

## Prevalence of Antenatal Care Services Satisfaction among Mothers Attending Antenatal Care in Goba Hospital, Bale Zone, Oromia Region, Southeast Ethiopia

Ahmed Yasin Mohammed<sup>1</sup>,  
Tilahun Ermeko Wanamo<sup>1\*</sup>  
and Abate Lette Wodera<sup>2</sup>

1 Department of Public Health, College of Medicine and Health Sciences, Goba Referral Hospital, Madda Walabu University, Bale Goba, Ethiopia

2 Department of Public Health, Goba Referral Hospital, Madawalabu University, Bale Goba, Ethiopia

\*Corresponding author:  
Tilahun Ermeko Wanamo

✉ tilahunjimma2008@gmail.com

Tel: +251909648032

Department of Public Health, College of Medicine and Health Sciences, Goba Referral Hospital, Madda Walabu University, Bale Goba, Ethiopia

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### Abstract

**Background:** Among the various pillars of safe motherhood, antenatal care (ANC) remains one of the interventions that have the potential to significantly reduce maternal morbidity and mortality and assessing the quality of service delivery in health facilities in terms of client satisfaction is a meaningful output indicator of quality health care.

**Objective:** To assess ante-natal care service satisfaction and associated factors among mothers attending ante-natal care in Goba hospital, Bale zone, Oromia region, Southeast Ethiopia.

**Methods:** A hospital based cross-sectional survey was used to collect data from all pregnant women who are attending ANC service in MCH unit of the hospital at the time of data collection. A simple random sampling technique was used to obtain the required number of pregnant women. A face to face interview using a semi structured questionnaire was used to collect the data. The data was being processed and analyzed by using SPSS version 22.

Descriptive statistics was computed for the study variables and frequency distribution tables are used to describe the findings. Associations between dependent and independent variables were analyzed using chi-square test and p-value.

**Result:** A total of 384 women who were interviewed. About 76.8% had received a health advice, 64.8% received advice about HIV/AIDS, and 15.6% received STDs, 40.9% family planning, 49.7% vaccination, 25.3% nutrition and 24.7% ANC. Of those, 52.9% were satisfied with the advice given. To have a good ANC, around forty five percent of mothers have suggested the waiting time to be short. Half of, 48.7% the participants were satisfied with the overall care and follow up they had.

**Conclusion:** In this study the prevalence of antenatal care service satisfaction among mothers was low compared with other studies conducted in Ethiopia. Therefore, the government, health professionals and other concerned bodies should focus on giving quality antenatal care service by considering the predictors.

**Keywords:** Antenatal care service; Satisfaction; Mothers attending ANC; Prevalence

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### Background

The World Health Organization (WHO) estimates that 358,000 women of reproductive age die each year from complications arising from pregnancy. Developing countries continued to account for 99% (355, 000) of the deaths with sub-Saharan Africa and South Asia accounting for 87% (313 000) of global maternal deaths [1]. Antenatal care (ANC) remains one of the interventions that have the potential to significantly reduce maternal morbidity and mortality when properly conducted [2].

One of the millennium development goals (MDGs) is to reduce the maternal mortality ratio by three-fourth between 1990 and 2015. Pregnancy and child birth claim the lives of large number of women globally each year. More than half of these deaths occur in Africa [1]. Ethiopia is one of the countries that have the highest maternal and child mortality rates in the world which is estimated to be 673 per 100,000 live births and 77 deaths per 1000 live births. ANC is a branch of preventive medicine that is a key to modern obstetric care dealing with pre-symptomatic diagnosis of general medical disorders, nutrition, immunological

problems, health education and social medicine, and the major focus to prevention and early detection of pregnancy disorders and other illness. Historically, ANC was started in Paris in 1788 as inpatient care from 36 weeks [3-7]. Antenatal care comprises of the systemic, regular, and periodic supervision (examination of the client and provision of advice) to pregnant women from the commencement of pregnancy until the onset of labor. The aims and objectives of ANC include maintaining the physiology of pregnancy; allaying maternal anxiety and reassuring her about the satisfactory progress of pregnancy; fostering healthy attitude towards her pregnancy; detecting medical and obstetric disorders early and initiate necessary measures to correct or minimize their adverse effects; conducting special investigation like sonograph and tests for fetal wellbeing as deemed necessary [4].

