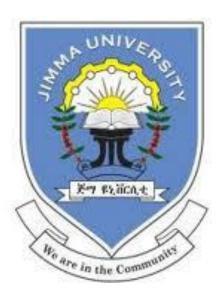
Quality of Antenatal Care Service in Public Health Facilities of, Chencha District, Gamo Gofa Zone, Southern Ethiopia.



By

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A thesis Submitted To Jimma University; College of Health Science, Department of Population & Family Health, in Partial Fulfillment for The Requirement of Degree of Master of Public Health (MPH) in Reproductive Health.

Quality of Antenatal Care Service in Public Health Facilities of, Chencha District
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## **ABSTRACT**

**Background:** The quality of antenatal care is dependent on the qualifications of health care providers, the number and frequency of ANC visits, the content of services received and the kinds of information given to women during their ANC visits. Although the quantity rather than quality of health services had been the focus historically in developing countries, ample evidences suggests that quality of care or lack of it must be at the center of every discussion. Hence, assessment of antenatal care quality in the study area is prudent.

**Objectives:** to assess the quality of antenatal care services in the public health facilities of, Chencha district, Gamo Gofa Zone, Southern Ethiopia.

**Methods:** A facility based cross-sectional study employing both quantitative and qualitative method was conducted from march-April 2016 among a sampled 350 pregnant women, 8 service providers and 4 heads of the department in ANC clinics of Chencha district. Semi- structured questionnaire, interview guide, resource inventory and 38 observation checklists were used to obtain information. Data were analyzed using SPSS for windows version 20 logistic regression model was used to identify predictor variables. Qualitative data were analyzed based on thematic framework.

**Result:** - Fifty two point six percent of respondents were satisfied with the service provided. The study revealed that residence, planning status of pregnancy, privacy, parity and counseling on birth preparedness and complication readiness plan were the predictors of client satisfaction. The qualitative part showed that, care providers didn't have regular supervision, updates on ANC, budget for preparing mother's forum, and incentive. Although health centers have basic medical equipments, all of the health institutions have no guidelines, different laboratory reagents, and most of them did not have waiting area with shade, and private room to carryout ANC service.

Conclusion and recommendations: - In this study the overall quality of antenatal care service is low. Even though 184(52.6%) of clients were satisfied, provision of health information is very poor, providers need specific training on ANC, budget for provision of health education, regular supervision, supply of drugs and laboratory reagent, incentive to provide quality of ANC service and all health facilities did not have guideline. So that provision of adequate information on risk factors, birth preparedness and complication readiness plan, regular update & supervision with feedback for service providers, preparing ANC guide line at national level and proper usage of the guideline and supply of reagents are most important.

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**ACRONYMS** 

AIDS----- Syndrome AIDS-----

ANC ----- Antenatal care

BP-----Blood pressure

BP/CR\_\_\_\_\_\_ Birth preparedness and complication readiness plan

FP -----Family planning

FANC-----Focused Antenatal care

HC-----Health center

HCT----- Hematocrit

Hgb-----Hemoglobin

HIV-----Human Immunodeficiency Virus

IPTP -----Intermittent preventive treatment for malaria during pregnancy

ITN-----Insecticide treated bed net

MCHIP-----Maternal and Child Health Integrated Program

MNCH-----Maternal, neonatal and child health

PMTCT-----Prevention of mother to child transmission of HIV/AIDS

RH-----Reproductive health

STI-----Sexually transmitted Infections

UK------United kingdom

VDRL-----Venereal Disease Research Laboratory

VCT-----Voluntary counseling and testing

WHO-----World health organization

#### CHAPTER ONE

## 1. INTRODUCTION

## 1.1 Background

Pregnancy is one of the most important periods in the life of a woman, a family and a society. WHO's definition of antenatal care includes recording medical history, assessment of individual needs, advice and guidance on pregnancy and delivery, screening tests, education on self-care and, identification of conditions detrimental to health during pregnancy, first-line management and referral if necessary(1)..The antenatal period presents important opportunities for reaching pregnant women with number of interventions that may be vital to their health, well-being and that of their infants(2).

Most women who are pregnant in the United Kingdom will have an uncomplicated pregnancy, giving birth to a healthy baby at full term. However, problems during pregnancy (such as miscarriage, fetal growth restriction and preterm birth) remain common, and stillbirth rates have changed little in recent years. Maternal complications such as depression, thromboembolism, haemorrhage and sepsis are also still encountered, with the most extreme cases contributing to a UK maternal mortality rate of around 11 per 100,000 maternities(3).

The aims of ANC are to optimize maternal and fetal health, to offer women maternal and fetal screening, to make medical or social interventions available to women where indicated, to improve women's experience of pregnancy and birth and to prepare women for motherhood whatever their risk status(4)..

ANC is a critical area where quality can play a major role in ensuring the wellbeing of the mother and the child(5). It is one of the key strategies in the reduction of maternal death. Focused ANC can assist in determining gestational age, identifying high-risk pregnancies, detecting and monitoring pregnancy related hypertension, assessing fetal well being, and can also promote mother's awareness and increase acceptability of skilled birth attendance. ANC also plays a key role in prevention of mother to child transmission of HIV, which is a contributing factor to both child and maternal deaths. It is recommended that for ANC to be more cost effective, at least four comprehensive antenatal visits during the pregnancy are needed(6).

ANC coverage is a success story in Africa, since over two-thirds of pregnant women (69 percent) have at least one ANC contact. However, to achieve the full life-saving potential that ANC promises for women and babies, four visits providing essential evidence based interventions are required (7).

The quality of ANC is dependent on the qualification of health care providers, the number and frequency of ANC visits, the content of services received and the kinds of information given to women during their visit(8). Provision of quality ANC service requires the presence of relevant infrastructure, adequate trained health workers, infection control facilities, diagnostic equipment, supplies and essential drugs. Furthermore, the ANC process requires the use of guidelines that health providers should follow while offering care to ensure prevention, diagnosis and treatment of complications(9).

Defining quality in health care is a challenge due to the multiple disciplines and professionals responsible for client care, and the diverse clients with infinite needs to be satisfied. At personal level the term quality describes something that satisfies ones expectation; all health care professions have standards for every practice used to determine quality and performance. The Institute of Medicine (1990) defines quality in health care as the degree to which health services for individual or population increase the likelihood of desired health outcomes, and consistent with current professional knowledge(10).

Quality can be assessed from the point of view of users (perceived) quality and the technical standards. Donabedian was one of the first person to reflect upon quality, to operationalize the term and offer a frame of work for its definition based on the three major attributes; structures, process and outcome. Structures refers to the attributes of the setting where health care occurs;" process" denotes what is actually done in giving and receiving care; and "outcome" indicates the effect of care on the heath status of patients and population(11).

The quality of services has largely received little attention in many African countries. Importance of health care on lives of people makes quality critical regardless of where services are provided in the hospital, or community. Yet, improving quality of health services is vital to improving the abysmal level of health (10).

#### 1.2 STATEMENT OF THE PROBLEM

The number of women dying due to complications during pregnancy and childbirth decreased by nearly 50% from an estimated 523 000 in 1990 to 289 000 in 2013. While such progress is notable, the average annual rate of decline is far below that needed to achieve the MDG target (5.5%), and the number of deaths remains unacceptably high. In 2013, nearly 800 women died every day from maternal causes(12). Almost all maternal deaths (99%) occurring in developing countries are due to complications arising during antenatal, intrapartum and immediate postnatal period(13). Of the deaths more than half of them occur in sub-Saharan Africa and one third occur in South Asia. Most causes of these deaths are easily preventable through ANC in pregnancy, skilled care during childbirth, and care and support in the weeks after childbirth(13) However, in many African countries the coverage of ANC is increasing. But the coverage alone does not provide information on quality of care, and poor quality in ANC clinics, correlated with poor service utilization. This is often related to an insufficient number of skilled providers (particularly in rural and remote areas), lack of standards of care and protocols, few supplies and drugs, and poor attitudes of health providers(7). The majority of maternal deaths could be avoided if women had access to quality medical care during pregnancy, childbirth, and postpartum(14).

One of the important problems which are continuously faced these days is lack of good quality of service(15). Quantity rather than quality of health services has been the focus historically in developing countries, ample evidence suggests that quality of care (or the lack of it) must be at the center of every discussion(16). Even though One woman in every three (32 percent) made four or more antenatal visits during the course of her pregnancy in Ethiopia(8) there is a growing consensus that access to ANC alone is insufficient to alter the present maternal health profile and that the quality of ANC services may be a key determinant of maternal and perinatal outcomes(17, 18).

Although researchers frequently highlight the importance of quality of maternal care in improving maternal and newborn health and, studies on quality of ANC have been carried out, there is paucity of data on the quality of ANC in Ethiopia. So that more rigorous examination should be needed on quality of ANC services in order to identify specific problems and develop

strategies to improve and reduce maternal mortality. Therefore this study aims to assess quality of ANC services in Chencha district, Gammo Gofa Zone, Southern Ethiopia.

#### **CHAPTER TWO**

#### 2.1 LITRATURE REVIEW

#### 2.1.1 Quality of Antenatal care services

Quality services improve health outcomes by providing clients with respectful and technically sound services, delivered according to standards that are known to maximize their health impact. Recent trends in addressing quality of care have taken a system view of the production of quality services, acknowledging that: 1) health care delivery occurs as part of an interaction between a health care provider and the client and community; 2) provider performance is affected and motivated by a wide range of factors in the provider's immediate environment; and 3) the health system is responsible for providing inputs and processes that service providers need to deliver quality services, including infrastructure, supplies, supervision, and management(16)..

#### 2.2.1 Structural dimension of antenatal care service quality

Study conducted in North Gondar revealed that: most of the facilities, except one health center, claimed that they had PMTCT services and none of the health centers visited had laboratory services for testing syphilis. Moreover, many health centers did not have laboratory tests for hemoglobin, urine for protienuria, and cross match(19).

According to study conducted in Bahr Dar special zone:-On inventory, all health facilities had functional weight scale, microscope, fetoscope and stethoscope but sphygmomanometer was not available in one health facility. Uristix for detection of glucose and protein in urine, VDRL and hemoglobin measurements were available only in two of the eight public health facilities included in the study. Penicillin was available in all health facilities but iron sulfate/folic acid was present only in one facility. Private ANC examination room was provided only in two health facilities. ANC guideline and water to wash hands in the examination room was available in none of the facilities(20).

## 2.2.2 Process dimension of quality of antenatal care service

Process attributes-Interpersonal aspects

Study conducted in Bahr Dar shows that:-almost all 365 (98.9%) and 359 (97.3%) of respondents reported that the providers seem interested and there was no interruption by the provider during

consultation respectively. The qualitative component of the study (by observation) also demonstrated that respectful and friendly greeting was offered for a total of 78 (81.2%) clients. However 105 (28.5%) of women re-ported that the door was not closed during consultation and 51 (13.8%) of the study women revealed that there were people other than the provider during consultation. (20).

