Utilization of Maternity Services and Associated Factors among Women Living in Addis Ababa Ethiopia Nifas Silk Lafto Sub-city, Woreda 1

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Abstract

Background: Maternal health service is the health service provided to mothers (women in their child bearing age). In Ethiopia mothers and children make up over 2/3rd of the whole population. Most pregnant women in developing world receive insufficient or no prenatal care and deliver without the help of appropriately trained health care provider. The situation in countries like Ethiopia is worsened by different factors such as poor infrastructure and lack of accessibility to health facilities. Taking this into account this study mainly focuses on the utilization of maternal service and associated factors among women living in selected villages in Nifas silk Lafto, Woreda 1.

Method: A community based cross-sectional study design was used to assess the utilization of maternal health service utilization and associated factors from January to March 2020. Mothers who gave birth in the past five years were included in the study. A pre tested Interview administered questionnaire was used for data collection; Data was coded, entered and analyzed using SPSS version 23.

Result: The result showed that there is 38.6% maternal health service utilization practice. Availability of health facility (OR:0.489, 95%CI(0.282,0.847),) and accessibility (OR:3.130, 95%CI (1.390,7.048) are found to have significant association with maternal health utilization practice.

Conclusion: The finding revealed that the majority of the respondents have poor maternal health service utilization practice; it's also indicated the majority of the respondents don't have knowledge regarding danger signs of pregnancy and the risks associated with pregnancy and child birth.

Key words: Maternity service, utilization practice, mothers of $\leq$ five children.

1 Background

2 Ethiopia is a landlocked country located in the horn of Africa, according to UN projections with

3 a 2019 population estimate of approximately 112.08 million. The most recent census in 2007

4 found an official population of 73.7 million. This makes Ethiopia the second most populous

5 country of Africa right after Nigeria. And the 14th most populous country in the world with a

6 growth rate of 3.02% per year (1, 2). Addis Ababa which is the capital city of Ethiopia is also the

7 largest city in the country , with a total population closer to 4 million(1).

8 In 2015, 3,200,000 babies were born in Ethiopia, or approximately 8,700 every day(3).Like most

9 other aspects of health care in Ethiopia, maternal and child health services are not well

10 developed. Roads are not well developed which exacerbates the existing transportation problems,

11 especially during the rainy season. The diversity of climate and socio-economic environments

12 have an impact on health conditions and outcomes(4). Among young women (aged 20-24), 22

13 percent gave birth by age 18, nearly 240 babies die each day before reaching their first month;

14 258 stillbirths occur every day(3). The poor health and nutrition of women and the lack of care

15 that contributes to their death in pregnancy and child birth also compromise the health and

16 survival of the infants and children they leave behind(5).

17

18 The link between early and regular attendance of antenatal care and health facility delivery and

19 improved maternal health outcomes has been documented for a considerable time. However, at

20 least half of all births in developing countries occur in the absence of skilled birth attendants.

21 This is largely influenced by socio-cultural factors, lack of understanding on the importance of

22 skilled attendance at birth, financial hardship and physical accessibility to health facilities(6)..

23

According to the Ethiopian 2016 demographic and health survey report, the total demand for modern family planning is 58 per cent, while family planning use is 36 per cent. This results in an unmet need of 22 per cent. Additionally, a quarter of women had unplanned pregnancies (8 per cent unwanted, 17 per cent mistimed). Among pregnant women, 62 % attended antenatal care (ANC), of which 32 % achieved the WHO recommendation of four ANC visits. Skilled birth attendance was also low with only 26 per cent of pregnant women giving birth in a healthcare facility. Above all, post-natal care was too low around 17 per cent maternity care. (7)

The health policy of Ethiopia emphasizes universal access for all segments of population, and geographic coverage by health services is estimated to be 89% in 2010(8). Health is vital for everyone and understanding the determinants of a disease, their spreads from person to person and community to community have become increasingly global. As expressed by (Scholten and De Lepper, 1991), ''health and ill-health are affected by a variety of life-style and environmental factors, including where people live"(9).

Method

Study area and period

The study was conducted in Nifas Silk Lafto sub city, Addis Ababa, Ethiopia. Nifas silk lafto sub city is among the ten sub cities. It is situated in the South western part of Addis Ababa, bounded from South by Oromia Special Zone, from North West by Kolfe Keranio, from East by Bole and Akaki Kality and from North by Lideta and Kirkos.(30) It has area of 68.3 sq.km.Currently there are 12 woredas within the sub city and a total population of 335,740 which includes 158,126 males and 177,614 females. there are different public and private facilities , among the health institutions there are 6 governmental health centers, 18 private higher clinic, 14 private junior clinic, 19 NGO junior clinic, 38 medium clinic and no hospital.(31). Lots of people live in woreda 1 with population number of 39512 which is 13.84% of the sub city population. Even though the number of individuals is relatively high in woreda 1. Due to poor infrastructure and rapid urbanization pregnant women are unable to access health service facilities which make the area more favorable for conducting the study. The study was conducted from January to March 2020.