Routine prenatal care is an example of preventive health care at its best. Its aim is to help and educate the mother to achieve optimum health so that birth is favorable for both the mother and her baby. From a cost benefit stand point, prenatal care has provided effective lowering of maternal morbidity and mortality as well as improving the peri-natal outcome. The prenatal care accomplishes this goal by identifying pregnant women and their fetus at high risk for adverse outcome and applying timely appropriate diagnostic and therapeutic measures to alleviate the risk factors [5]. The frequency and timing of visits of ANC are classified into two. The traditional (standard) western model and the new WHO model. The first one recommends the first visit to take place as early in pregnancy as possible continuing at four-week intervals until the 28<sup>th</sup> week, then every two weeks until the 36<sup>th</sup> week, and then weekly until the onset of labor. More frequent visits are required for high-risk patients. The later one recommends a minimum of four visits. The first visit takes place before or at 16 weeks; the second is planned between 24-28 weeks; the third at 32 weeks; and the fourth at 36-38 weeks. The initial visit takes 30-40 min, and the other visits take around 20 min each. Women with risk factors should not be enrolled in this model [2,6].

Assessing the quality of service delivery in the health facilities is receiving growing recognition as a strategy for monitoring and evaluation of primary health care program in developing countries [8]. Quality of care can be measured at three levels: the policy level, the service delivery level, and the client/outcome level. Assessing outcomes has merit both as an indicator of the effectiveness of different interventions and as part of a monitoring system directed to improving quality of care as well as detecting its deteriorations. Quality assessment studies usually measure one of the three types of outcomes namely medical, cost, and client satisfaction. For the last mentioned, clients are asked to assess not their own health status after receiving care but their satisfaction with the services delivered [9]. Satisfaction is a meaningful output indicator of quality health care. Various studies have reported that satisfied service users are more likely to utilize health services, comply with services and follow-ups, and continue with the health care [10]. Satisfaction with child birth experience is important to the woman, infant's health and wellbeing, and mother-infant relationship. Studies reported that a mother's positive perception of birth experience has been

linked to positive feelings towards her infant and adaptation of the mothering role [11].

Poor access to basic ANC is recognized as a major obstacle to improvement in pregnancy outcomes. There is a growing consensus that access to ANC alone is insufficient to alter the present maternal health profile and quality of ANC services may be a key determinant of maternal and peri-natal outcomes. During the ante-partum period, women are prone to some physiological and psychological changes that may adversely affect pregnancy outcomes [6]. Thus, all women require high quality client oriented ANC services that address their personal needs throughout the pregnancy to ensure their health and that of their infants irrespective of their socio-economic status and potential for pregnancy complications [12]. Therefore, this study is aimed at determining the level of pregnant women's satisfaction in the ANC service delivered in Goba hospital.

## Methods

### Study design, area and period

An institutional based cross sectional study was conducted at Goba hospital from April to May, 2012. The hospital was established in 1957 E.C as a clinic. In 1988 E.C, it was upgraded and named Tahsas 11 hospital and then in 2001 E.C, the name was changed to Goba hospital. This hospital is found in Oromia regional state, Bale zone, 445 km Southeast of Addis Ababa. The hospital has a total of 100 beds with major units such as medical, surgical, pediatrics, obstetrics and gynecology wards. There are also others like out-patient department, psychiatry, emergency room, laboratory, physiotherapy room, pharmacy, dental and eye clinic, maternal and child health services, X-ray and operation room, card room, kitchen, and laundry room. There are two specialists, namely internist and gynecologist; nine general practitioner medical doctors; eight health officers; fifty six nurses of whom eight are degree holders and the rest are diploma holders; there are two ophthalmic nurses and one psychiatric nurse; ten midwives of whom only one is a degree holder and others are with a diploma; eight laboratory technicians of whom three are degree holders and the rest are with diploma; six pharmacists of whom three are degree holders; four anesthetists of whom three are degree holders; one physiotherapist; two health assistants; one sanitarian and one environmental health graduate.