Study conducted in Ambo Town showed that: - Women were asked about the situation of privacy at ANC Care unit, majority 246(84%) of the participant respond that privacy maintained, while 42(16%) believe that there was violation of privacy. Regarding the duration of time spent with provider; majority of the participant 212(70%) said time was adequate, and 66(23%) the time was inadequate. About 206(71.5%) of the participants reported that health care provider were attentively listening to their problem, but 82(28.5%) of the women reported that the provider didn't asked them their feeling. (21).

#### Process attributes-technical aspects

Study done in Zambia revealed that certain ANC interventions were commonly received by Zambian mothers while others were not. Iron supplementation, weight measurement, IPT of malaria, blood pressure measurement, and tetanus vaccination were each received by over 80% of women, while VCT for HIV was received by half, drugs for intestinal parasites by about a third, and only about a quarter of women reported that their urine had been tested at ANC(22).

Study conducted in eastern Uganda revealed that client examination was generally well done for the majority 80% of the clients, while counseling for risk factors was observed to have been poorly done for over 176(58%) of the ANC clients. For clients counseling on birth preparedness, over 50% were observed to have had poor counseling. Similarly, 159(53%) of the clients did not have essential tests carried out on them. Nonetheless, at least 22% of the clients were observed to have undergone good counseling for birth preparedness. For the essential drugs provided, 159(53%) of the clients received TT vaccination. However the majority of the ANC clients were not offered folic acid 215(72%) as an iron supplement(23).

Study conducted in rural Tanzania revealed that, hemoglobin and urine albumin was assessed in 22%–37% and blood pressure in 69% - 87% of all visits. Fifty two (20%) severe maternal morbidities were attributed to substandard ANC, of these 39 had severe anemia and eclampsia

combined. Substandard ANC was mainly attributed to shortage of staff, equipment and consumables. There was no significant relationship between assessment of essential parameters at first ANC visit and total number of visits made(24).

Study conducted in Bahr Dar shows that:-Advice about nutrition, FP and ITN utilization was given for 221 (59.9%), 151 (40.9%) and 130 (35.2%) women, respectively. In this study 316 (85.6%) and 304 (82.3%) of the women were asked and tested for HIV respectively. For majority 356 (96.5%) and 327(88.7%) of women gestational age and uterine height were measured, respectively. (20).

#### 2.2.3 Client satisfaction on service provided

Study conducted in Jimma town shows that:- In overall, 235(60.4%) of the women were satisfied and 39.4% were dissatisfied with the focused antenatal care (FANC) services. (25).

Study conducted in Ambo shows that: ninety seven (33.6%) women were very satisfied, 159(55.3%) women were satisfied with ANC services, while only 32(11%) women were not satisfied(21). Study in Bahr dar special zone revealed that (52.3%) of the study women were satisfied(20). Study in Addis ababa showed that 89% of the study women were satisfied with the care provided(26). Study conducted in Bursa woreda sidama zone, revealed that 97 (33.4%) of the mothers participated in the study were satisfied(27).

#### 2.2.4 Providers perspective

Study in Addis Ababa revealed that care providers identified lack of transportation and communication infrastructure and overcrowding at the referral hospital as challenges for the smooth functioning of the referral network, as well as insufficient pre-service and in-service

training in obstetric emergencies, and lack of supportive supervision as barriers to the provision of timely, quality emergency obstetric care(28).

#### 2.2.5 Factors affecting client satisfaction.

According to Ethiopian mini demographic and health survey urban women are more than twice as likely as rural women to receive ANC from a skilled provider. Eighty percent of women residing in urban areas received ANC services from a skilled provider for their last birth compared with 35 percent of women in rural areas(8).

Study conducted in united republic of Tanzania revealed that Privacy of the consultation (i.e., the door of the examination room being closed) was observed in 81% of consultations in the public sector and in 99% in the private sector which is significantly associated with quality of ANC service Even though they were not run multiple regression the cross tab result shows that x2=36.65;P<0.001(29).

Study in Bahr dar revealed that sex of the provider, time of initiation of ANC, privacy during consultation, frequency of ANC visit, duration of consultation time and explaining the procedure before ANC examination were predictor variables for client satisfaction(20).

Study conducted in Jimma revealed that Variables which significantly predict level of satisfaction with focused antenatal care services include: type of health center, average monthly income of family and educational status of the mother, and type of pregnancy and history of stillbirth(25)

## 2.3 Conceptual frame work.

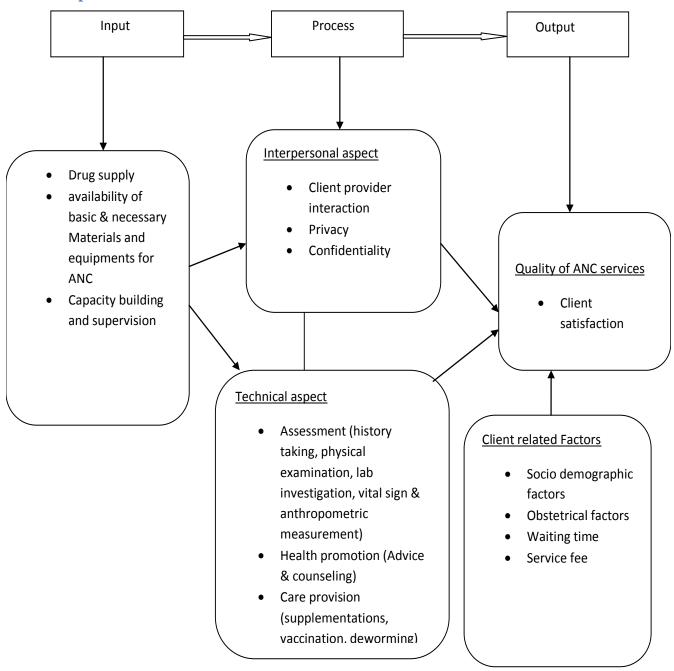


Figure 1 Donabedian Model Adapted for Quality of ANC Service(11).

#### 2.4 SIGNIFICANCE OF THE STUDY

This study aimed to identify quality gaps in the provision of ANC in public MCH facilities, which when addressed will go a long way in strengthening the capacity and credibility of public ANC services and it will gives important information that could be used in informing intervention design and implementation of projects that seek to improve maternal health in the area. The outcomes of this study is also a pointer to clinicians, public health practitioners, and policy makers not to evaluate success of ANC on the basis of its coverage alone but on what was offered in the ANC services and also the result will form baseline data for improving quality of ANC in the study area in particular and other similar settings. The study also gives clue for planning quality in the health facilities as far as it is the current focus and commitment of Ethiopian government.

## CHAPTER THREE

## 3.1 OBJECTIVES OF THE STUDY

## 3.1.1 General objective

To assess the quality of antenatal care service in public health facilities of, Chencha district from Ethiopia, 2016.

## 3.1.2 Specific objectives

- To assess the availability of resource that could enable to conduct quality ANC services.
- To determine client satisfaction of ANC service.
- To explore health care providers perceived barriers of good quality of care.
- To identify factors affecting client satisfaction of ANC services.

#### CHAPTER FOUR

#### 4.1 Methods and materials

## 4.2. Study Area and Period

The study was conducted from March 15 to April 28 2016 at Chencha district, Gamo gofa zone, southern Ethiopia in four government owned ANC clinics. Chencha district is one of 13 districts in Gamo gofa zone; SNNP regional state which is located at 250 Km south of the capital of southern regional state, Hawassa; and 480 km south east of the capital city of Ethiopia, Addis Ababa. According to the data obtained from the district health office, 2015/2016 projected population of the district is around142, 062. From the total population, the number of women in child bearing age is 27, 812 of these 4850 women planned to be on ANC visit. There are 1 district hospital, 7 health centers, 5 private clinics, two drug venders and 49 health posts with 2 health extension workers in each Kebeles (small administrative unit). It is bordered by Kucha and Boreda weredas in the North, Arbamich zuria wereda in the south, Mirab-Abaya wereda in the east and Dita in the west. It has 52 rural administrations which are called Kebele and currently the district covers an estimated area of 445 km2 and divided into 45 rural peasant associations and 5 urban dwellers associations (30).

#### 4.3. Study design

A facility based cross-sectional study employing both quantitative and qualitative methods were conducted to assess the level of input, process and output of service delivery, resource inventory, client satisfaction exit interviews, interview of provider's perceived barriers of quality of care and observation were conducted.

#### 4.4. Population

#### 4.4.1. Source population

I. For the quantitative part

All pregnant women attending ANC services in Chencha district

II. For the qualitative part

All ANC providers and service providing public health Facilities of Chencha district

## 4.4.2. Study population

### I. For quantitative part

All ANC attending pregnant mothers in public health facilities of Chencha district during the study period.

#### II. For qualitative part

Purposively selected ANC providers and randomly selected public health facilities of the district

#### 4.5. Exclusion and Inclusion criteria

#### 4.5.1 Exclusion criteria

Pregnant women whose gestational age was below twelve weeks were excluded from the study.

#### 4.5.2 Inclusion criteria

All pregnant women who visited ANC clinic during data collection period in Chencha district

### 4.6. Sample size determination and sampling technique

#### 4.6.1. Sample size determination

For quantitative study, the required sample size was determined by using EPI-INFO version 7.1 by considering single population proportion based on the following assumptions. The proportion of client satisfaction among ANC users is estimated to be (33%)(27). A level of confidence of 95% and margin of error of 5% were also considered. After adding non response rate of 10% and finite population correction (as source population 4850 is <10,000), the final sample size became 350 ANC users.

#### For qualitative part

- A total of 12 respondents 8 ANC care providers of (2 from each health facility) and 4 focal person of the unit or head of the health facilities (1 from each) were selected purposively for in-depth interview and resource inventory.
- For observation 38 antenatal care sessions of first visit mothers were observed.

#### 4.6.2. Sampling procedure

Initially, from the 7 health centers, three health centers were selected randomly, and the existing one district hospital were included. The number of pregnant women included from each facility

were determined by a proportional to size allocation based on the average number of ANC users in the quarterly plan of each health facility and the duration of the data collection was continued until the required sample were obtained.

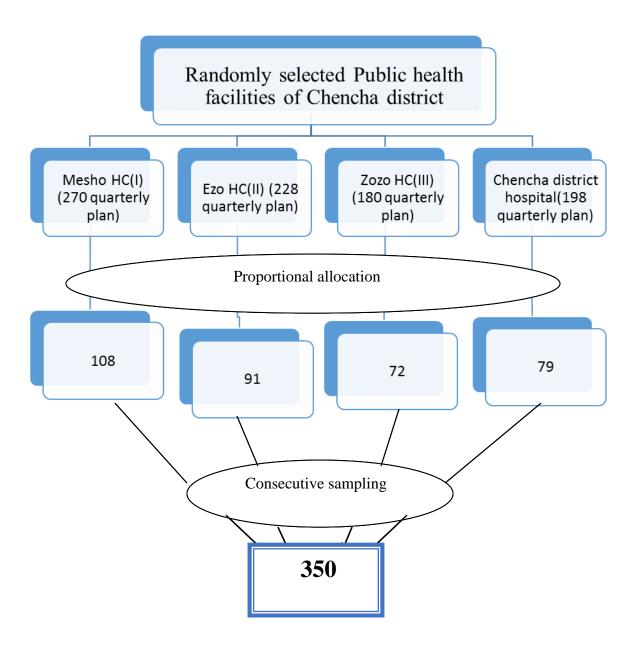


Figure 2 Schematic presentation of sampling procedure.