1

Figure 1: Map of Sub cities in Addis Ababa

Study design

Community based cross-sectional study design was used on mothers of ≤ 5 children who live in three selected villages in Woreda1namely Eartu Abo, Dula mariam and Teklehaymanot the stratas were identified based on their geographic location.

Study Population

The study was conducted on women who live in selected villages in woredas 1, Nifas Silk/ Lafto sub city who are mothers of ≤ 5 children.

Sample size determination

Since there were no researches conducted on similar setting by taking P=50%, α= 5%, Z α/2= 1.96, margin of error (d) = 5% and applying single population proportion formula. The calculated sample size = 384

By applying finite population correction formula, multiplying the calculated sample size by design effect and adding 10% non response rate the final sample size was found to be = **302**

Proportional allocation was used and 129 participants were selected from Dulamariam, 86 from Eartu Abo and 87 from Teklehaymanot, the participants from each stratas were selected randomly.

Sampling procedure

Stratified sampling technique was used among the residents in woreda1 Nifas silk Lafto sub city, Addis Ababa Ethiopia, the stratas were selected by using purposive sampling technique and the stratas were defined by geographic location. The selected stratas are Eartu Abo, Teklehaymanot and Dulamariam and women in a reproductive age group who were pregnant during the time the data collection or who gave birth in the past five years were selected randomly.

Inclusion and exclusion criteria

    Inclusion criteria

- Inclusion criteria for the research participants was women who are pregnant during the time of the data collection or women who gave birth in the past five years were

selected and   included in the study after they were fully provided with the information about the objective of the research and after getting verbal consent.

Exclusion criteria

- Woman who don't have a child in the past five years or were not pregnant by the time of the data collection, also those pregnant women and women with ≤ 5 children who are not willing to participate after being informed about the objective of the research.

Data collection procedure and quality assurance

Data collection

Interview-administered questionnaire was prepared in English and translated into Amharic and data collectors who can also communicate inAffan Oromo, the local language of the study area were included. A one day training regarding the data collection was given to the data collectors. The Amharic and the English Versions of the questionnaire was communicated. The inclusion and Exclusion criteria of the study participants was also be described.. Any difficulty in understanding the questions or a language barrier among the study participants was well handled by the data collectors. The questionnaire include questions about socio-demographic characteristics, maternity service utilization practice, quality of care related questions.

Data quality assurance

A pre test was conducted to ensure the quality of the data on a nearby village (Eartu Mojo) on 30 mothers or (10%) of the total sample size. And based on the finding of the pre-test slight modification was made on the questionnaire. Data was checked during and after the data entry into SPSS Version 23.

Data management and analysis

Data were coded and entered in to data entry and analysis software SPSS version 23 and was checked for missing values, incompleteness and mistakes during the data entry process. During analysis the variables were defined and frequencies of different variables were calculated. Cross tabulation was used to test the presence of relationship between two or more variables. Descriptive statistics was by using proportion with percentages also bar graphs and pie charts were used. The association between the dependant variable with each of the independent variables was analyzed at 95% CI using bivariate analysis .variables with a p-value of ≤ 0.25 were taken to the multivariable analysis model and association of the variables with the independent variable was assessed in the presence of confounders.

Results

Characteristics of the study area and population

A total of 298 mothers of ≤ 5 children, who live in the selected three villages in woreda 1, Nifas silk lafto sub city, participated in the study giving a response rate of 98.6%. In the study 85 participants were included from Eartu abo, 126 from Dula mariam and 87 from Tekle haymanot. The findings showed that majority (43.3%) of the respondents are in the age group of 24-29 with a mean age of 28. More than half of the respondents 159(53%) got married when they were in the age group of 18-22 years. Majority 295(95.6%) of the respondents are married. concerning religion 231(77.5%) are orthodox Christians. On educational status both for the husband and the mothers majority are found to have primary education. There are only 3.7% among the mothers and 7% of the husbands who have completed a higher education level. Employment status showed that majority of the husband and the mother's are not employed and 1.7% of the mother

1 and 11.1% of the fathers are farmers. Household monthly income 199(67.2%) responded average

2 monthly income is less than 1000ETB only 11 (3.7%) reported they earn greater than 4000 ETB.

3 The table below show the socio demographic characteristics of the study participants.

4 **Table 1:** Socio demographic characteristics of mothers of $\leq$ 5 children in selected three villages

5 in woreda 1, Nifas silk lafto sub city, Addis Ababa, Ethiopia, February 2020.