### Sample size calculation

The sample size was determined by using single population proportion with 95% confidence interval, degree of accuracy (d) of 5% and 50% proportion, and the final sample size calculated to be 384.

### Data collection tools and techniques

A simple random sampling technique was used to obtain the required number of pregnant women. A face to face interview with the pregnant women using a semi-structured questionnaire was used to collect data. The questionnaire was pretested before starting data collection. Data was collected by three trained data collectors.

## Data quality control

A well organized and self-descriptive questionnaire will be prepared to keep the quality of the data and to have a better precision of the result. After this, a pretest was done to evaluate the appropriateness, completeness, consistency, and easily understand the ability of the questionnaire. Five percent of the sample population will be tested on similar target population as a pretest before the actual data is collected. But the pretested samples were be included in the sample population.

## Data processing and analysis

The collected data will be processed and analyzed by using manual compilation and SPSS version 22. Descriptive statistics was computed for the study variables and frequency distribution tables were used to describe the findings and graphs were plotted if required. Association between dependent and independent variables will be analyzed using chi-square test and p-value will be used.

## Ethical considerations

An ethical clearance was obtained from Madda Walabu University ethical clearance committee. A verbal consent was obtained from each respondent after explaining the purpose of the study. Confidentiality of the response was ensured throughout the data collection and the names of the respondents were omitted as well. At the end of interview health education was given to each participant about exclusive breast feeding.

## Result

### Socio-demographic characteristics

A total of 384 women who were attending in the MCH unit of Goba Hospital for ANC follow up were interviewed of which all the respondents were voluntary to give relevant information on the study. Therefore, the overall response rate was 100%. Of the 384 pregnant mothers, 54.7% came from Goba. About 63.0% were between 25-34 years of age and the mean  $\pm$  SD age was 27  $\pm$  4.9 (Table 1).

### Current and past pregnancy status

About 25.3% of women who were attending ANC services were primi Gravid while 34.1% came for their second pregnancy and the rest for their third and above. Mothers were also assessed about the number of live births of those who ever gave birth, 73.4% had one or more live births. At the time of study, 90.1% of the study subjects reported that their pregnancy was planned. 36.5% of the respondents had their first visit during their third trimester, 52.9% came during their second trimester and only 10.7% came during their first trimester (Table 2).

### Antenatal care service related data

According to our analysis, 56.8% of the mothers included in the study claimed that they spent 30-59 minutes, 34.6% of the mothers spent more than an hour and the rest 8.6% spent less than 30 minutes to see the health care provider. Of those mothers who spent more than an hour, 33.3% feel like it was very long waiting time, 20.6% of those who spent 30-59 minutes

Table 1 Socio-demographic characteristics of respondents.

Characteristics	Number	Percentage
<b>Address</b>		
Goba	210	54.7
Robe	117	30.5
Goro	26	6.8
Agarfa/Gasera	10	2.6
Others*	21	5.5
<b>Age</b>		
15-24	106	27.6
25-34	242	63
$\geq$ 35	36	9.4
<b>Religion</b>		
Orthodox	175	45.6
Muslim	169	44
Protestant	37	9.6
Others**	3	0.8
<b>Marital Status</b>		
Single	8	2.1
Married	363	94.5
Divorced	6	1.6
Widowed/Separated	7	1.8
<b>Educational Status</b>		
No formal education	151	39.3
Elementary school	90	23.4
Secondary and above	143	37.2

\*Includes those who came from Delo Mena, sinnana, \*\* includes followers of Catholic, Wake Fetcha, and Jova.

feel like it was appropriate and 4.1% of them who spent less than thirty minutes feel it was short (Table 3).

### Services delivered to clients and their satisfaction

In this study about 44.3% were satisfied with the advice they had. Less than ten percent of mothers complained that there were times they returned back without being checked up in which 3.9% claimed MCH was closed, 1.6% didn't have enough money and the rest returned because of long waiting time and no professional was available. During the follow up visits, 63.5% of our study subjects were mostly seen by nurses. 53.6% were seen by two health professionals and 24.3% were seen by three and more (Table 4).