#### ❖ For the qualitative method:-

Two care providers who were served at least six months in the ANC clinic were selected for in-depth interview and one focal person or head of the health facility were included from each health facility to conduct resource inventory.

## 4.7. Study variables

### 4.7.1. Dependent variable

Client satisfaction

#### 4.7.2. Independent variables

The socio demographic variables: residence, age, religion, ethnicity, marital status, educational status, occupation and income level per month.

The obstetrical variables:- gravidity, parity, history of abortion planning status of pregnancy, number of visits in the current pregnancy, week or month of first visit in the current pregnancy, reason to start follow up by the time, gestational age.

The interpersonal variables: - confidentiality, privacy during consultation &/or physical examination, respect, time spent with care provider, initiation to ask question by care providers.(Accessibility in terms of distance and service fee) and waiting time after arrived,

The technical aspect assess:-explanation made before & after Physical examination, counseling on on danger sign, birth preparedness and complication redness plan, when to go health facility for delivery, PMTCT, nutrition, breast feeding, family planning, vaccination, rest, STD and HIV/AIDS, tests done for hemoglobin, hematocrit, HIV, VDRL for syphilis, Rh-factor, urine test, stool examination, drugs taken:-TT vaccine, iron/folic acid, mebendaazole/albendazole, measurements done:-BP, weight, fundal height, fetal heart beat.

The resource inventory checklist contains:-logistic supplies, presence of waiting space, consultation room, availability of water supply, examination table, weighing machine, measuring instruments, FANC card, sanitation facilities, laboratory facilities, logbook and FANC guidelines.

The provider perspective assess: - training, technical support and supervision taken and barriers for the provision of good quality of ANC service.

The performance observation checklist assess:-Introduction and history taking, tests and treatments, procedures and counseling.

#### 4.8 Data collection tools and process

#### 4.8.1 Measurements

Semi-structured questionnaires designed to enable collection of information on client's perspectives, interview guide for provider's perceived barriers to quality ANC provision, and performance observation and resource inventory checklist were used in data collection (standardized tool developed by Maternal and Child Health Integrated Program (MCHIP) were used for provider perspective, resource inventory and ANC performance observation)(31). Whereas, the client exit interview instrument for this study was developed from elements that were applied in other related studies and contextualized (20-24, 32, 33).

The instrument used to assess Client satisfaction; is adapted from study conducted in Bahr dar special zone having internal reliability value of 0.845 (20).

The client satisfaction part assess:-polite or friendly greeting of the care provider, waiting time, adequacy of waiting area and seats, providers understandability, cost incurred for the service, privacy during consultation, provider's performance cleanliness and sanitation, presence of latrine and adequate water supply in the clinic for clients, getting of quality service that they want, getting of full information that they expect, clients interest to continue the rest ANC visit in that health facility and recommendation to their relatives.

### 4.8.2 Data collection process

Data on the types of services ANC attendees received was collected through interviews and FANC card review. Client exit interview was made to assess the provision of key elements of ANC service. Clients were interviewed at exit outside the service room far away from employees and the data collectors were non-staff personnel to prevent information contamination/bias.

Two ANC providers were included in each health facility to assess current training status, supervision made and providers' perceived barriers by using interview guide and simple

observation were made by using Performance evaluation observation check-list on 38 first visit ANC mothers.

Data on availability of resource were collected by conducting resource inventory in each of the study health facilities. An inventory checklist was used to see supply of required resources for the provision of comprehensive ANC services.

To conduct observation, supervisors who are not included in the study were observed the provider client-interaction, history taking, procedures performed and services provided before the exit interview and after oral consent were obtained from both the provider and the client.

#### 4.9. Data collectors and supervisors

Data collectors were 4 diploma nurse graduates who are fluent speakers of the local language and Amharic as well, two (public health officers) supervisors were recruited. Training was given for two days on the objective of the study, data collection tools, method of data collection, interview techniques and procedures for data collectors and supervisors.

### 4.10. Data processing and analysis

Following the data collection, data were coded, cleaned and entered using EPI data version 3.1statistical software and exported to SPSS window version 20 statistical packages. Descriptive statistics were computed to determine the extent to which recommended components of ANC services were provided. In the descriptive statistic, simple frequencies, proportion and mean were calculated and the results of the analysis were presented in tables and graphs as appropriate.

Binary logistic regression was carried out to assess the association of different independent variables. Independent variables having P<0.25 on the bivariate analysis were considered as candidates for the multiple logistic regression analysis

Multiple logistic regression analysis was carried out to identify factors having statistically significant associations with client satisfaction by controlling for the confounding variables.

Qualitative data were reviewed and analyzed thematically as appropriate.

## 4.11. Operational definition

1. Client satisfaction of ANC: - were measured using 12 item questions related to Satisfaction each having five point Likert scale from strongly disagree (1) to strongly agree (5). To see the total score of each respondent, the points obtained from the 12 items by each respondent were

computed. A respondent have a minimum of 12 and a maximum of 60 points on ANC satisfaction score. Clients were rated as satisfied if they score more than or equal to the average; otherwise they were considered as not satisfied

- 2. Necessary and enough man power: is the availability of minimum requirement supply of persons available and fitted for service based on the standard
- 3. Necessary equipments for ANC: is the presence of at least examination coach, Stethoscope, Sphygmomanometer, Weighing scale , Fetoscope, FANC card and loge book
- 4. Drug supply for ANC: is the availability of iron, combined dose of TDF +3TC + EFV/ AZT +3TC +EFV, folic acid and TT vaccine.
- 5. Periodic supervision: is when supervision is conducted at least two times within a year
- 6. Update of health professionals: At least one, in-service training is given to care provider on subjects related to ANC within two years.
- 7. Quality of antenatal care:-when clients get satisfied, if the healthcare facility has necessary resources, drug supply and update of health professionals to conduct ANC.
- 8. Accessible:-when a pregnant women access health facility within two hours walking distance
- 9. Resource:-both human and material resource that are necessary to provide comprehensive and quality ANC services
- 10. Basic diagnostic facilities for health centers:-If health facilities equipped with diagnostic laboratory for ANC (HCG test kit, Syphilis test, Urine analysis test, HIV test kit, Haemoglobinometer, Albuminstix and Blood group & Rh factor test and vital sign equipment's).
- 11. Basic diagnostic facilities for primary hospitals:-If health facilities equipped with diagnostic laboratory for ANC (HCG test kit, Syphilis test, Urine analysis test, HIV test kit, Haemoglobinometer, Albuminstix, Blood group & Rh factor test, ultrasound and vital sign equipment's).

## 4.12. Data quality assurance

The questions were prepared in English and translated into Amharic and back translated to English to check consistency. The questionnaire was pre-tested on Dorze health center in 5% of the sample before the actual data collection to ensure the appropriateness of the content with regard to the questions, language, and coherence.

The quality of data were insured by proper categorization and coding of questionnaire, observation checklist, and each computed questionnaire and checklist were reviewed and checked for completeness and credibility and transferability of qualitative data were ensured.

#### **4.13. Ethical considerations**

The proposal was approved by ethical review committee of Jimma University college of health science before the start of the study. Letter of permission was obtained from Chencha district health department and from the respective health facilities. All the study participants were informed about the purpose of the study and finally verbal consent were obtained before interview or observation. The respondents had the right to refuse participation or terminate their involvement at any point during the interview.

#### 4.14. Dissemination of finding

The result of this study will be presented to Jimma University collage of health science, department of population and family health, will be disseminated to Chencha district health department, for NGO projects that seek to improve maternal health in the area and efforts will be made to publish in journal.

### **CHAPTER FIVE**

#### **5 RESULTS**

## **5.1 Socio-Demographic Characteristics**

All the sampled 350 clients were responded to the questions. This stands at hundred percent response rates.

The mean age of respondents were 27.92 years (SD  $\pm 5.031$ ) and range of 18-42 years of age. Sixty five point five percent of the women participated in the study were found between 25-34 years of age. The study revealed that 96.3 % of them were married.

It was found that 279(79.7%) of the respondents were from rural and only 71(20.3%) were from urban area. Of the total respondents 96.3% of respondents were from Gamo ethnic group and around 59.7% of the sampled women were followers of Orthodox religion and 141 of the respondents (40.3%) were protestant.

One hundred and thirty nine respondents (39.7%) had no formal education and only 38(10.9%) of respondents had tertiary education. Regarding occupation, more than half of the respondents (58.6%) were housewives as shown in Table 1.

**Table 1** Number and percent distributions of socio-demographic characteristics of respondents in Chencha district, Gamo gofa zone, southern Ethiopia from March – April 2016.

Socio-Demographic variable	Frequency (n=350)	Percent
Age group		
below 19	14	4.0
20-24	60	17.1
25-29	142	40.6
30-34	87	24.9
above 35	47	13.4
Residence		
Urban	71	20.3
Rural	279	79.7
Marital status		
Married	337	96.3
Single	13	3.7
Educational status		
No formal education	139	39.7
Primary education	85	24.3
Secondary education	88	25.1
More than secondary education	38	10.9
Religion		
Orthodox	209	59.7
Protestant	141	40.3
Ethnicity		
Gamo	337	96.3
Others	13	3.7
Occupation		
House wife	205	58.6
Merchant	83	23.7
Government employee	34	9.7
Private employee	15	4.3
Farmer	10	2.85
Student	3	0.85
Monthly income		
<1242 ETB	250	71
≥ 1242 ETB	100	29

## **5.2** Obstetric characteristics of respondents

Mothers were assessed on their current and previous pregnancy status, and this study found that 79.3% of them were Multi-gravida, Two hundred thirty (65.7%) of mothers had at third trimester or above twenty eight weeks but, only 138(39.4%) were came the health facility for third and above visit (Table 2).

Table 2 Number and percent distributions of obstetric characteristics of respondents in Chencha district, Gamo gofa zone, southern Ethiopia from March – April 2016.

Obstetric characteristics	Frequency(n=350)	Percent
Number of pregnancy		
Primi gravid	73	20.7
Multi gravid	279	79.3
Parity		
Second or less	91	25.9
More than two	261	74.1
Number of visit		
First and second visit	212	60.6
Third visit and above	138	39.4
Gestational age		
First or Second trimester	120	34.3
Third trimester	230	65.7

Obstetric characteristics	Frequency(n=350)	Percent
Gestational age at first visit		
First trimester	39	11.1
Second trimester	262	74.9
Third trimester	49	14.0
Reason to start ANC		
TT vaccine	54	15.4
ANC checkup	219	62.6
Pregnancy test	27	7.7
Medical case	50	14.3
History of abortion		
Yes	58	16.6
No	292	83.4
Pregnancy status		
Planned	282	80.6
Not planned	68	19.4

## 5.3 Availability of resource and structural attributes

The availability of basic materials for ANC service was assessed. Regarding necessary equipments for ANC all service delivery points were equipped with weight scale, fetoscope, measuring tape, cold chain box, safety box, clean and surgical glove, FANC card, registration logbook and alcohol. But only the primary hospital and health center(HC)II have BP apparatus specifically used in the ANC unit. The other health facilities were use BP apparatus in common with different units. None of the health facilities had working ANC guidelines and thermometer. This finding is also supplemented with the providers' perspective in which providers mentioned absence of national ANC clinical management guideline as one of the barrier for the provision of good quality service.