Variable	Category	Frequency	Percent
Age of respondent	18-23	52	17.4
	24-29	129	43.3
	30-35	88	29.5
	$\geq$ 36	29	9.7
Age of mother's at marriage	$\leq$ 17	58	19.5
	18-22	159	53.4
	23-27	70	23.5
	$\geq$ 28	11	3.7
Age of mother's at first pregnancy	$\leq$ 17	22	7.4
	18-22	140	47
	23-27	113	37.9
	$\geq$ 28	23	7.7
Marital status	Married	285	95.6
	Not married	2	0.7

	Widowed	1	0.3
Religion	Orthodox	231	77.5
	Catholic	3	1
	Protestant	30	10.1
	Muslim	27	9.1
	Other religion	7	2.3
Head of house hold	Male	196	65.8
	Female	22	7.4
	Both	80	26.8
Mother's educational status	Illiterate	52	17.4
	primary education	176	59.1
	Higher level	11	3.7
	Secondary education	59	19.8
Husband's educational status	Illiterate	34	11.4
	Primary education	175	58.7
	Higher level	21	7
	Secondary education	68	22.8
Employment status of mother	Employed	9	3

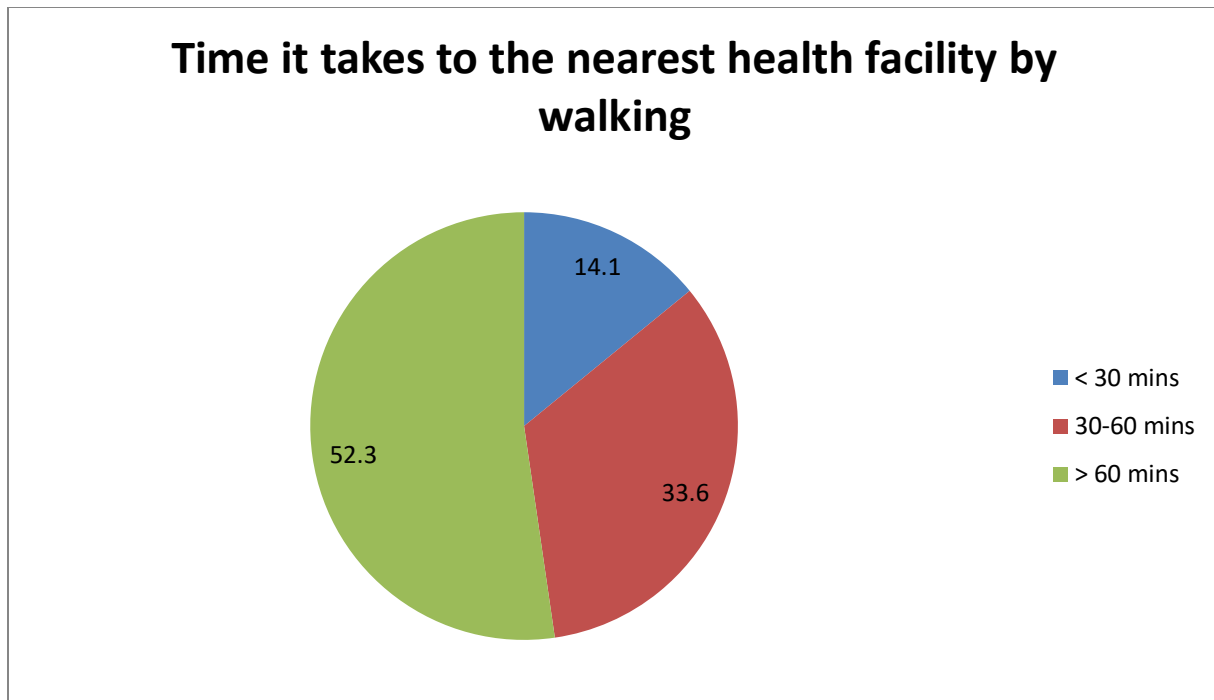|			
	Not employed	269	90.3
	Farmer	5	1.7
	Other	15	5
Employment status of husband	Employed	56	18.8
	Not employed	119	39.9
	Farmer	33	11.1
	Other	90	30.2
Monthly house hold income in ETB	<1000	199	67.2
	1000-1999	40	13.5
	2000-2999	32	10.8
	3000-3999	14	4.7
	$\geq$ 4000	11	3.7

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2 **Basic Facilities in the Study Area**

3 The availability of basic services and facilities was assessed and a slight variation was observed

4 among the three villages, where individuals who live in Eartu Abo responded they have the least

5 access to basic facilities relative to the other villages. The responses from Eartu Abo showed that

6 those who answered they have toilet are (57.6%), good infrastructure (10.6%), electric power

7 (23.5%). Apart from this only (3.4%) of respondents from tekle haymanot reported they have

8 access to clean water source which is less than the other two villages.