### Socio demographic correlates of satisfaction

This study examined the relationship between socio demographic backgrounds and their level of satisfaction. Satisfaction by the antenatal care service was lesser among women aged above 35 years which showed a significant relation. Satisfaction was non-significantly greater among orthodox Christians and those who were separated or divorced. Besides, those mothers who have completed elementary school are more likely to be satisfied as compared to others. A significant association between the age and satisfaction of mothers with the antenatal care service

**Table 2** Distribution of women by their current and past pregnancy status.

Characteristics	Number	Percentage
<b>Number of children alive</b>		
None	102	26.6
One	143	37.2
Two	77	20.1
Three and above	62	16.1
<b>Number of children dead</b>		
None	328	85.4
One	48	12.5
Two	7	1.8
Three and above	1	0.3
<b>Pregnancy status</b>		
First	97	25.3
Second	131	34.1
Third	78	20.3
Fourth and above	78	20.3
<b>Planned pregnancy</b>		
Yes	346	90.1
No	38	9.9
<b>Duration of pregnancy</b>		
First trimester	17	4.4
Second	120	31.3
third	247	64.3
<b>Number of visits</b>		
First	176	45.8
Second	108	28.1
Third	72	18.8
Fourth and above	28	7.3
<b>Time of first visit</b>		
First trimester	41	10.7
Second trimester	203	52.9
Third trimester	140	36.5
<b>Reason to start at this time</b>		
Pressure from family and friends	55	14.3
Heard from mass media	29	7.6
Got sick and needed health care	136	35.4
I feel like it's necessary	119	31
Didn't think it was necessary before	26	6.8
others	19	4.9

**Table 3** ANC service related data.

Characteristics	Number	Percentage
<b>Waiting time to see health care provider</b>		
<30 minutes	33	8.6
30-59 minutes	218	56.8
>= 1 hour	133	34.6
<b>Consultation time</b>		
< 30 minutes	359	93.5
>=30 minutes	25	6.6
<b>Feeling about the waiting time</b>		
Very long	222	57.8
Short	65	16.9
Appropriate	97	25.3
General examination performed	368	95.8
Explained about the examination first	177	46.1
Confidential discussion	248	64.6
Treated respectfully	364	94.8

**Table 4** List of services delivered to clients and their level of satisfaction.

Characteristics	Number	Percentage
Satisfied with the advice given	170	44.3
Returned back anytime without being checked up	29	7.6
<b>Reason to returning back</b>		
Long waiting time	4	1
MCH closed	15	3.9
No professional available	4	1
Didn't have enough money	6	1.6
<b>Health professional mostly giving ANC</b>		
Doctors	2	0.5
Midwives	11	2.9
Nurses	244	63.5
I don't know	127	33.1
<b>Number of health professionals mostly seeing the client</b>		
One	84	21.9'
Two	206	53.6
Three and more	94	24.5
Satisfied with the number of health professional	327	85.2
<b>Reason for dissatisfaction with the number of health care provider</b>		
Overcrowding	20	5.2
Lesser privacy	21	5.5
Shortage of skilled man power	16	4.2
<b>Place of preference for delivery</b>		
This hospital	284	74
Another hospital	31	8.1
Health canter	50	13
At home	19	4.9
<b>Reason to choice of this hospital</b>		
It's near to my house	73	19
Better medical equipment are available	131	34.1
The waiting time was very short	1	0.3
Better service is given	60	15.6
Better qualified care provider	19	4.9
Appointment given for the next visit	352	91.7
Received a health advice today or previously	295	76.8
<b>Topics on which advice was given</b>		
HIV/AIDS	249	64.8
STDs	60	15.6
Family planning	157	40.9
Vaccination	191	49.7
Nutrition	97	25.3
ANC	95	24.7
Satisfied with the health advice	203	52.9
<b>Things to be improved to have a good ANC</b>		
Increasing the number of health care provider	49	12.8
Drug supply	33	8.6
Laboratory	58	15.1
Cleanliness of the rooms	5	1.3
Short waiting time	60	15.6
A separate private room	19	4.9
others	1	0.3
Satisfied with the overall care and follow up	187	48.7

was seen whereas there was no significant relation in overall satisfaction by difference in address, religion, marital status or educational status of the women. Satisfaction level by the antenatal care services was higher among the women where explanation was given before performing general examination. This has shown to have a significant relationship (Table 5).