Drug supply for ANC:-Iron folic acid tablet is found in all health facilities and given to the clients free of fee in all HCs but in the primary hospital client are expected to pay 35 birr to take iron tablet. TT vaccine is also available in all health facilities and provided in the working days from Monday to Friday. Except HC I all others provide PMTCT and they all have TDF +3TC+ EFV at hand. But HC I refer mothers to the hospital.

Regarding laboratory facilities even though there was scarcity, VDRL testing reagent and albuminstix are only found in the primary Hospital and HC II, except the primary hospital none of the HCs have haemoglobinometer. Pregnancy test, blood group and Rh factor and HIV test were done in all health facilities and except in HC III all others screen urine for infection.

Regarding the availability of latrines and water supply except the primary hospital and HC I, there were no water supply in the other health facilities. Except HC III other health facilities have toilet around the MCH unit. It has also been investigated that the privacy of counseling rooms was not respected in all HC because ANC, EPI and postnatal service were provided in the same room. Only the primary hospital has protected waiting space with enough sits.

Except the hospital none of the HCs were fulfill minimum requirement of the standard. This might be due to shortage of health professionals specially midwifes and also in rural area, due to the availability of health extension workers in the health posts to manage mild cases.

## 5.4 Process attribute of interpersonal aspect in ANC service

Two hundred ninety six (84.6%) of mothers were agree that care providers treat them respectfully. This finding is also supplemented by ANC session observation. Regarding privacy during physical examination and/or consultation 131(37.4%) of mothers claimed that the door was open. This was again supplemented by the qualitative component as only the primary hospital had private ANC rooms while the remaining facilities had multi- purpose rooms on resource inventory (Table3).

Table 3 Number and percent distributions of process attribute of interpersonal aspect in ANC services of Chencha district, Gamo gofa zone, southern Ethiopia from March – April 2016.

Characteristics	Frequency	Percent
Presence of confidentiality		
Yes	243	69.4
No	107	30.6
privacy during consultation and/or		
Yes	219	62.6
No	131	37.4
Respect by health care provider		
Yes	296	84.6
No	54	15.4
Provider initiation to ask question		
Yes	216	61.7
No	134	38.3
Consultation time		
<20 minute	306	87.4
>=20 minute	44	12.6

## 5. 5 Process attribute of technical aspects in ANC service

Two hundred twenty eighty (65.1%) respondents were not counseled on danger signs of pregnancy. Out of counseled mothers 105 mothers mention vaginal bleeding, 68 mothers mention severe headache, 40 mothers mention offensive vaginal discharge, 26 mothers mention blurred vision, 21 mothers mention leg and facial edema, four mothers mention decreased fetal movement and 4 mothers mention fever as danger signs of pregnancy. Out of counseled mothers 39 mothers mention two and 50 mothers mentioned more than two danger signs of pregnancy.

Regarding counseling on Birth preparedness and complication redness plan(BP/CR) only 61(17.4%) of them were counseled on BP/CR plan. Out of 17.4% of counseled respondents, 59 mothers mention place of delivery, 7 mothers mention many, 5 mothers mention transport, 4 mothers mention selecting health care professional, 3 mothers mention blood donor and 2 mothers mention cloths for the baby as BP/CR plan. This finding is also supplemented with only 3 mothers were advised to arrange delivery place & emergency transportation and none of the 38 observation were advised on items to have on hand at home for emergencies at the time of observation.

One hundred ten (31.4%) of the study subjects were counseled on nutrition and only 88(25.1%) of them were counseled on prevention of mother to child transmission of HIV virus. This finding is also supplemented with the ANC service performance observation in which out of 35 observations only 6 mothers were counseled on PMTCT (Figure 3).

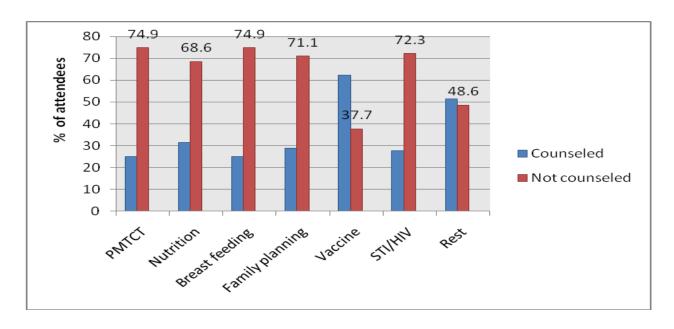


Figure 3: Percentage distribution of mothers not counseled on different maternal and child health related issues in ANC services of Chencha district, Gamo gofa zone, southern Ethiopia from March - April 2016.

Regarding different services in which pregnant mothers were expected to take, TT vaccine were given to 293(83.7%) mothers, Iron/folic acid were give or prescribed for 308(88%) of mothers and only 5.7% of mothers were taken deworming medication and only 49.4% of respondents were checked for pallor.

Base line laboratory investigations and procedures performed for mothers attending ANC service were displayed below (Fig.3 and Table 4).

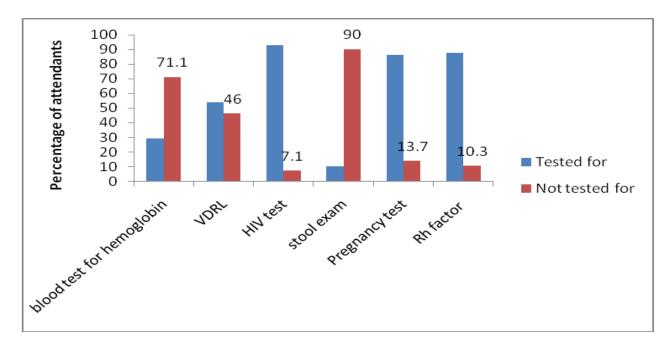


Figure 4: Percentage distributions of baseline laboratory investigations done for mothers attending ANC service in Chencha district, Gamo gofa zone, southern Ethiopia from March – April 2016. (Reviewed from FANC card)

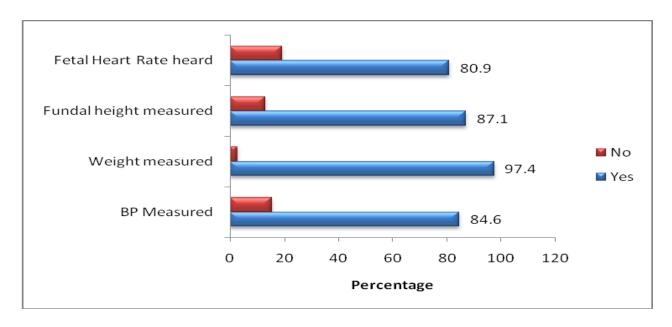


Figure 5 Percentage distributions of procedures performed for ANC attendants in public health facilities of Chencha district, Gamo gofa zone, southern Ethiopia from March – April 2016.

#### **5.6 Client satisfaction**

The mean score for client satisfaction on the ANC services received was 64.8. In overall, 184(52.6%), (with 95%CI=47.4-58) of the respondents were satisfied or scored equal to or more than the mean satisfaction score and the rest 47.4% were dissatisfied with the ANC services provided and scored less than the mean satisfaction score. Internal reliability value of items was 0.752.

Table4 Component wise client satisfaction on ANC service in public health facilities of Chencha district, Gamo gofa zone, southern Ethiopia from March-April 2016.

Characteristics	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
Provider's greeting	2(.6)	142(40.6)	2(.6)	178(50.9)	26(7.4)
Waiting time	4(1.1)	129(36.9)	7(2.0)	196(56.0)	14(4.0)
Waiting area with sits	1(.3)	163(46.6)	44(12.6)	129(36.9)	13(3.7)
Provider's Understandability	4(1.1)	149(42.6)	6(1.7)	176(50.3)	15(4.3)
Service fee	5(1.4)	7(2)	11(3.1)	203(57.7)	124(58)
privacy during consultation	3(0.9)	26(7.4)	239(68.3)	68(19.4)	14(4)
Cleanliness of procedures	4(1.1)	32(9.1)	237(67.7)	66(18.9)	11(3.1)
Clean latrine & water supply	35(10)	97(27.7)	158(45.1)	58(16.6)	2(0.6)
Get Quality service	5(1.4)	115(32.9)	136(38.9)	91(26.0)	3(0.9)
Get full information about ANC	7(2)	102(29.1)	182(52)	58(16.6)	1(0.3)
Client wants to continue	2(0.6)	21(6)	53(15.1)	266(76)	8(2.3)
Recommend for others	1(0.3)	26(7.4)	120(34.1)	194(55.1)	9(2.6)

#### 5.7 Factors associated with client satisfaction

Both bivariate and multiple logistic regression analysis were made to identify predictors of client satisfaction. The bivariate analysis result revealed that residence, marital status, gravidity, parity, history of abortion, planning state of pregnancy, privacy, respect by care provider, provider initiation to ask question, counseling on danger sign, counseling on birth preparedness and complication redness plan and distance were significantly associated with ANC services satisfaction. The above mentioned were again entered in to multiple logistic regression model to control for confounding.

The variables with p-value less than 0.05 in multiple logistic regression analysis were taken as significant predictors of satisfaction and the rest were refuted. Variables which significantly associated with client satisfaction of ANC services include:- Residence, mothers with two or less deliveries, mothers with unplanned pregnancy, mothers whose privacy were kept and mothers who were counseled on birth preparedness and complication redness plan. The likelihood of satisfaction from service were 2.185 times more likely in urban mothers than rural (AOR= 2.185; 95% CI; (1.192, 4.006) mothers. The likelihood of satisfaction from the service were 2.043times higher (AOR = 2.043; 95% CI; (1.163,3.587) among mothers with two or less deliveries than that of mothers with more deliveries, mothers with unplanned pregnancy were 0.522times less likely to satisfy than that of planned mothers (AOR= 0.522; 95%CI (0.286,0.953), The likelihood of satisfaction from the service in mothers whose privacy were kept was 5.615times higher than that of mothers whose privacy were not kept (AOR =5.615; 95% CI (3.371,9.355) and mothers who were counseled on birth preparedness and complication redness plan were 2.191times higher than that of not counseled mothers (AOR =2.191: 95% CI: (1.118, 4.293). However, the crude association found between marital status, number of pregnancy she had, history of abortion, respect, provider initiation to ask question, counseling on danger sign and distance from their home to health facility with client satisfaction in ANC service provided were refuted after adjusting for the above variables (Table 5).

Table 5 Multiple logistic regression model variables and predictors of client satisfaction among ANC attendants of, Chencha district, Gamo gofa zone, southern Ethiopia from March - April 2016.

