

Research Article





Quality of antenatal care service in public health facilities of chencha district, gamo gofa zone, southern Ethiopia

Abstract

Background: The quality of antenatal care (ANC) 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. Therefore, the objective of this study was 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 15 to April 28, 2016 among 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.

Results: The response rate was 100%. 52.6% of respondents were satisfied with the service provided. 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: This study indicated that even though majority satisfied, the overall quality of ANC service was poor which may be explained by shortage of reagents and drugs, absences of guidelines, absence of trainings, absence of incentives, absence of regular supervision, inadequate information for mothers and absence of privacy.

Keywords: quality, antenatal care, chencha, southern Ethiopia

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Sintayehu Abebe, I Addisu Alemayehu, 2 Abebe Gebremariam, 3 Anteneh Dirar 3

¹Department of Midwifery, Arba Minch University, Ethiopia ²Department of Nursing, Arba Minch University, Ethiopia ³Department of Population and Family Health, Jimma University, Ethiopia

Correspondence: Addisu Alemayehu Gube, Department of Nursing, College of Medicine and Health Sciences, Arba Minch University, P.O. Box 21, Tel +251-9-12119726, Fax +251-46-8810279, Email addis 166@gmail.com

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Introduction

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 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.3 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.⁴ 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.5 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.⁶ 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.5

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. 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. 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.8 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.9

Almost all maternal deaths (99%) occurring in developing countries are due to complications arising during antenatal, intrapartum and immediate postnatal period.¹⁰ 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. 10 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. 11 The majority of maternal deaths could be avoided if women had access to quality medical care during pregnancy, childbirth, and postpartum.¹² Even though One woman in every three (32 %) made four or more antenatal visits during the course of her pregnancy in Ethiopia⁶ 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. 13,14 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. Therefore, this study aims to assess quality of ANC services in Chencha district, Gammo Gofa Zone, Southern Ethiopia.

Materials and methods

Study area and period

The study was conducted from March 15 to April 28, 2016 at Chencha district, Gamo Gofa Zone, Southern Ethiopia. Chencha district is one of 13 districts in Gamo Gofa Zone 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 around 142, 062 and the number of women in child bearing age is 27, 812: of these 4,850 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 has 52 rural Kebeles and currently the district covers an estimated area of 445 km2

and divided into 45 rural peasant associations and 5 urban dwellers associations (Annual report of Chencha District Health Office, 2016).

Study design

A facility based cross-sectional study design employing both quantitative and qualitative methods.

Study population

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

For qualitative part: Purposively selected ANC providers and randomly selected public health facilities of the district.

Sample size determination and sampling technique

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%. ¹⁵ 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 4,850 is <10,000), the final sample size became 350 ANC users.

For qualitative part

- A total of 12 respondents, 8 ANC providers (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.

To draw the sample, initially, from the 7 health centers, three health centers were selected randomly, and the existing one district hospital was 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.

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 facility were included from each health facility to conduct resource inventory.

Data collection tools and process

Standardized tool developed by Maternal and Child Health Integrated Program (MCHIP) were used for provider perspective, resource inventory and ANC performance observation. ¹⁶ Whereas, the client exit interview instrument for this study was adapted from elements that were applied in other related studies. ^{17–23} The instrument used to assess Client satisfaction; is adapted from study conducted in Bahr dar Special Zone having internal reliability value of 0.845. ¹⁷ Data on the types of services ANC attendees received was collected through interviews and FANC card review. 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. Data on availability of resource were collected by

conducting resource inventory in each of the study health facilities. To conduct observation, supervisors who are not included in the study were observed the provider client-interaction, history taking, procedures performed and services.

Data processing and analysis

Data were coded, cleaned and entered using EPI data version 3.1statistical software and exported to SPSS window version 20 statistical packages for descriptive and inferential analysis. Binary logistic regression was used to predict a dependent variable on the basis of independents variables and predictors having $P \le 0.25$ on the bivariate analysis were candidates for the multivariate analysis. And factors with p < 0.05 were statistically significant. The degrees of association between dependent and independent variables was assessed using AOR at 95% CI. Qualitative data were reviewed and analyzed manually using themes.