### Satisfaction level by present and past pregnancy status

Comparison in antenatal care service satisfaction level was made by past and present pregnancy history in which the relationship was not as such significant between the pregnancy status, whether the pregnancy was planned or not and satisfaction of the mothers with the services provided. However, the satisfaction level was lower among those who are pregnant for the third time and above and those who had an unplanned pregnancy. The number of children alive or dead a mother has also didn't have significance in their satisfaction. However, there was a greater satisfaction level among women who had only one child alive and those who had never lost a child before but lower satisfaction among women having three alive children. It is also shown that women who are in their second trimester and those who

**Table 5** Comparison of satisfaction of clients with their socio-demographic characteristics.

Characteristics	Level of satisfaction		P-Value
	Satisfied number (%)	Not satisfied number (%)	
<b>Address</b>			
Goba	107 (51)	103 (49)	0.09
Robe	46 (39.3)	71 (60.7)	
Goro	14 (53.8)	12 (46.2)	
Agarfa/Gasera	6 (60.0)	4 (40.0)	
others	14 (66.7)	7 (33.3)	
<b>Age</b>			
15-24	62 (72.1)	44 (27.9)	0.044
25-34	111 (45.9)	131 (54.1)	
≥ 35	14 (30.4)	32 (69.6)	
<b>Religion</b>			
Orthodox Christian	96 (54.9)	79 (45.1)	0.165
Muslim	73 (43.2)	96 (56.8)	
Protestant	17 (45.9)	20 (54.1)	
others	1 (33.3)	2 (66.7)	
<b>Marital status</b>			
Single	5 (62.5)	3 (37.5)	0.543
Married	174 (47.9)	189 (52.1)	
Divorced	3 (50.0)	3 (50.0)	
Widowed/ Separated	5 (71.4)	2 (28.6)	
<b>Educational status</b>			
No formal education	70 (46.4)	81 (53.6)	0.224
Elementary	51 (56.7)	39 (43.3)	
Secondary and above	66 (46.2)	77 (53.8)	
Income level/ month			

came for the very first time are relatively satisfied. The chance of satisfaction among women who made their first visit because they were sick was relatively higher and it's lower among those who came because they heard from media. This showed that there is a significant relationship with the satisfaction of mothers with the services provided and the reasons as to why they started their follow ups (Table 6).

### Satisfaction level by the antenatal care services provided

The relationship between the level of satisfaction of mothers and the services provided for them has been assessed and it was shown that the greater portion of the mothers were unsatisfied with the waiting time they spent to see the health care provider and an equal number of the mothers were satisfied and dissatisfied with the general examination performed. This again has showed that there is a significant relationship with the satisfaction of women attending ANC on the services provided. The confidentiality of discussion between the health care provider and the mothers was not found to be significant in relation with the overall satisfaction of the mothers on the services provided. A greater number of mothers were satisfied with being treated respectfully and women who were satisfied with the health information given during the consultation time were the most satisfied with the overall care and follow up. In addition, place of preference for delivery, health advices given for the clients and the satisfaction level with the advices given significantly affect the overall satisfaction of mothers with ANC services provided (Table 7).