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Figure 2: Bar chart of the presence of public health facilities in woreda 1, Nifas silk lafto sub

city, Addis Ababa, Ethiopia, February 2020.

Also in the presence of health facilities nearby 49.3% responded they could access health

facilities nearby among this only 1% could access maternity and child health clinics and 42.6%

reported they could access health center or higher clinic. About transportation system to the

nearest MCH 86.6% reported walking is the only way of accessing the health facilities. Time it

takes by walking to the nearest health facility is indicated in the figure below.

Figure 3: Time it takes to the nearest health facility by walking for women living in woreda 1, Nifas silk lafto sub city, Addis Ababa, Ethiopia, February 2020.

Knowledge on maternal health utilization practice

Knowledge based questions on maternal health utilization practice such as importance of ANC service utilization; awareness related questions on danger signs during and after delivery were forwarded in order to assess their knowledge when they seek medical attention. The overall knowledge score showed that 292(98%) have poor knowledge regarding danger signs and the risk associated with pregnancy and child birth. The table below shows the knowledge on utilization of maternal health service.

1   **Table 2:**knowledge   based questions on maternal health service utilization of mothers of

2   ≤ 5 children in selected three villages in woreda 1, Nifas silk lafto sub city,   Addis

3   Ababa, Ethiopia, February 2020.

Knowledge based questions	Yes	
	Frequency	Percentage
For whom is the ANC check up important for?		
The mother	28	9.4
The baby	28	9.4
Both	242	81.2
Which danger sign of pregnancy are you aware of		
Vaginal bleeding	114	38.3
Severe headache	83	27.9
Blurred vision	61	20.5
Severe abdominal pain	48	16.1
Swollen hand and feet	36	12.1
Weakness	38	12.8
Difficulty breathing	28	9.4
Which post natal danger sign are you aware of		
Active bleeding	91	30.5

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Maternal health service utilization practice

On maternal health service utilization practice questions associated with ANC visit, delivery service and post natal care were forwarded and the research revealed that 38.6% are found have good practice the rest 61.4% have poor practice. The table below shows the maternal health service utilization practice.

Table 3: Utilization of maternal services among women in selected three villages in woreda 1, Nifas silk lafto sub city, Addis Ababa, Ethiopia, February 2020.
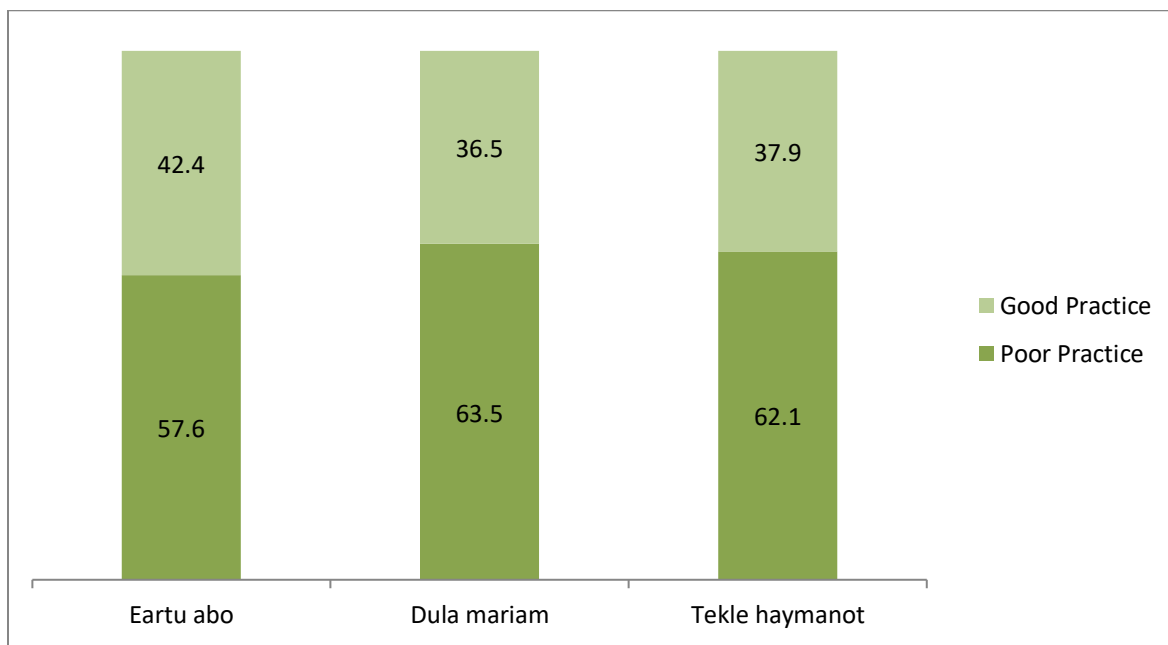
Maternity service utilization based questions	Categories	Yes	
		Frequency	Percent
ANC follow up		284	95.3
How many antenatal (ANC) visits do you have during your pregnancy?	1-3 times	83	27.9
	>4	215	72.1
How many months were you when you had your first ANC visit?	1-3 months	40	13.4
	4-6 months	134	45
	7-9 months	112	37.6
Did you take vaccine TT during your follow up		271	90.9
Did you take any supplement during your pregnancy?		281	94.3
How was your previous delivery?	SVD	281	94.3
	CS	17	5.7
What did you feed your baby after birth?	Breast milk	288	96.6