Ethical considerations

The research was approved by ethical review committee of Jimma University, College of Health Sciences. 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 was obtained before interview or observation.

Results

Socio demographic characteristics

All sampled 350 clients responded to the questions making the response rate 100%. The mean age of respondents was 27.92years (SD±5.031) and range of 18-42years of age. 65% of the women participated in the study were found between 25-34years 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. 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. 139(39.7%) had no formal education and more than half of the respondents (58.6%) were housewives (Table 1).

Obstetric characteristics of respondents

79.3% of respondents were Multi-gravida, 230(65.7%) of mothers were at third trimester, only 138(39.4%) came for third and above visit (Table 2).

Availability of resource and structural attributes

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 1 health center (HC) have BP apparatus specifically used in the ANC unit. The other HCs use BP apparatus in common with other 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. 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, clients 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 1HC that refer mothers to the hospital, all others provide PMTCT and they all have TDF +3TC+ EFV at hand. VDRL testing reagent and albuminstix are only found in the primary Hospital and 1HC. 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 1HC all others screen urine for infection. Except in primary hospital and 1 HC, there were no water supply in other health facilities. Except 1 HC other health facilities have toilet around the MCH unit. It was observed that the privacy of counseling rooms was not respected in all HC because ANC, EPI and postnatal services were provided in the same room. Only the primary hospital has protected waiting space with enough seats. Except the hospital none of the HCs fulfill minimum requirement of the standard. This might be due to shortage of health professionals specially midwives and also in rural area, due to the availability of health extension workers in the health posts to manage mild cases.

Table 1 Socio-demographic characteristics of respondents in Chencha district, Gamo Gofa Zone, Southern Ethiopia, 2016

Socio demographic variable	Frequency(n=350)	Percent	
Age Group			
Below 19	14	4	
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	
Farmer	10	2.85	

Socio demographic variable	Frequency(n=350)	Percent
Student	3	0.85
Monthly Income		
<1242 ETB	250	71
≥1242 ETB	100	29

Table 2 Obstetric characteristics of respondents in Chencha district, Gamo Gofa Zone, Southern Ethiopia, 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
Gestational age at first visit		
First trimester	39	11.1
Second trimester	262	74.9
Third trimester	49	14
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

Process attribute of interpersonal aspect in ANC service

243 (69.4%) said there was confidentiality, 219(62.6%) claimed there was privacy, 296(84.6%) agreed that care providers treat them respectfully, in 216(61.7%) of cases the provider has initiated to ask question and in 306(87.4%) cases consultation time was less than 20 minutes.

Process attribute of technical aspects in ANC service

228(65.1%) respondents were not counseled on danger signs of pregnancy. Of counseled mothers, 105 on vaginal bleeding, 68 on severe headache, 40 on offensive vaginal discharge, 26 on blurred vision, 21 on leg and facial edema, 4 on decreased fetal movement and 4 on fever. Of counseled mothers, 39 mothers mentioned 2 and 50 mentioned more than 2 danger signs of pregnancy. Regarding counseling on Birth preparedness and complication redness plan (BP/CR), only 61(17.4%) of them were counseled. Of counseled respondents, 59 on place of delivery, 7 on money, 5 on transport, 4 on selecting health care professional, 3 on blood donor and 2 on 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. 110(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 1). Regarding services to pregnant mothers, TT vaccine were given to 293(83.7%), Iron/folic acid to 308(88%), 5.7% received deworming medication and 49.4% of respondents were checked for pallor. Base line laboratory investigations and procedures performed for mothers attending ANC service are displayed below (Figures 2 & 3).

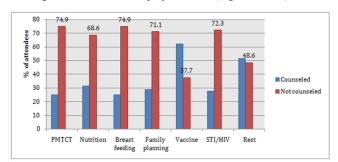


Figure I Percentage distribution of mothers not counseled on different maternal and child health related issues in ANC services of Chencha district, Gamo Gofa zone, Southern Ethiopia, 2016.