**Table 6** Comparison of satisfaction on ANC to pregnancy status.

Characteristics	Level of satisfaction		P- value
	Satisfied	Not satisfied	
<b>Pregnancy status</b>			
First	54 (55.7)	43 (44.3)	0.366
Second	58 (44.3)	73 (55.7)	
Third	39 (50.0)	39 (50.0)	
Fourth and above	36 (46.2)	42 (53.8)	
Planned pregnancy	166 (48.0)	180 (52)	0.606
<b>Duration of pregnancy</b>			
First trimester	6 (35.3)	11 (64.7)	0.41
Second trimester	56 (46.7)	64 (53.3)	
Third trimester	125 (50.6)	122 (49.4)	
Time of first visit			0.619
First trimester	18 (43.9)	23 (56.1)	
Second trimester	103 (50.7)	100 (49.3)	
Third trimester	66 (47.1)	74 (52.9)	
<b>Reason for starting follow up</b>			
Pressure from family	18 (32.7)	37 (67.3)	0.001
Heard from media	9 (31.0)	20 (69.0)	
Got sick and needed health care	83 (61.0)	53 (39.0)	
Feel like necessary	60 (50.4)	59 (49.6)	
Didn't think necessary before	11 (42.3)	15 (57.7)	
others	6 (31.6)	13 (68.4)	

**Table 7** Level of satisfaction of clients with different ANC services provided.

Characteristics	Level of satisfaction		P-value
	Satisfied	Not satisfied	
<b>Waiting time to see care provider</b>			
< 30 minutes	11 (33.3)	22 (66.7)	0.005
30-59 minutes	97 (44.5)	121 (55.5)	
>= 1 hour	79 (59.4)	54 (40.6)	
<b>General examination performed</b>			
Explanation given before examination	107 (60.5)	70 (39.5)	0
Being treated respectfully	185 (50.8)	179 (49.2)	0
Satisfied with health information given during the consultation time	123 (72.4)	47 (27.6)	0
<b>Place of preference for delivery</b>			
In this hospital	154 (54.2)	130 (45.8)	
In another hospital	9 (29.0)	22 (71.0)	0.003
In health center	17 (34.0)	33 (66.0)	
At home	7 (36.8)	12 (63.2)	
<b>Advice given on</b>			
HIV/AIDS	145 (58.2)	104 (41.8)	0
STD	38 (63.3)	22 (36.7)	0.014
Family planning	99 (63.1)	58 (36.9)	0
Vaccination	124 (64.9)	67 (35.1)	0
Nutrition	68 (70.1)	29 (29.9)	0
ANC	60 (62.5)	36 (37.5)	0.002
Satisfaction with the advice given	152 (74.9)	51 (25.1)	0

## Discussion

According to the findings of this study, 10.7% of the ANC attendants made their first visit in the first trimester as recommended by WHO. However, the majority; 52.9% and 36.5% made their first visit in the second and third trimesters respectively. The number of mothers who made their first visit in the first trimester is larger than those reported in the EDHS [7,8-28]. However, clients who made their first visit in the second and third trimester are lower as compared to a study done in Hadiya zone [29-31] and in Northwest Ethiopia [32] respectively. The probable reasons for not starting ANC first visit in the recommended first trimester are lack of awareness by the clients and lack of consultation by the health providers. This can be clarified from the results. Only around a quarter (23.2%) of the interviewed clients reported to have received information about the time to start ANC follow up and only 31% of the pregnant women feel that starting ANC follow up was necessary. Besides, the most common reason to start ANC follow up was getting sick (35.4%) and unless the clients got sick in the first trimester, they probably won't go to health facilities.

In the current study, clients who had the recommended four visits were only 7.3%. This is greater than the report by Fantahun and colleagues [32] in Northwest Ethiopia (6.5%) but lower

than UNICEF's statistics [28] that reported 12%. The reasons for such low number of visits might be the late start of follow up, dissatisfaction with the overall services rendered, and other related factors that can influence satisfaction like age, distance from the hospital, waiting time, respectful treatment etc.

The current study also found that approximately one in two pregnant women (48.7%) were satisfied with the overall ANC care and follow up rendered at Goba hospital. The result is discordant with the study conducted in Addis Ababa that reported an overall satisfaction rate of 89.2% [8]. Our result is also in disagreement with the studies conducted in Nigeria [9] and Sweden [23]. The variations could probably be attributed to the fact that Addis Ababa, Nigeria, and Sweden are by far more urban as compared to our study area and satisfaction is a subjective issue and the clients might not have enough knowledge on what services should have been given. In accordance with this, there might be difference in professional competency, availability of necessary materials and drugs, and way of provision of the services. The current study also reveals that pregnant women who made their first visits while they are in their second trimester are relatively satisfied.