Cow's milk	1	0.3
Infant's formula	9	3
Did you have post- natal visit?	185	62.1

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2   The maternal health service utilization practice for the three villages when observed separately is

3   indicated in the figure below.

4

5   **Figure 4 :**Bar chart for utilization of maternal health services in woreda 1, Nifas silk

6   lafto sub city, Addis Ababa, Ethiopia, February 2020.

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Factors Associated with Maternal Health Service Utilization

Association between maternal health service utilization practice and contributing factors was assessed. A Bivariate analysis was performed and variables with a (P-value of less than or equal to 0.05) were chosen to enter to the final multivariable analysis model.

Bivariate analysis was made on personal factors such as age of the respondents, marital status, mother's age at first pregnancy, mother's age at marriage, head of household, educational status and employment status. Variables such as household head, husband's educational status, were found to have a (P-value $\leq$ 0.05) and were chosen to enter to multivariable analysis model. In the multivariable analysis however household head and husband's educational status did not have statistically significant association with the variable maternal health utilization practice.

Institutional factors such as presence of health facility nearby, transportation to the nearest health facility, previous delivery outcome, payment for delivery service, belief about risk of pregnancy, quality of care, knowledge on maternal health, and house hold income were used and both presence of health facility nearby (AOR: 0.489, and 95% CI (0.282,0.847) and transportation system to the nearest health facility by car (AOR: 3.130, 95% CI (1.390,7.048) were found to have statistically significant association with maternal health service utilization practice.

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3 **Table 4:** Maternal health utilization practice among women in selected three villages in

4 woreda1, Nifas silk lafto sub city, Addis Ababa, Ethiopia, February 2020.

Variable	Categories	Practice		COR(95%CI)	AOR(95%CI)
		Poor	Good		
Age of respondent	18-23	34	18	1.390(0.514,3.758)	
	24-29	74	55	1.951(0.804,4.732)	
	30-35	54	34	1.653(0.658,4.149)	
	≥ 36	21	8		
Mother's age at marriage	≤ 17	34	24	1.235(0.325,4.694)	
	18-22	99	60	1.061(0.298,3.775)	
	23-27	43	27	1.099(0.294,4.111)	
	≥ 28	7	4		
Mother's age at pregnancy	≤ 17	13	9	0.635(0.195,2.065)	
	18-22	86	54	0.576(0.237,1.396)	
	23-27	73	40	0.502(0.203,1.241)	
	≥ 28	11	12		
Marital status	Married	117	111	1.489(0.377,5.877)	
	Not married	1	1	2.333(0.107,5.098)	

19

	Widowed	1	0	0.0001(0.01,0.001)
	Divorced	7	3	1
Household head	Male	108	88	1
	Female	13	9	0.850(0.347,2.080)
	Both	62	18	0.356(0.196,0.646)
Mother's educational status	Illiterate	29	23	1
	Primary education	128	48	0.473(0.249,0.879)
	Secondary education	22	37	2.207(0.575,8.468)
	Higher level	4	7	2.121(0.992,4.535)
husband's educational status	Illiterate	17	17	1
	Primary education	127	48	0.378(0.79,0.800)
	Secondary education	30	38	1.333(0.446,3.985)
	Higher level	9	12	1.267(0.555,2.891)
Employment status husband	Employed	29	27	0.815(0.418,1.589)

	Not employed	90	29	0.282(0.156,,0.508)	
	Farmer	22	11	0.437(0.190, 1.007)	
	Other	42	48	1	
Employment status of mother	Employed	6	3	0.750(0.133,4.224)	
	Not employed	165	104	0.945(0.327,2.734)	
	Farmer	3	2	1.000(0.127,7.893)	
	Other	9	6	1	
Health facility nearby	No	75	76	1	
	Yes	108	39	0.356(0.219,0.579)	0.489(0.282,0.847)
Transportation to the nearest health facility	Walking	168	90	1	
	Car	11	24	4.073(0.051,4.238)	3.130(1.390,7.048)
	Other	4	1	0.467(0.051,4.238)	0.299(0.032,2.841)
Still birth	No	176	112	1	
	Yes	7	3	0.573(0.171,2.659)	
Payment for delivery service	No	168	108	1	
	Yes	15	7	0.726(0.287,1.838)	
Belief about risk of pregnancy	No	96	87	1	

