabina fayahoma egachi narsi lossan minane la'am digiree massi kitabi naqasha gudesemina wexakam naqash wixachina itti sagara uwoo mana sidimina gudesako gudesha

soroobimmi horoori sawwit lamfoor xummi egechchane hinkaan galaxxoo keen yooda'ee mashika'uwwi mahi ihukisida'e la'immina issoomane.

Loppitato ayyiche:-					
Summi iki	yamamooko.	Ku	lamfoor	xummi	egechchane
awwaado uwwimm ogorane awwaaxxaan yoo	galaxxati bikir	na gu	ıdakohane	e. Ka naq	ashik horror
washi lamfoor xummi egechchane hinkaa'n av	wwaaxxan galax	xxaac	la'e la'im	minaa m	ashshika'uw
mahi ihukisida'e la'immina Hossaa'n beero	yoo lamfoor	amo	o'one issa	akam so	rooba. Kine
uwitakam naqash lamfoor xummi egechchan	e awwaado uv	vwim	m ogorar	ne araqa	awadohane:
uwitakam naqasha hundam koxixanchine max	aqanche amand	lo bik	ina mahi	m affobe	'ane ehukisa
chakesomo. Ka xamichuwika hundam ihuko k	oli dabacha hig	gime	xansisoha	ne ihuka	rem kine ka
xamichina uwitakam nakash danami misha ebi	mina araka awa	adoha	ane ihook	ko.	
Xamicha dabarimina hasakamone?					
Oyya, ashere Aa'ee, g	alaxomo!				
Naqash wixa'anchi suma	furmaa		a	yamoo	

**1. Baxanchi matto**:-minaadaph heechch ogoraa gat qaanquwwa Hossaa'n beeroo yoo lamfoor amo'one issakam sorooba woto'i agana 2006 H.D.

S.Nº	minaadaph heechch	
	ogoraa	
	Fayya'oom egachi mine	Inkiino xigo
1	Umer mee'o (hundem	
	hincho)	
2.	Min issaqim ogori	1. Agisumoyyo
		2. Agisamoo
		3. Anani ihamoo
		4. Min ani lehako
3.	Amanati maha?	Potestanta1
		Oritodoqisa2
		Musilima3
		Katolika4
		Mulane(chakise)99
4.	Ki shumo'i maha	1. Hadiyya
		2. Kambaata
		3.Guraage'e
		4.Silxe'e
		5.Amaara
		6.Mullane (caakise)
5.	Mee'i baxxancha gulitta	e) Losan bee'ane
		f) Luxxi qooxo losa'n mine guullaammo
		g) La'mmi qooxo losa'n mine guullaammo

		h) saxi qooxo losa'n mine guullaamm
6.	Baxxi ogori maha?	1. Mi'in ama
		2. Gili batancho
		3. Adi'l batancho
		4. losaancho
		5. Abuulaancho
		6. Daddaraancho
		7. Mullane (caakise
8.	Mee'ane waattittokki	c) luxxane
		d) lamoo hanaane

# Baxxanch II kaba yoo xummii qach ogora Hosaa'n beero yoo lamfoorina gudukkane woto agana 2006 H.D

S.Nº	Qachchi ogora	
1.	Mee'aa qattaa	d) mato
		e) lamii onti afeebe'e
		f) ontii hanaan
2.	Lamfooroom hassahinii	b) hasaammo b)hasummoyyo
3.	Godabo aphixximma	a)ooyya b) aa'ee
4.	Lehaa qaaraama	a) ooyya b) aa'ee
5.	Ciilluwwi xig	

3. lamfoorina uwwakkam awwado yoo xeebi mu'llim xa'mmichcha hinkaa'na iittisa awonoo keeno bito uwwee

Keeno bit 5= Horem iittaamo 4= iittaammo 3= mahayyome 2= iittummoyo 1= Horem iittummoyo.