Characteristics	Client satisfaction		Crude	AOR (95%CI)
			OR (95%CI)	
	Satisfied Number (%)	Not satisfied		
	rumoer (70)	Number(%)		
Residence				
Urban	47 (66.2%)	24(33.8%)	2.030(1.177,3.500)	2.185(1.192,4.006)
Rural	137(49.1%)	142(50.9%)	1.00	1.00
Marital status				
Single	2(18.2%)	9(81.8%)	0.192(0.041,0.900)	0.619(.117,3.281)
Married	182(53.7%)	157(46.3%)	1.00	1.00
Number of pregnancy				
Primi gravid	48(65.8%)	25(34.2%)	1.991(1.163,3.408)	0.516 (0.134,1.987)
Multi gravid	136(49.1%)	141(50.9%)	1.00	1.00
Parity				
Second or less	58(63.7%)	33(36.3%)	1.855(1.134,3.034)	2.043 (1.163,3.587)
More than two	126(48.6%)	133(51.4%)	1.00	1.00
History of abortion				
History of abortion	161(55.1%)	131(44.9%)	1.870(1.053,3.322)	1.468(0.769,2.803)
No history of abortion	23(39.7%)	35(60.3%)	1.00	1.00
Pregnancy status				
Planned	156(55.3%)	126(44.7%)	1,00	1.00
Not planned	28(41.2%)	40(58.8%)	0.565(0.330,0.967)	1.00 0.522(0.286,0.953)

Characteristics	Client satisfaction		Crude	AOR (95%CI)
			OR (95%CI)	
	Satisfied	Not satisfied		
	Number (%)	Number (%)		
Privacy				
Yes	148(67.9%)	70(32.1%)	5.638(3.499,9.085)	5.615 (3.371,9.355)
No	36(27.3%)	96(72.7%)	1.00	1.00
Respect by health care provider				
Yes	165(55.7%)	131(44.3%)	2.320(1.269,4.244)	1.820(0.921,3.597)
No	19(35.2%)	35(64.8%)	1.00	1.00
Provider initiation to ask question				
Not at all	100(46.3%)	116(53.7%)	1.00	1.00
Some times	84(62.7%)	50(37.3%)	1.949(1.254,3.028)	.741 (0.443,1.238)
Counseled on danger sign				
Yes	76(62.3%)	46(37.7%)	1.836(1.172,2.876)	1.175(0.641,2.152)
No	108(47.4%)	120(52.6%)	1.00	1.00
Counseled on BP/CR plan				
Yes	45(73.8%)	16(26.2%)	3.035(1.640,5.616)	2.191(1.118,4.293)
No	139(48.1%)	150(51.9%)	1.00	1.00
Distance				
<1 hour walking distance	161(56.3%)	125(43.7%)	2.296(1.310,4.026)	1.780(0.938, 3.377)
1-2 hour walking distance	23(35.9%)	41(64.1%)	1.00	1.00

# 5.8 Observation findings of antenatal care service provision

Simple observation was made on ANC service provision of the study health facilities. During observation 85.7% of the clients were treated respectfully in the beginning and at the end of the examination, Blood pressure was measured for 88.6% of the clients. About 97.1% of observed mothers were assessed for the pregnancy and fetal condition and 71.4 % of the clients were informed about the progress of pregnancy.

Only 20% of mothers were counseled on nutrition and healthy eating during pregnancy and 6 mothers (17.1%) were counseled on HIV/PMTCT. Twenty mothers take TT injection and 23 mothers were prescribed to buy and taken Iron/folic acid tablet. About 42.9% of mothers were asked about the problems they were concerned for.

Finally, clients' card were revised and recorded in the beginning and at the end of each care for 28(80%) of the cases. Findings on services provided and procedures performed were displayed as shown in the figure below.

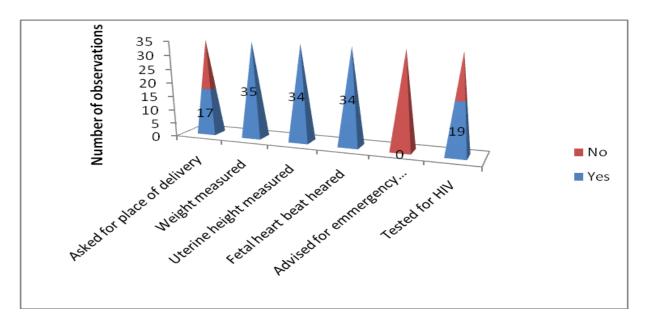


Figure 6: Observation findings of services provided and procedures performed in public health facilities of Chencha district, Gamo gofa zone, southern Ethiopia, 2016.

# 5.9 Findings of provider perspective on quality of ANC service

Regarding supervision, health care providers from two health facilities mentioned that they were supervised within the past three months but the other health care providers from two HCs reported that they were supervised before one year. All of them reported that there was no internal supervision other than periodic meeting, Even though we are not regularly supervised, during the external supervision they check records and reports that we have done, gave constrictive verbal feedback about how we were doing our job and discuss problems that we were encountered in ANC service provision. However they didn't provide written comment about how we were doing our job.

Among the various things related to their working situation service providers mentioned that:-ANC specific training and onsite orientation, drugs and material supply, incentive, laboratory reagents, budget for preparing mothers forum, strong management, examination table, motivation and absence of ANC clinical management guideline as the major barriers that can prevent the provision of good quality of ANC services.

# **CHAPTER SIX**

#### **6 Discussions**

In this study, 52.6% of respondents were satisfied with the service provided. The study revealed that residence, planning status of pregnancy, privacy, parity and counseling on birth preparedness and complication redness plan were the predictors of client satisfaction. The qualitative part showed that, care providers didn't have regular supervision, updates on ANC, budget for preparing mother's forum, and incentive. Although health centers have basic medical equipments, all of the health institutions have no guidelines, different laboratory reagents, and most of them did not have waiting area with shade, and private room to carryout ANC service

#### **6.1.1 Structural Aspects**

Structural aspect of this study focused on availability of resources. Based on this assessment, all of the health facilities in the study area have necessary equipment for ANC service provision but only the primary hospital and health center II have BP apparatus specifically used in the ANC unit and none of them had thermometer. This finding is in line with study conducted in Bahr dar(20). This might be due to lack of logistic supplies or difficulty of maintaining. This would make the identification of pregnant women with pregnancy induced hypertension un-likely for subsequent follow up and management.

None of the health facilities have working ANC guidelines. This finding is also supplemented with the providers' perspective in which the providers mention absence of guideline as one of the barrier to provide good quality of care. The finding is similar with study conducted in Addis Ababa(26). This might be due to absence of clinical management guide line at a national level so that as the care providers differ the content in which clients were taken was different and also full package of the service were not provided for all of the clients.

The health centers were lacked important laboratory tests such as VDRL, hemoglobin, and urine protein. This finding is also similar with study conducted in North Gonder (19), This might be due to inadequate logistic supply and also absence of emphasis on base line investigations of pregnant mothers. The absence of such tests has a clear effect on the diagnosis of syphilis, anemia and pre-eclamtic mothers of antenatal care services.

It has also been investigated that the privacy of counseling rooms was not respected in all health centers because ANC, EPI and postnatal services were provided in the same room. Only the primary hospital has protected waiting space with enough sits. This finding is also similar with study conducted in Bahr dar(20).

#### **6.1.2** Client satisfaction

According to this study it was found out that overall client satisfaction of antenatal care service in the study population were 184(52.6%). This study is consistent with study conducted in Bahr dar but lower than other studies conducted in Jimma, Addis Ababa, Ethiopia and Ambo and higher than study conducted in Bursa District, Sidama zone. The difference might be due to subjective nature of the subject matter; because measure of satisfaction needs standardized scales and tools for accurate measurement but most of the literatures measure satisfaction by using simple yes/no response category so that the clients will bias to incline towards yes. This might increase the percentage of satisfaction in other studies (20, 21, 25-27).

#### **6.1.3 Factors affecting client satisfaction**

This study revealed that the likelihood of satisfaction from the service in mothers whose privacy were kept during consultation or physical examination were higher from their counterparts; it is also supported with qualitative finding of the study in which all of the study health centers have multipurpose room. This finding is in line with study conducted in Tanzania and Bahr dar.(20, 34).

The likelihood of client satisfaction from the ANC service rendered was more likely in urban mothers than that of rural mothers. This might be due to Urban women are more than twice as likely as rural women to receive ANC from a skilled provider than rural mothers according to Ethiopian min demographic and health survey(8).

The chance of satisfaction on antenatal care service rendered was lower to a statistically significant level among women who had unplanned pregnancy. This might be because of women who had unplanned pregnancy might be too sensitive in terms of privacy and confidentiality due to possible stigma if the pregnancy is out of the wedlock. And also women who had unplanned pregnancy experience greater relationship instability than women whose pregnancies were intended. This agrees with findings of a study conducted at Bursa District, Sidama zone and Jimma(25, 27)

This study also revealed that the likelihood of satisfaction in ANC service provided was higher in mothers who were counseled on birth preparedness and complication redness plan than that of mothers who were not counseled. This might be because the outcome of pregnancy until the actual birth of the baby is unpredictable, provision of adequate information for pregnant mothers specially preparing mothers for the coming new event and making them ready for the unpredictable situations can play a great role in client satisfaction.

The study revealed that parity is one of the predictor of client satisfaction. This might be due to the reason that mother who had few number of deliveries were more likely to satisfy than that of mothers with more deliveries.

# **6.1.4 Providers perspective**

This study revealed from providers' side that, insufficient training specifically on antenatal care service, lack of regular supervision either by internal or external supervisor, and drug and material supply, incentive, funds to prepare mothers forum, guidelines, examination table laboratory reagents and strong management were mentioned as barriers that can prevent provision of good quality services. This finding is similar with study conducted in Addis Ababa in which insufficient pre-service and in-service training in obstetric emergencies, and lack of supportive supervision were mentioned as barriers to the provision of timely, quality emergency obstetric care(28).

# **Limitation of the Study**

The results of this study might be biased as the respondents affected by social desirability bias to respond or tell the existing realty about their care provider and also assessment of health care providers through observation while they do antenatal care creates a type of reactivity in which individuals modify or improve an aspect of their behavior in response to their awareness of being observed.

#### **CHAPTER SEVEN**

#### 7 Conclusions

This study identifies several shortfalls of antenatal care service provision from different dimensions. The following are the major shortfalls revealed:-

- ❖ Shortage of laboratory reagents especially VDRL, hemoglobin and Urine test for protein.
- ❖ All health facilities were delivering services without guideline.
- Low clients satisfaction as compared to others studies
- ❖ Lack of Provision of adequate information for pregnant mothers especially not preparing mothers for the coming new event and preventing delay after a problem happens.
- ❖ Lack of keeping mother's privacy during consultation and physical examination,
- ❖ Lack of training and refreshment courses were registered at all health facilities
- \* Regular supervision is inadequate along with the absence of feedback system. After all the overall quality of ANC service in Chencha District is low.

#### **CHAPTER EIGHT**

#### **8 Recommendations**

Based on the result the following recommendations are made to improve ANC services of public health facilities in Chencha district.

# To federal ministry of health

• The Ministry of Health has to prepare ANC service clinical management guide line.

# To SNNP republic health bureau

 Strengthened regular and supportive supervision should be performed according to its plan at all hierarchy with feedback.