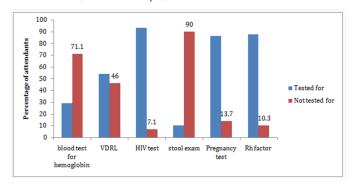


Figure 2 Percentage distributions of baseline laboratory investigations done for mothers attending ANC service in Chencha district, Gamo Gofa Zone, Southern Ethiopia, 2016.

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. Internal reliability value of items was 0.752 (Table 3).

Factors associated with client satisfaction

Variables significantly associated with client satisfaction of ANC services are residence, parity, pregnancy status, privacy and counsel on BP/CR plan. The likelihood of satisfaction from service were 2times 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 times 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 less likely to be satisfied than that of planned mothers (AOR= 0.522; 95%CI=0.286,0.953), The likelihood of satisfaction in mothers whose privacy were kept was 6 times higher than that of mothers whose privacy were not kept (AOR=5.615; 95% CI=3.371,9.355) and mothers who were counseled BP/CR plan were 2 times higher to be satisfied than that of

not counseled mothers (AOR =2.191: 95% CI=1.118, 4.293) (Table 4).

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. Services provided and procedures performed are displayed below (Figure 4).

Table 3 Component wise client satisfaction on ANC service in public health facilities of Chencha district, Gamo Gofa Zone, Southern Ethiopia, 2016

Characteristics	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
Provider's greeting	2(.6)	142(40.6)	2(0.6)	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)

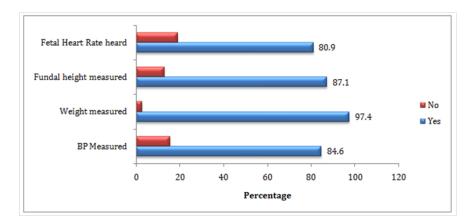


Figure 3 Percentage distributions of procedures performed for ANC attendants in public health facilities of Chencha district, Gamo Gofa Zone, Southern Ethiopia, 2016.

Table 4 Predictors of client satisfaction among ANC attendants of Chencha district, Gamo Gofa Zone, Southern Ethiopia, 2016

Variables	Satisfied n(%)	Not Satisfied n(%)	Crude OR(95%CI)	AOR(95%CI)
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	1
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	1
Pregnancy Statu	s			
Planned	156(55.3%)	126(44.7%)	1	1 0.522(0.286,0.953)
Not planned	28(41.2%)	40(58.8%)	0.565(0.330,0.967)	
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	1
Counseled on BP	P/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	1

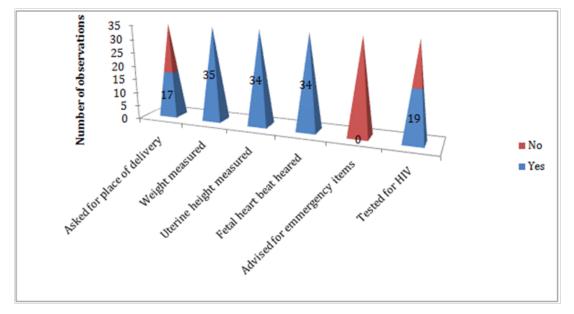


Figure 4 Observation findings of services provided and procedures performed in public health facilities of Chencha district, Gamo Gofa Zone, Southern Ethiopia, 2016.

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 3 months but the other health care providers from two HCs reported that they were supervised before 1 year. All of them reported that there was no internal supervision other than periodic meeting. They said

'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 were the major barriers that can prevent the provision of good quality of ANC services.

Discussion

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 one health center 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.¹⁷ 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.²⁴ 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.²⁵ 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 Baher dar.¹⁷

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. 15,17,18,24,26

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 Bahr dar and Tanzania. 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.⁶ 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. 15,26 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.

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.²⁷

Conclusions

This study indicated that even though majority satisfied, the overall quality of ANC service was poor which may be explained by shortage of reagents and drugs, absences of guidelines, absence of trainings, absence of incentives, absence of regular supervision, inadequate health information for mothers and absence of privacy.

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None

Conflict of interest

The author declares no conflict of intrest.

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