В	axxanchi I xe	ebo n	nu'llo'i	bito		
Sr.	Items	1	2	3	4	5
N <sub>o</sub>						
1	Xuunso mirmane fayyaa'ooma egeru manch galaxxitaa					
2	fayyaa'ooma egeru manch lamfoor waroo ammane caakkisaa					
3	fayyaa'ooma egeru manch uwwu caakishshane.					
4	Lamfoor egachi awwonnanchane maha baximmi hasisooda galaxxitaa					
5	Xuunso lamfoor awwaadonne hinkaa'na galaxxitaa					
7	Fayya'oommi egech manch handayatin geegeesaa					
8	Fayya'oommi egech manch ki bikkina beyyo uwaa					
9	Fayya'oommi egech manchi aa'aaqancha					
10	Fayya'oommi egech manchi aa'aaqancha and hundam xa'mmichcha dabaraa					
11	Fayya'oommi egech manchi kolli manna annanissaa moo'oo					
13	Fayya'oommi egech manchi kiina ihaakko ammane uwwaa					
14	Fayya'oommi egech manchi keese summine xummaatisaa					
15	Fayya'oommi egech manchi maramaru luwwa hundam caakkisaa					
16	Fayya'oommi egech manchi woshsha gundisaa caakkisaa					
17	Ki xa'mmichchina uwwu dabachcha galaxxitaa					
18	Fayya'oommi egeru manchine sholle'aallanem woshshaa liiranchaa dabasitaa					
19	Gaqqi maaxxaqa Fayya'oom egechi manch lamfoor awwaado uwwoo ammane egeraa					
20	Gaqqi maaxxaqa Fayya'oom egechi manch oracho moo'kkuyya egeraa					
21	Worafa egerakkam beyyi gunda siidaa					
22	Fayya'oommi egechchi mi'n muccurooma galaxxitaa					
23	Worafa egerakkam beyyo ihaakkoo barcum yoo					
24	Mirma'l mi'n muccurooma galaxxitaa					
25	Worafa egerakkam beyyi kiina makkaa					
26	Egetti ammanene hinkaa'n liirantaa					

27	Lamfoolano moo'anteena miqi bit galaxxisaa			

	Baxxanchi III awaaxxi egechcha	1	2	3	4
S.No	Fayya'oom egech mine waatteen illageen	jora	hasamoohane	Horem	mahameyyo
	ki egechi hinkid hee'ukko			danaamo	
301	Awwaaxxi bit hiinkaa'naa yitaa				
302	Fayya'oommi egech mi'n mucurooma				
303	Qaraa'll hincite				
304	Fayya'oommi egechi manchi hara'mmato				

### Galaxxoommo

Xa'mmichcha xa'mmu manchi summa	
Mare'e	
Balla	

### Lamfoor awwaaxxi bikina fayya'oom egech ogorane atoracha

- 1. Fayya'ooma egeroo keenii kitaaph mi'n keenii hamanaatii hayidii hinkidet hee'ukko?
- 2. Lamfoor awwaaxxi bikina yoo woshsha kurim ogora kutteena xantoo.(kiiitaaphphi min yoobeyyi ,mirma'l min,labaraatoore minii qaraa'l mine).
- 3. Mirmaraa ammane fayya'oom egeroo keenine egeti amma'n bikina kuttoo?
- 4. Labratore awwaaxxi bikkina ma'llichcho kure
- 5. Qararee mulli mu'uxxi hincitti siidimmi ogora kuttoo?
- 6. Lamfoor mirmara awaaxxiteena fayya'oom egech beyyo egetti ama'n bikina kuttoo lich yoo?
- 7. Horror horoor ihaakkoo fayya'oom egech ogorane galaxxissoobee'i luwwi bikkina sawwitoo?
- 8. Ki sawwit lamfoor awwaaxxi ogora axxisimminna maha issimmi e'llooda'e kuttoo?

## ASSURANCE OF THE PRINCIPAL INVESTIGATOR

The undersigned agrees to accept responsibility for the scientific ethical and technical conduct of the research project and for provision of required progress reports as per terms and conditions of the college of public health and medical sciences in effect at the time of grant is forwarded as the result of this application.

Name of the student:	<u>DAGMAWIT BIRHANU</u>
Date	Signature
APPROVAL OF THE	ADVISORS
Name of the first advise	or: PROFESSOR TEFERA BELACHEW
Date	Signature
	visor: Mr. DESTA WORKNEH
Date	Signature
APPROVAL OF THE	EXAMINER
Name of the examiner:	
Date.	Signature