# To Gamo gofa zone health office

Basic training and refreshment courses should be given for all service providers.

#### To District health office

- The district health office should consistently provide adequate supplies, equipment for providing ANC service to promote quality ANC
- There should be regular supportive supervision and monitoring of service providers activity.

#### To health facilities

- The reproductive health unit should come up with a standard tool comprising of all important information to be taught at antenatal clinic so that all important information is not missed out at the ANC service.
- Provision of adequate information and counseling for mothers on risk factors. Specially
  preparing mothers for the coming new event and making them ready for the
  unpredictable situations and also preventing delay in obtaining treatment if a problem
  arises.

#### To researchers

 The effect of capacity building and regular supervision for health care providers on increasing quality of service.

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#### **ANNEXES**

#### Questionnaires

#### PART I: CLIENT EXIT ENTERVIEW QUESTIONNAIRE

Questionnaire to assess quality of antenatal care service in public health facilities of, chencha district, gammo gofa zone, southern Ethiopia, 2016.

Questionnaire No.:	Date:	Time of start
Name of interviewer and signatu	ıre:ANC o	eard number

#### **INSTRUCTIONS**

- (a) Explain the purpose of the interview to the mother,
- (b) Ask for consent before proceeding with the interview
- (c) Make sure all questions are answered
- (d) Circle choice of the answer as appropriate.

This is a study to be conducted with the objectives of, to assess Quality of ANC service in the health facilities of Chencha District. And you are one of the women who are selected to participate in this study, therefore you are kindly requested to participate in this study and provide the information required from you. Your Participation in this study is completely on voluntary basis and you have the right to refuse from Participating at any time.

I will like to inform you that the responses that you provide will be kept confidential.

# CLIENT EXIT INTERVIEW ON QUALITY OF ANTENATAL CARE

Part one:-Socio demographic character of the client
1.1 Residence 1. Urban 2. Rural
1.2 Age of Client in year
1.3 Religion
1.4 Ethnicity
1.5 Marital Status
1.6 Educational Statues
1.7 Occupation
1.8 Income level per month:birr
Part two: Obstetrical history
2.1 Number of Pregnancy:
2.2. Is the pregnancy planned? 1. Yes 2. No
2.3. Gravida 1. Para 2. Abortion
2.4 How many visits do you have in this pregnancy? 1.First 2.Second 3.Third 4 Fourth and above
2.5. Gestational age in completed weeks
2.6. When was your first visit? In weeks/Months of pregnancy/
2.7 Why did you start at this time?
1. TT immunizations 2. ANC check up 3. Pregnancy test 4. Other medical cases
Part three: Interpersonal aspect
3.1 Do you think the discussion b/n the health care provider and you were confidential?
1. Yes 2. No 3. I am not sure
3.2 Did the health care provider treat you respectfully? 1.Yes 2.No
3.3 How much time did you spent to reach this health center/hospitalin hour?
3.4 After you arrived in the health facility how much time did you spent to get the health care
provider?
Waiting time in hoursmin

3.5 How much time d	id you spent with	care provider o	during consultation?	In minutes	
3.6 What did you say about the time that you spent?					
1-Very long	_	2-Short	3-Appro	priate	
3.7 Is there any time that you return back to your home without having check up?					
1.Yes	2	.No			
3.8. If, yes explain the	reason				
3.9. How often did the	health care provi	ders initiate yo	u to ask question?		
1. Not at all	2. Some times	3. Usually	4. Other specify		
Part four : Technical					
4.1 Does the health ca	re provider perfor	m general exar	nination in this visit?		
1.Yes	2.1	No			
4.2 If yes, for 4.1 of	does the healthca	are provider e	xplain about the ex	amination before the	
procedure?					
1.Yes	2.1	No			
4.3 After performing	the examination,	did the health	care provider expla	in about the result of	
examination?					
1.Yes	2.1	NO			
4.4 During your follo	ow up did the he	ealth profession	nals counseled on th	e following points in	
satisfactory way?					
1- Danger signs of pre	gnancy	1.Y	es 2	2.No	
1.1 If yes for Q4.4-1 n	nention the signs_				
				-	
2- Birth preparedness	•	•		2.No	
2.1 If yes for Q4.4-2 n	nention the points	<u> </u>			
				<u></u>	
3- When to go to health facilities for delivery 1.Yes					
2.No					
3.1 If yes for Q4.4-3 mention					

4- PMTCT	1.7	Yes	2.No		
4.5 Today or previously, did you re	eceive counseling or	1			
1- Nutrition 2- Breast fee	eding 3- FP	4-ITN use	5-Vaccination	l	
6- STD and HIV/AIDS 7. res	t				
Ask the women and encourage to s	speak				
4.6 Which one of the following tes	sts has been done in	your today	's or previous fo	ollow up?(	(review
from FANC card).					
4.9.1-Blood test for Hgb/Hct					
4.9.2-HIV					
4.9.3-VDRL for syphilis					
4.9.4-Rh factor					
4.9.5-Urin test for pregnancy					
4.9.6-Stool examination	•				
4.7. Which one of the following d	rugs have you taker	n in your f	ollow up?(obser	ve drugs t	aken if
any)					
1-TT vaccine					
2-Iron/ Folic acid					
3-mebendazole/Albendazole					
4.11 Which one of the following m	neasurements has be	en done in	your follow up?	<b>?</b>	
1.BP					
2.Weight					
3.Fundal height with tape or fing	ger measurement				
4.Fetal heart rate					
5. pallor					
4.12 Did the health care provide	der keep your pri	vacy durir	g consultation	and/or p	hysical
examination? 1.Yes	2.No				
4.13 How much did you pay for the $ m c$	are that you receive?				
4.14 Did the care provider told you	the next date of ap	pointment	?		
Part five: Client satisfaction	on the care	Strongly	Dis Uncer	Agre S	Strongl

pr	ovided	disagree	agree	tain	e	y agree
1	Provider's greeting was good and in a friendly					
	way(polite)					
2	Waiting time was fair					
3	Waiting area was adequate & with seats					
4	The provider was easy to understand					
5	The cost incurred for the service was fair					
6	privacy during consultation was maintained					
7	Provider perform the procedure with cleanliness					
	and sanitation					
8	The antenatal clinic has clean latrine & adequate					
	water supply					
9	You get quality service that you wanted					
1	You feel that today you received full information					
0	about ANC					
1	You want to continue the rest ANC visits in this					
1	health facility.					
1	you recommend your relatives &others to attend					
2	their ANC visit in this facility					
RE	EMEMBER TO THANK CLIENT FOR THEIR PA	RTICIPA	TION IN	THE S	TUDY	<i>T</i>

# Amharic version of client exit interview

	<u> </u>
የመጠይቁ ተራ ቁጥር/ልዩ መለያ	ቀን
ቃለ መጥይቁ የተጀመረበት ሰዓት	-የጠያቂዉ ስም እና ፊርማ
የቅድመ ወሊድ ካርድ ቁፕር	
<i>መ</i> መርያዎች	
1. የመጠይቁን አላማ ለተንል <i>ጋ</i> ዩ <b>ባ</b> ለጪ	

- 2. መጠይቁን ከመጀመርሽ በፊት የተገልጋዩን ፈቃደኝነት ጠይቂ
- 3. ሁሉም ተያቄዎች መመለሳቸዉን አረጋግጪ
- 4. የተሰጠሸን መልስ አክብቢ

የዚህ ጥናት አላማ በጨንቻ ዎረዳ ዉስጥ በሚገኙ ጤና ተቁዋማት የሚሰጠዉን የቅድመ ወሊድ ክትትል አገልግሎት ጥራት ለማወቅ የሚያስቸሉ መረጃ ለመሰብሰብ ሲሆን ከርስዎ የምናገኘዉ ሃሳብ ትልቅ አስተዋጾ ያለዉ መሆኑን እየገለጽን የሚሰጡን ሃሳብ ሚስጥራዊነቱ የተጠበቀ እንደሆነ እና በጥናቱ ዉስት ያለመሳተፍ መብቶ የተጠበቀ መሆኑን እንገልጻለን፡፡ መልሱን ከአማራጮቹ የእርስዎን ትክክለኛ ሁኔታ የሚገልጸዉን እንዲመልሱልን በትህትና እንጠይቃለን፡፡

በጥናቱ ላይ ለመሳተፍ ፌቃደኛ ነዎት? 1.አዎ 2.አይደለሁም

በፕናቱ ላይ ስለተሳተፉ በቅድሚያ አመስግናለሁ!!!

ክፍል አንድ ፡ጣህበራዊ እና ኢኮኖሚያዊ መረጃዎች

1	1.	የመኖሪያ አካባቢ	1. ከተማ	2. <i>1</i> mC		
2	2.	እድ <i>ሜ</i>				
3	3.	ሐይማኖት 1. ኦርቶዶክስ	2. ፕሮቴስታንት 3	.ካቶሊክ 4. ሌላ		
4	4.	ብሄር				
4	5.	የ <i>ጋ</i> ብቻ ሁኔታ 1.ያ <i>ገ</i> ባች	2. ያላገባቸ 3. የፈታቭ	F 4.ባሉዋ የሞተባት 5.የተለያየች		
(	6.	የትምህርት ደረጃ				
7	7.	የስራ ሁኔታ				
8	8.	የወር ኀቢ				
		ክፍል ሁለት ፡ የጽንስ ሁንታ <i>ወ</i>	Pረጃ			
2.1.	ስንተ	-ኛ እርግዝናዎ ነዉ?				
2.2.	2.2. አቅደዉ ነዉ ያረገዙት? 1. አዉ   2. የለም					
2.3.	2.3. የቀድሞ እርግዝና ዉጤት 1. በህይወት ያሉ2. የሞቱ3. ዉርጃ					
2.4.	ስንተ	·ኛ ክትትልዎ ነዉ? 1. አንደ	ኛ 2. ሁለተኛ 3. ሶስተኛ	4. አራተ እና ከዚያ በለይ		
2.5.	2.5. ካረንዙ ስንተኛ ዎርዎ ነው? (በሳምንት/ በዎራት ግለጪ)					