	Yes	72	43	0.659(0.409,1.061)	
Quality of care	No	14	5	1	
	Yes	169	110	1.822(0.638,5.203)	
Knowledge on maternal health	Poor	180	112	1	
	Good	3	3	1.607(0.319,8.102)	
House hold income	0-999	137	62	1	
	1000-1999	20	20	2.210(1.110,4.399)	1.403(0.662,2.971)
	2000-2999	15	17	2.504(1.175,5.335)	1.337(0.578,3.094)
	3000-3999	4	10	5.534(1.668,18.299)	3.330(0.929,11.934)
	4000-10000	5	6	2.652(0.780,9.019)	1.804(0.499,6.525)

Discussion

Maternal health is one of the prior agendas in any development goals this is due to the fact that women comprise more than half of the total population and most of the problems faced during pregnancy and child birth could be prevented by following certain measures. It is also known to have economical implication since it is one way of saving a huge out of pocket money that might be lost due to morbidity and mortality associated with pregnancy and birth.

The finding from this research revealed that there is 38.6% maternal health service utilization practice and 61.4% poor practice. The poor practice is found to be associated with accessibility of health facility nearby, transportation system to the nearest health facility

On availability of health facility nearby 49.3% reported there is health facility. On accessibility of health facility 258(86.6%) of the respondents travel by walking to the nearest health facility and 156(52.3%) reported it took them more than one hour. The finding indicates that the odds of having good practice among those who reported the availability of health facility nearby is almost as much as those who reported there is no health facility nearby, which indicate that the respondents might not have access to it due to poor infrastructure and lack of transportation. The study also indicates that the odds of having good practice is three times greater for those who travel by car than those who travel by walking

Early marriage is found to be prevalent among 58(19.5%) of the respondents. which is illegal as per the revised Ethiopian family code of Article 7 which stated that "Neither a man nor a woman who has not attained the full age of eighteen years shall conclude marriage."(32) which is shown to have an impact on educational status of the mother's in which 74% are found to have no formal education or can only read and write .The mean age at marriage is found to be 20 yr with a minimum of 10 year and maximum of 33 years.

In addition to having early marriage, the mean and median age at first pregnancy was found to be 22 years, minimum age of 14 and maximum 34. The majority 140(47%) of the respondents lie in age group of 18-22. Under age pregnancy is found to be 22(7.4%) this finding contrast with the finding in Europe where the median percentage of women having their first babies is 35 years or older is 21%. The percentage also increases in Portugal, Greece, Ireland, Italy, and Spain. In

these countries older age and obesity are found to be the risk factors for infant and maternal health complications(20).

On utilization of ANC service WHO recommends at least four ANC visit as a standard. EDHS report showed that only 20% of women had their ANC during the first trimester, 26% during their fourth to fifth month of pregnancy, and 14% during their sixth to seventh month of pregnancy. Two percent of women did not receive any ANC until the eight month of pregnancy or later(15). Here in this study 72.1% reported they had at least four follow up visits during their pregnancy, 13.4% started when they were 1-3 months, 45% started when they were 4-6 months and 37.6% did not start follow up until they were 7-9months in to their pregnancy. This figure is greater than a study conducted in India where only 38.3% of the mothers had four or more visits(33).and similar with the study conducted in Ghana where 76% of the women have the recommended number of visits educational status of women is found to have an impact on the number of follow up (34)

Results on facility based delivery showed that 275(93.6%) of the respondents reported they deliver on health care facilities with the help of health professionals. From a total of 298 participants 19(6.4%) deliver at home among which 5(1.7%) reported no one assisted their delivery and the rest 14(4.7%) reported they were assisted by traditional birth attendants. Article from west Africa on facility-based delivery showed that only 11.7% of women in one region of Nigeria,63% in northern Ghana and 78% of women in Senegal delivered in facility (24). In a study conducted in Bhubaneswar, India Only 25.3% of respondents gave birth in health institutions for their recent birth with the help of health professionals while majority (74.7%) of

respondents gave birth at home without the help of health professionals (35).in contrast home delivery in Netherlands In most cases, took place in the presence of skilled birth attendants and have uncomplicated outcomes.(21)

Regarding knowledge on danger signs of pregnancy 98% are found to have poor knowledge, in similar study conducted in Debra Birhan town on knowledge of pregnant women about danger signs of pregnancy and associated factors, public health institutions. One hundred thirty seven (38.6%) of the respondents were knowledgeable about danger signs of pregnancy and the knowledge level was found to be associated with educational status and employment status of the women (36).