Satisfaction with the ANC services given was significantly affected statistically by age of mother ( $p=0.044$ ), reason for starting follow up ( $p=0.001$ ), waiting time ( $p=0.005$ ), performing general examination ( $p=0.014$ ) and explanation given before examination ( $p=0.000$ ); respectful treatment ( $p=0.000$ ), and health information given during consultation ( $p=0.000$ ). Similar reasons in Ethiopia and other countries have been cited in different researches [8, 9, 20, 25] as factors that affect either satisfaction with ANC service or utilization of the services. One of the factors that significantly altered client satisfaction was age. Pregnant women whose ages greater than 35 years are the least satisfied than younger clients. This might be due to the fact that with increase in age, the clients will probably compare the current services with the past services they had in their previous pregnancies. Those clients whose first ANC visit to the hospital was because of getting sick and hearing from media were the most and least satisfied respectively when compared to other reasons of starting follow up. Most of the clients were not satisfied with the waiting time to see the health care provider. However, those who waited more than one hour were the most satisfied while those waiting less than 30 minutes were the least satisfied. Most of the pregnant women were satisfied with the explanation given before examination although equal number of these women is satisfied and dissatisfied with the general examination performed. Approximately one in two mothers was satisfied with respectful treatment by the health care providers. On the other hand, among the clients who were satisfied with the health information given during consultation, three fourth were satisfied with the overall service. The highest number of clients reported to have received the result of examination (99.0%), type and reason of laboratory investigation (90.6%), and explanation about danger signs of pregnancy (66.4%). Nevertheless, only 3.4% received advice about pre-preparation before delivery; 14.1% about true signs of labor; 17.2% about where ANC services are provided; 19.3% about the time to go to health facility for delivery; 23.2% about the time to start ANC; and 39.1% about the

place of delivery. The percentage of women who received advice on the possible complications that may arise during pregnancy, namely anemia, preeclampsia and severe bleeding were 38.3%. This result is higher when compared to study done in sub-Saharan Africa by Nikiema and colleagues [26]. The increment might have resulted due to the time gap present between the two studies and population number considered.

Other factors that significantly affect overall satisfaction with ANC services include place of preference for delivery ( $p=0.003$ ), advices given on HIV/AIDS ( $p=0.000$ ), STDs ( $p=0.014$ ), family planning ( $p=0.000$ ), vaccination ( $p=0.000$ ), nutrition ( $p=0.000$ ), ANC ( $p=0.002$ ), and satisfaction with these advices given ( $p=0.000$ ). Clients who are most satisfied are those who preferred to deliver in Goba hospital while those who wanted to deliver at another hospital were least satisfied. Rendering advice on the above listed areas anytime during their follow up; especially, those clients satisfied, resulted in higher level of satisfaction with the overall services.

Most of the mothers (45.6%) wanted the waiting time to be short while 16.4% need a separate private room. Others (15.1%) wanted the laboratory to be improved while 14.8% wanted increased number of health care providers. Improving drug supply (8.6%) has also been cited as point of improvement. Small amount (1.3%) wanted different other things to be improved like better respect from all the staff members of the hospital, facilitated handling of cards and cleanliness of the rooms.

## Conclusion

In this study the magnitude of antenatal care service satisfaction among mothers was low compared with other studies conducted

in Ethiopia. The place of delivery, family planning, age of mother, waiting time, way of general examination and explanation given before examination was the predictors of women satisfaction. Therefore, the government, health professionals and other concerned bodies should focus on giving quality antenatal care service.

## Competing Interests

The authors declare that they have no any competing interests.

## Data Availability

The data will be available upon request.

## Authors' Contributions

All authors have contribution to the manuscript; all authors read and approved the final manuscript.

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## Authors' Information

AYM is an assistant professor at Madda Walabu University and ALW is an assistant professor at Madda Walabu University and TEW is lecturer at Madda Walabu University.

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