2.6. የመጀመርያ ክትትል ያደረጉት በስንተኛ ዎርዎ ነዉ? በሳምንት/	በዎራት
2.7. ለምን ነበር የእርባዝና ክትትል የጀመሩት? 1. የ መንጋጋ ቆልፍ ማርገዝ አለማርገዜን ለማረጋገጥ 4. ሌላ	ክትባት ለመዉሰድ 2. የጽንስ ክትትል ለማድረባ 3.
ክፍል ሶስት ፡ የጤና ባለሙያዉና የተገልጋይ ግንኙነትን/ንግግር	ርን በተመለከተ
3.1. በእርስዎ እና በጤና ባለሙያዉ/ዋ መካከል የነበረዉ ግንኙነት	ሚስጥራዊነቱ የተጠበቀ ነዉ ብለዉ ያስባሉ?
1. አዉ 2. የለም 3. እርግ	lጠኛ አየደለ <i>ሁ</i> ም
3.2. የጤና ባለሙያዉ/ዋ የሚገባዎትን ክብር እና መስተንገዶ አድርን	ስሎታል/ <i>ጋ</i> ልዎታለች? 1. አዎ 2. የለም
3.3. ከቤትዎ ወደእዚህ ጤና ተቐም ለመድረስ ምን ያህል ጊዜ ይወስ!	ድብዎታል?(በሰዓት/በደቂቃ)
3.4. እዚህ ጤና ተቐም ከደረሱ በኃላ አንልግሎቱን እስከያንኙ ድረስ ነ	ምን ያህል ሰዓት ፌጀብዎ?
3.5. ከጤና ባለሙያዉ/ዋ <i>ጋ</i> ር ምን ያህል ጊዜ ቆዩ?	
3.6. ስላሳለፉት ሰዓት ምን ይላሉ?. 1. በጣም ረጅም ሰዓት ነዉ	2. በጣም አጭር ሰዓትነዉ 3. ተመመጣጣኝ ሰዓት ነዉ
3.7. ወደ ጤና ድርጅቱ ለክትትል መጥተው ህክምና ሳየንኙ የተመለሰ	ትበት አ <i>ጋ</i> ጣሚ አለ? 1. አዎ
3.8. ለተ.ቁ 3.7 መልስዎ አዎ ከሆነ በምን ምክንያት ነበር?	
3.9. ተያቄ እንዲጠይቁ የጤና ባለሙያዎች ምን ያህል ጊዜ ይንፋፍዎ,	ታል? 1. የለም 2. አንድ ኣንኤ 3. ዘዉትር
4. ልሳ ካለ	
3.10. ከጤና ባለሙያው ውጭ ተጨማሪ ሰው ነበረ 1.አዎ 2.የረ	ሳም ካለ ስንት ሰው?
ክፍል አራት ፡ የሙያዊ ሁኔታ መረጃ	
4.1. በዚህ ክትትል የጤና ባለሙያው/ዋ ሙሉ የአካል ምርመራ አድር	ርጎሎታል/ጋልዎታለች? 1. አዎ 2. የለም
4.2. ለተ.ቁ 4.1 መልስዎ አዎ ከሆነ የጤና ባለሙያው/ዋ ስለምርመሪ	ራዉ ቅድመ ገለጻ አድርጎሎታል/ጋልዎታለች? 1. አዎ   2. የለም
4.3. ከምርመራዉ በኃላ የምርመራዉን ዉጤት ገልጾልዎታል/ጻልዎ;	ታለች? 1. አዎ 2. የለም
4.4. በክትትልዎ ግዚያት የጤና ባለሙያው/ዋ ከሚከተሉት መካከል	በሚገባ ገለጻ አድርጎልዎታል/ጋልዎታለች?
1. በእርባዝና ጊዜ ስለሚፈጠር የአደ <i>ጋ</i> ምልክት	1. አዎ 2. የለም
2. ስለዎሊድ ዝባኚት እቅድ	1. አዎ 2. የለም
3. በዎሊድ ጊዜ ሊፈጠሩ ስለሚችሉ አደጋዎች መዘጋጀት	1. አዎ 2. የለም
4. ለዎሊድ ወደ ጤና ተቐም መቾ መሔድ እንዳለብሽ	1. አዎ 2. የለም
5. ኤች አይ ቢ ኤድስ ከእናት ወደጽንሱ እነዳይተላለፍ ስለመከላከል	1. አዎ 2. የለም

4.5. ለተ.ቁ 4.4-1 መልስዎ አዎ ከሆነ ምልክቶቹን ይ	ዘርዝሩ	
4.6. ለተ.ቁ 4.4-2 መልስዎ አዎ ከሆነ ስለዎሊድ ዝግ	ጂት እቀድ ይዘ 	ርዝሩ
4.7. ለተ.ቁ 4.4-3 መልስዎ አዎ ከሆነ ይዘርዝሩ		
4.8. ዛሬ ዎይንም በፊት በሚከተሉት ዙሪያ ምክር አግ	ነኝተዋል?	
1. ስለ አ <i>መጋገ</i> ብ	1. አዎ	2. የለም
2. ስለጡት ማాባት	1. አዎ	2. የለም
3. ስለ  እርግዝና  መከላከያ	1. አዎ	2. የለም
4. ስለአንበር አጠቃቀም	1. አዎ	2. የሰም
5. ስለክትባት	1. አዎ	2. የለም
6. ስለአባላዘር በሽታዎች እና ስለ ኤች አይ ቪ ኤድስ	1. አዎ	2. የለም
7. ስለ  ሪረፍት		
4.9 ዛሬ ዎይንም ከዛሬ በፊት ከሚከተሉት መካከል የ	ትኛዉ ምርመሪ	· ተደር <i>ጎ</i> ልዎታል?(ከካርድ ላይ የሚሞላ)
4.9.1-የደም ማነስ (Hg/HCT)	1. አዎ	2. የለም
4.9.2-የኤቸ አይ ቪ	1. አዎ	2. የለም
4.9.3-የአባላዘር በሽታዎች ምርመራ	1. አዎ	2. የለም .
4.9.4-የሸተላይ ምርመራ	1. አዎ	2. የለም
4.9.5-የሽንት ምር <i>መ</i> ራ	1. አዎ	2. የለም
4.9.6-የሰገራ ምር <i>መ</i> ራ	1.አዎ	2. የለም
4.10. ዛሬ ዎይንም ከዛሬ በፊት ከሚከተሉት መካከሬ	\ የትኛዉን <i>መ</i> ያ	<del>ረ</del> ሕኒት ዎስደዋል?(ከካርድ ላይ የሚሞላ)
1. የመንኃኃ ቆሌፍ ክትባት	1. አዎ	2. የለም
2. አይረን/ፎሴት	1. አዎ	2. የለም
3. ሜቤንዳዞል/አልቤንዳዞል	1. አዎ	2. የለም
4.11. በክትትልዎ ዎቅት ከሚከተሉት ልኬቶች መካ	በል የትኛዉ ተያ	<i>ደረገ</i> ልዎ?
1. የደም ባፊት	1. አዎ	2. የሰም
2. ክብደት	1. አዎ	2. የሰም
3. የጣህጻን ቁመት	1. አዎ	2. የለም

4. የአይን መንጣተ(pallor)	1. አዎ	2.የለም		
5. የህጻት ልብ ምት	1. አዎ	2. የለም		
4.12. በአካላዊ ምርመራ/ በምክር ወቅት ከጣንኛዉም	አካል ሚስጥርዎ	ተጠብቋል?	1. አዎ	2. የለም
4.13. በዚህ ክትትል ወቅት ለተደረገልዎት አጠቃላይ ሀክ	ምና አገልባሎት	ምን ያህል ከሬ	ሉ?	
4.14. ባለሙያዉ መቼ መመለስ እንዳለብዎት የህክምና	<del></del> ቅጠሮ ሰጥቶዎታ	ነል 1. አዎን -	2. F	'ለም
ክፍል አምስት				

ተ.ቁ	የተገል <i>ጋ</i> ዩን የእርካታ መጠን የሚለካ መረጃ	በጣም አልስማማም	በመጠኑ	ሕርባጠኛ አይደለሁም	በመጠኑ	በጣም እስማማለሁ
			አልስ <i>ማማ</i> ም		<i>እስማ</i> ማለሁ	
5.1.	የጤና ባለሙያዉ/ዋ አቀባበልና ሰላምታ ጥሩ					
	ነበር					
5.2.	አንልግሎቱን ለማግኘት የጠበቅኩት ሰዓት ተመጣጣኝ ነበር					
5.3	በተቐሙ በቂ የሆነ መጠበቂያ ቦታ እና ዎንበር አለ					
5.4	የጤና ባለሙያዉ/ዋ ለመረዳት ሆነ ለመገባባት አትከብድም					
5.5	አገልባሎቱን ለማፃኘት የከፌሉት ብር ተመጣጣኝ ነበር					
5.6	በአካላዊ ምር <i>መራዎት/</i> በምክር <i>ወቅት</i> ከማንኛዉም አካል ሚስጥርዎ ተጠብቋል					
5.7	ጤና ባለሙያው/ዋ የአካል ምርመራ በንጽህናና በተንቃቄ ሰርታለች					
5.8	ኪሊኒኩ ንጹ መጸዳጃ እና በቂ የዉሓ አቅርቦት አለዉ					
5.9	የሚፈልጉትን ዓይነት ጥራት ያለዉ አገልግሎት አግኝተዋል					
5.1	ስለ እርባዝና ክትትልዎ ሙሉ መረጃ አኒኝተዋል ማለት ይቻላል					
5.1	ቀሪ የእርግዝና ክትትልዎን እዚሁ ጤና ተቐም ማድረባ ይፌልጋሉ					

5.1	ሌሎቸ እናቶቸ በዚህ እንዲከታተሉ ይመክራሉ	<u> </u>	ተቐም				
	ተገፅ	\ <i>ጋ</i> ይዋን በ	<u> ፕ</u> ናቱ ስለተ	ተሳተፈች <i>ማ</i> መስገን	እንዳይረሱ!!!		

#### PART II: QUESTIONNAIRE ON PROVIDERS' PERSPECTIVE

# INTERVIEW OF PROVIDER'S PERSPECTIVE ON QUALITY OF ANC SERVICE

H1: Facility name	
H2: Today's date	
(day/month/year)	

H3: Have you given your consent to participate in the study? 1. Yes 2.No

H4: Sex of health worker 1. Male 2. Female

H5: What is your current professional /technical/ medical qualification?

# **SECTION ONE**

# EDUCATION AND EXPERIENCE H1: What year did you graduate (or complete) with this qualification? H2: In what year did you start working in this facility? H3: How many years in total have you provided services in ANC? Service may have been here or in another facility TRAINING AND SERVICES PROVIDED Questions H4: What training have you received in the past 3 years (pre- or in-service) training on subjects related to ANC?