Regarding post natal visit 185(62.1%) of the respondents reported they had PNC. The remaining 113(37.9%) did not had PNC. Among those who responded they don't have post- natal visit 32.9% mother's answered they did not know they had to take the visit, 3.7% mother's answered it's because of cultural reasons and the remaining 1% reported they have other reasons. This is similar with a study conducted in India, Karnataka state in which majority of the mothers reported they seek post natal care service only when the infant seeks help or immunization.(37)

About quality of maternal health service 94.6% of the respondents who use health facility for pregnancy and child birth related services reported they are satisfied with the health care service they get. This figure is similar with the study conducted at bore, west Gojjam and greater than a study conducted in Gonder teaching hospital. The study conducted in bore west Gojjam showed that the level of satisfaction among delivering mothers were 88% which is closer to the level of

satisfaction obtained from this study whereas study in Gonder teaching hospital showed that only 31.3% of the mothers who attended labor and delivery care reported they were satisfied with the service they received(13, 29)

Birth Spacing which represents the age difference between children of consecutive pregnancies was also assessed and the average spacing was found to have a mean of two years, minimum 1 year and maximum of 12 years. Evidence from systematic reviews and meta-analyses indicates that short and long intervals between pregnancies are independently associated with increased risk of adverse maternal, perinatal, infant, and child outcomes Inter pregnancy intervals shorter than 18 months and longer than 59 months are associated with increased risk of adverse prenatal outcomes spacing longer than 59 months is associated with preterm birth, low birth-weight and short intervals are associated with increased risk of premature membrane rupture utero-placental bleeding disorders such as abruption, placenta previa and uterine rupture in women attempting a vaginal birth after previous cesarean delivery(38)

Conclusion

The study revealed that there is poor maternal and child health utilization practice among mothers of $\leq$ five children in selected villages (Dula mariam, Eartu Abo and Tekle Haymanot) in woreda 1, Nifas silk Lafto sub city, Addis Ababa, Ethiopia. The finding also show that the availability of health facility and accessibility of health facility nearby to have statistically significant association with the maternal health service utilization practice,

Abbreviation

ANC: Antenatal care; EDHS: Ethiopian Demographic Health Survey; EU: European Union; HIC: High income countries; MCH: Maternity and Child Health; MDG: Millennium Development goal; MMR: Maternal Mortality Ratio; SDG: Sustainable Development goal; SPSS: Statistical Package for Social Science; UN: United Nations; WHO: World health organization

Ethical Approval and consent

Ethical clearance was obtained from the ethical committee of Ethiopian Catholic University of La Salle. The study subjects were registered to participate after they get information about the objective of the study and only after obtaining verbal consent from them.

Consent for publication

Not applicable

Availability of Data and Material for Publication

The data used in the conclusion will be submitted up on request. (In order to get the data used please contact Finot Admassu Woldemariam (e-mail: finotaddma@gmail.com)

Competing Interest

The authors would like to declare there is no competing interest.