WORKING CONDITIONS IN FACILITY		
Now I would like to ask you some questions about supervision you have persona	lly rec	eived.
This supervision may have been from a supervisor either in this facility, or from	n outsi	de the
facility.		
H6: What type of technical support or supervision do you receive in your work at		
this facility?		
H7: The last time you were personally supervised, What did your supervisor do		
during and after the supervision?		
during and arter the supervision.		
H8.Does the supervision 1-Planned regularly 2-periodical		
H10.How much is constrictive the comment given?		
H11: Among the various things related to your working situation that you would		
improved, can you tell me the three that you think would most improve your ability	ty to p	rovide
good quality of care services?	1	

REMEMBER TO THANK PROVIDER FOR THEIR PARTICIPATION IN THE STUDY
REVIEWBER TO THE WAR TROVIDER TOR THEM TARTISH ATTOM IN THE STODY
Amharic version of provider perspective
<i>መ</i> ጠይቅ ሁለት
<u>በቅድመ ዎሊድ አገልገሎት                                   </u>
ተ.ቁ1 የጤና ተቐሙ ስም ተ.ቀ2 ቀን(ቀን/ዎር/አመት)
በዚህ ጥናት ዉስጥ ለመሳተፍ ፈቃደኛ ነዎት? 1. አዎ 2. የለም
4. ጾታ 1. ወንድ 2. ሴት 5. ሙያዎ ምንድነዉ?
ክፍል አንድ
የትምሀርት ደረጃ እና የስራ ልምድ
1. በዚህ ሙያ ከተመረቁ ስንት አመት ሆኖት?
2. በዚህ ተቐም ስራ የጀመሩት በስንት ዓ.ም ነዉ?
3. በቅድመ ዎሊድ ክፍል ለምን ያህል ጊዜ አንለንሉ?
አገልግሎቱ እዚሁ ዎይንም ሌላ ተቐም ሊሆን ይቸሳል
የስልጠና ሁኔታን በተመለከተ
4. <i>ቅድመ ዎ</i> ሊድ አንልግሎትን በተመለከተ ባለፉት ሶስት አመታት ምን አይነት ስልጠናዎችን አግኝተው ነበር? ከስራ
በፊት ሆነ በስራ ላይ እያሉ ሊሆን ይቸላል?
በተቐሙ ዉስፕ የስራ ሁኔታን በተመለከተ
5. በግል በተቸሙ ዉስጥ ስላንኙት ቁጥጥር/supervision በተመለከተ ምን ይላሉ? ቁጥጥሩ/supervision
የተደረገዉ ከሴላ ቦታ በመጡ ዎይንም እዚሁ ባሉ ሐላፊዎች ሊሆን ይቸላል

ር ዐሕዑመ መል የተከትቷል የመልመልነት መደት ዐልመ ነ	ንዲሆን ይረዳሉ ብለዉ ሚያስቡዋቸዉን ነገሮች ምንድናቸዉ?				
በተለይም ፕራት ያለዉ አገልግሎት መስጠት እየ	ፈለጉ ባለመደረጋቸዉና ባለመኖራቸዉ የአገልግሎቱን ጥራት				
የሚቀንሱ ነገሮች ምንድናቸዉ?					
0 መር ተ ዕተያ ተና	ትን የጤና ባለሙያ ማመስንን አይዘንጉ!!!				
וויזיג לדיווץ	of A full a duon's a loot (1.1 Vizil 1.6.11)				
PART III: ANTENATAL CARE SERVICE OBS	ERVATION CHECKLIST				
ANC Service observation Checklist					
A 1. E114	T				
A1: Facility name					
A2: Facility number					
A2. Pacifity fluition					

Find A Health Worker Involved In Antenatal Care Services. Make Sure To Obtain Permission From Both The Service Provider And The Client. Also Make Sure That The Provider Knows

A3: Observer number

A4: Today's date(day/month/year)

That You Are Not There To Evaluate Him Or Her, And That You Are Not An "Expert "To Be Consulted During The Session.

A5: Health worker qualification			-
A6: Sex of health worker	1. Male	2.Female	

A7: Client code Start client code at 1 for each new facility visited.

Section 1: Introduction and History Taking							
RECORD WHETHER THE PROVIDER CARRIED OUT THE FOLLOWING STEPS							
AND/OR EXAMINATIONS:							
Record the time that ANC consultation started							
Question	Yes	No		Go to			
			DK				
A100: Did the health worker greet the client (and others present) in							
a friendly and respectful manner?							
A101: Did the health worker introduce her/himself and title							
(midwife, nurse, etc.)							
A102: Did the health worker call the client by her appropriate name							
or appropriate title?							
A103: Did the health worker ask about or the client mentions any of							
the following facts?							
01) Client's age							
02) Medication the client is taking							
03) Date that client's last menstrual period began							
04) Prior pregnancies							
A104: Number of prior pregnancies (Observer: listen and record							
woman's number of prior pregnancies; enter 0 if no previous							
pregnancies, enter 98 if number not mentioned)							
A105: Did the health worker ask about or the client mentions any of							
the following for current pregnancy?							

01) Vaginal bleeding			
00) F			
02) Fever			
03) Headaches or blurred vision			
04) Swollen face or hands			
ory sworld race of hands			
05) Convulsions or loss of consciousness			
06) Severe difficulty breathing			
07) Persistent cough for 2 weeks or longer			
ory reisistent cough for 2 weeks of longer			
08) Severe abdominal pain			
10) Frequent or painful urination			
11) Whether the client has felt a decrease or stop in fetal movement			
12) If there are any other problems the client is concerned about			
	l		

Section 2: Tests and Treatments						
Question	Yes	No	DN	Go to		
A106: Did the health worker wash his/her hands						
with soap or use alcohol hand rub prior to						
examination?						
A107: Did the health worker perform any of the						
following procedures?						
01) Weigh the client						
02) Take the client's blood pressure						

03) Examine hands and face for edema	
04) Perform or refer for urine test	
05) Check for signs of anemia	
06) Perform or refer for anemia test	
07) Palpate the client's abdomen for uterine height	
(0) Liston to the client's chilomon for fotal	
08) Listen to the client's abdomen for fetal heartbeat	
09) Perform or refer for a syphilis test	
obj Terrorm of Teref for a syphinis test	
A108: Did the health worker ask about, perform,	
inquire about, or refer for an HIV test?	
A109: Is client HIV positive? (Observer: listen and	
record answer, circle Don't Know if	
HIV status is unknown or status is not discussed)	
A110: Did the health worker provide counseling on	
HIV/PMTCT?	
A111 D'1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
A111: Did the health worker give the client any of	
the following treatments?	
02) Gave supply of iron or folic acid (IFA) or both	
52, Sure supply of non-of-tone deld (1171) of both	
04) Explained how to take iron or folic acid	
pills/syrup	

06) Prescribed or gave a tetanus toxoid (TT)		
injection		
07) Explained the purpose of the TT injection		
08) Prescribed or gave anti-malarial prophylaxis		
(SP for IPT)		
13) Importance of using ITN explained explicitly		
14) Prescribed or gave deworming medication		
END OF SECTION TWO		

Section 3: Counseling and Outcome				
Question	Yes	No		Go to
A112: Did the health worker inform the client about the progress of the pregnancy?				
A113: Did the health worker counsel the client in any of the following reasons to seek Immediate medical care?				
01) Seek immediate care if she has vaginal bleeding				
02) If she has convulsions				

03) If she has severe headaches with blurred vision		
04) If she has fever and is too weak to get out of bed		
05) If she has severe abdominal pain		
06) If she has fast or difficult breathing		
A114: Did the health worker counsel the client in any of the		
following ways about birth Preparation?		
01) Asked the client where she will deliver		
02) Advised the client to prepare for delivery (e.g. set aside		
money, arrange for emergency transportation		
03) Advised the client to use a skilled health worker during		
delivery		
04) Discussed with client what items to have on hand at home for		
emergencies (e.g. sterile blade)		
A115: Did the health worker discuss nutrition and healthy eating		
during pregnancy?		
A120: Did the health worker discuss breastfeeding?		
A116: Did the health worker discuss family planning for use after		
delivery?		
A117: Did the health worker counsel on when to return for next		
visit?		
A118: Did the health worker ask whether the client had any		
questions?		
A119: Did the health worker speak using easy-to-understand		
language for the client?		
A120: Did the health worker look at the client's health		

card/booklet, either before beginning the consultation or while				
collecting information or examining the client				
(Observer: choose DK if no card/booklet)				
A121: Did the health worker write on the client's health card	·			
(Observer: choose DK if no card/booklet)				
Record the time ANC consultation ended				
REMEMBER TO THANK CLIENT FOR THEIR PARTICIPATION	ON IN T	HE STU	DY	
AT THE END OF THE CONSULTATION, ASK THE HEALTH	WORKI	ER THE	FOLLO	OWING
QUESTIONS:				
A122: Ask the health worker how many weeks pregnant the				
client is (Observer: enter 98 for Don't Know)				
Question	Code	)		
A124: Ask the health worker whether this is a referral visit or a				
routine ANC visit				
□ Referral visit	1			
☐ Routine visit	2			
A125: Ask the health worker whether this is the client's first				
pregnancy (Observer: circle that the answer to A104_4 agrees				
with the answer to this question)				
☐ Yes, first pregnancy	1			
$\square$ No	2			
A1126: Record the outcome of the consultation (what happened				
at the time the observation concluded)				
Client goes home	1			
Client referred (same facility)	2			
Client admitted (same facility)	3			
Client referred to other facility	4			
Don't Know	8			
A127: If client was admitted or referred, ask health worker what				

is client's diagnosis	
A128: PLEASE COMMENT ON THE QUALITY OF CARE PRO	OVIDED:

# PART IV: RESOURCE INVENTORY CHECKLIST

# 2. RESOURCES INVENTORY CHECKLIST

Assessment of structural aspect of health centers of the town about antenatal services availability of physical infrastructure

2.1. Health facility name	
2.2. Health professional Interviewed	_

#### 2.5. Staff Profile of the health institution

S.N	Category	Female	Male	Total
2.5.1	Technical			
	Health officer			
	Midwife			
	Nurses			
	Sanitarian			
	Lab. Technician			
2.5.2	Administrative Staff			
	Clerk			
	Cleaner			
	Guard			
2.6	Does the health institution have specific plan			
	document			
2.6.1	What is the total population that the health center			
	Look			

2.6.2	Does the health institution have prepared action		
	plan for the current budget for F/p, ANC, Delivery		
	and Postnatal		
2.6.3	Is there clear job description for all staff in this		
	health institution		

# 2.7. Logistics

2.7.1	Does this health institution have	1= Car
	transportation facility	2=Motorcycle
		3=Bicycle 4=none
2.7.2	If available, are they functional?	Yes No
2.7.3	Does the health institution have stand by generator? If no	Yes
	What alternative means do you use	No
2.7.4	What water source is using	
	Pip water	YesNo
	Well Water	Yes No
2.7.4	Does the health institution has enough budget for vehicle	Yes No
	maintenance and fuel	
2.8	Waiting space	
2.8.1	Is there clean and Protected waiting area	
2.8.2	Adequate sitting space	
2.9	Consultation room	
2.9.1	Separate room	
2.9.2	Auditory/ Visual privacy	
2.9.3	Examination Table	
2.9.4	Foetoscope	
2.9.5	Weighing machine	
2.9.6	Stethoscope & B.P. instruments	
207	W. I. ANG. III.	
2.9.7	Working ANC guideline	
2.9.8	Maternal & child health cards(FANC)	

2.10	Sanitation facilities	
2.10.1	Bathroom	
2.10.2	Toilet	
2.10.3	Hand wash room with Soap	
2.10.4	Electricity	
2.10.5	Drinking water facility	
2.11	Laboratory Facilities and medical supplies	1=available 2=not available
2.11.1	Syphilis test	
2.11.2	Urine Analysis test	
2.11.3	HIV test	
2.11.4	Pregnancy test	
2.11.5	Haemoglobinometer	
2.11.6	Albuminstix	
2.11.7	IFA tablets	
2.11.8	TT Vaccines	

# 2.12. Sterilization

Sterilizer	1=Dry oven	2=autoclave	3=Boiling
			pan
2.13	Infection prevention measures taken	1=Yes	2= No
2.13.1	Hand washing with alcohol hand rub		
2.13.2	Decontamination		
2.13.3	Surgical Gloving		
2.13.4	Clean gloving		
2.13.5	High level disinfection		
2.13.8	Safety box		