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Figures

Figure 1

Map of Sub cities in Addis Ababa

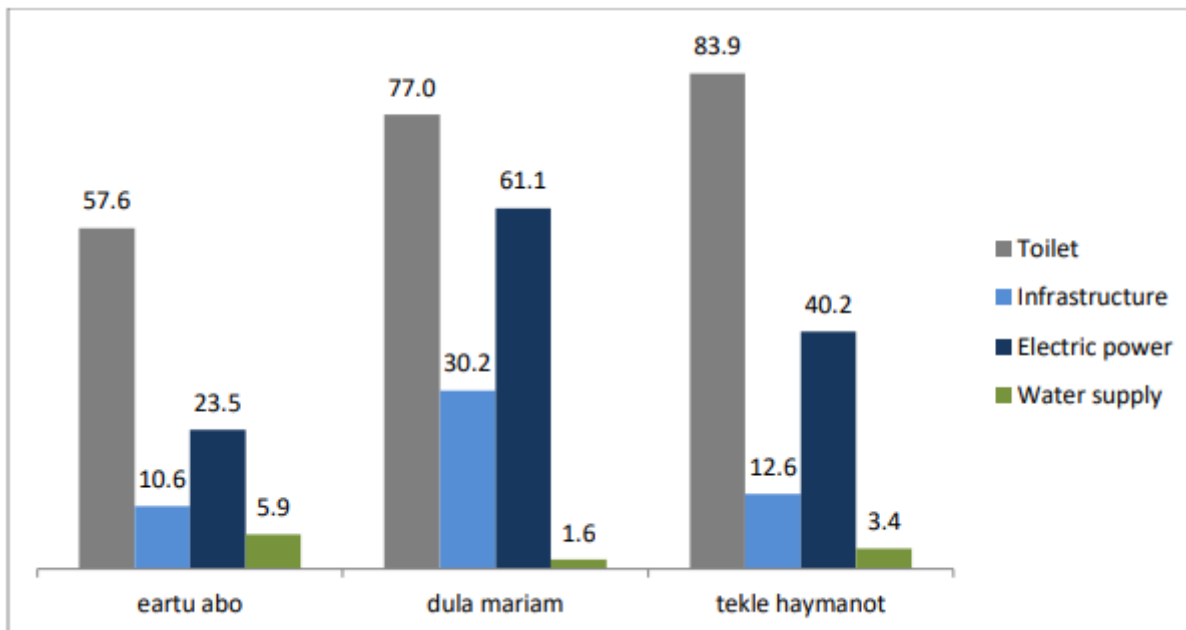**Figure 2**

Bar chart of the presence of public health facilities in woreda 1, Nifas silk lafto sub city, Addis Ababa, Ethiopia, February 2020.
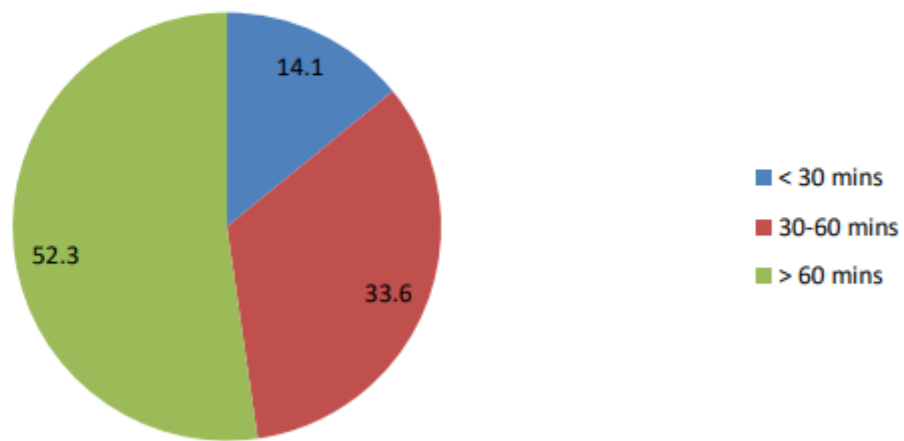
Figure 3

Time it takes to the nearest health facility by walking for women living in woreda 1, Nifas silk lafto sub city, Addis Ababa, Ethiopia, February 2020.
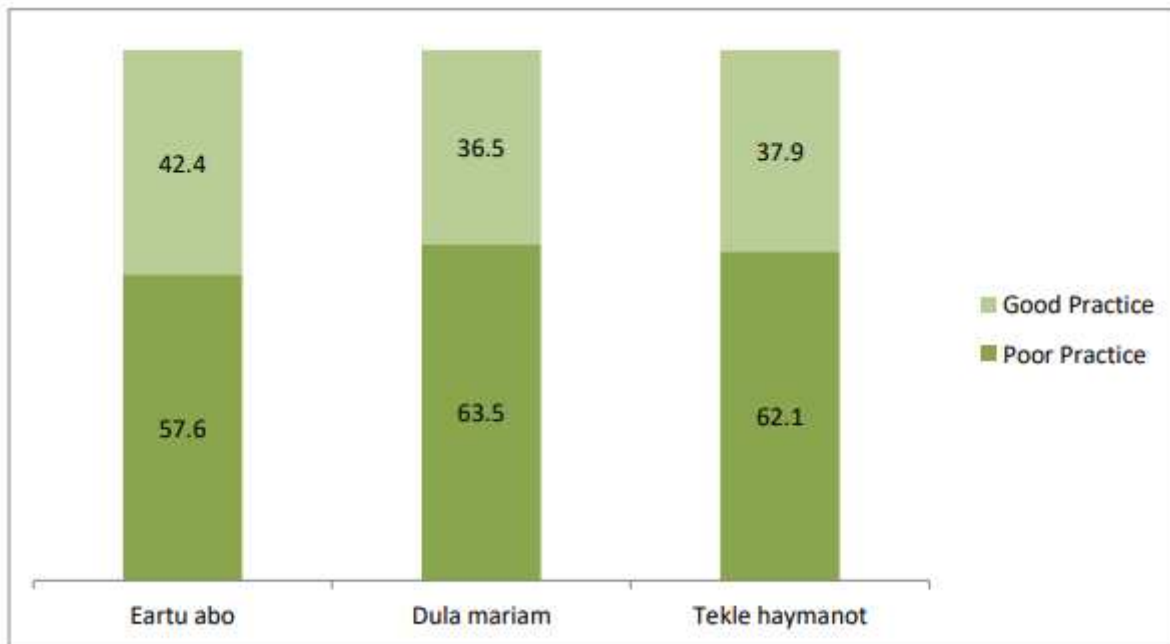

Figure 4

Bar chart for utilization of maternal health services in woreda 1, Nifas silk lafto sub city, Addis Ababa, Ethiopia, February 2020.