Journal of Midwifery &

Reproductive Health



Traditional Practice Affecting Maternal Health in Pastoralist Community of Afar Region, Ethiopia: A Facility-Based Cross-Sectional Study

Ahmed Ausman Ebabu (BSc)1*, Muhammed Abdu Muhammed (MSc)2

¹ BSc in Midwifery, Department of Midwifery, College of Medical and Health Science, Samara University, Samara, Ethiopia

² Master of Midwifery Education, Senior Lecturer, Department of Midwifery, College of Medical and Health Science, Samara University, Samara, Ethiopia

ARTICLE INFO	ABSTRACT
<i>Article type:</i> Original article	Background & aim: Every day, at least 830 women die around the world as a result of complications related to pregnancy and childbirth, with the majority of the deaths occurring in the developing countries. Traditional practices throughout
<i>Article History:</i> Received: 01-Mar-2020 Accepted: 25-Feb-2021	pregnancy and childbirth are one of the causative reasons for this maternal death. This study aimed to assess traditional practices that affect maternal health and its associated factors among women of childbearing age <i>Methods:</i> A facility-based cross-sectional study design was conducted on 308
<i>Key words:</i> Maternal Health Traditional Practice Ethiopia	 participants using systematic sampling method. The study was done from 17 May to 17 June 2018, at Aysaita primary hospital, Afar region, Northeast Ethiopia. The data was collected by a structured interviewer-administered questionnaire. Data were entered into SPSS version 20 for analysis. X2 test with a p-value of less than 0.05 was used to declare the significance of the association with the independent and outcome variable. <i>Results:</i> The study findings showed that 101 women (32.8%) practiced nutritional taboo during pregnancy. Also, 53(17.2%) and 56(18.2%) women practiced abdominal massage during pregnancy and delivery, respectively. Among included study participants, 54(17.5%) washed their babies immediately after birth. There was an association between educational status (p=0.041) and parity (p=0.003) with nutritional taboo. Additionally, an association was seen between parity (p=<0.001) and education (p=<0.001) with abdominal massage and home delivery. <i>Conclusion:</i> Traditional practices in the study area were relatively high. Therefore, health education of the mother and promoting formal female education are crucial to the reduction or avoidance of these cultural malpractices.

▶ Please cite this paper as:

Ausman Ebabu A, Abdu Muhammed M. Traditional Practice Affecting Maternal Health in Pastoralist Community of Afar Region, Ethiopia: A Facility-Based Cross-Sectional Study. Journal of Midwifery and Reproductive Health. 2021; 9(3): 2817-2827. DOI: 10.22038/jmrh.2020.36329.1396

Introduction

All through mankind's history, peoples have had unique understandings of health and disease deep-rooted in their own culture, contributing to a range of practices for disease prevention and care during sickness, pregnancy, and childbirth (1). There were diverse cultural influences that impact the well-being of pregnant mothers, use of herbal drugs, food taboos, abdominal massage, and hard work during pregnancy and labor are just a few examples (2, 3). Cultural practice represents the whole total of all behaviors that are learned, shared, and transferred from generation to generation such as dialect, religion, types of food eaten and way of their preparation, child handling practices, and other values that hold peoples together and give them a sense of identity and differentiate them from the other groups. Also classified as harmful or beneficial based on its effect to the physical nature of mankind, psychological and social needs (4).

Ethiopia is a country of nation and nationality with valuable, promotional, and traditional practices such as breast feeding and postnatal

* *Corresponding author:* Ahmed Ausman Ebabu, BSc in Midwifery, Department of Midwifery, College of Medical and Health Science, Samara University, Samara, Ethiopia. Email: ausmanahmed44@gmail.com

care. However, it is also a country where harmful traditional practices such as home delivery, abdominal massage, food taboo, early marriage, marriage by abduction, giving "kosso", application of cow dung on the umbilicus, keeping babies out of the sun, son preference, and unsafe abortion are frequently practiced across various events and age groups, especially in females and children (5).

Worldwide, at least 830 women die every day from complications of pregnancy and childbirth. Developing countries account for 99 percent of all maternal deaths. Maternal mortality shows the biggest gap between developed and developing countries (6). Ethiopia has the highest maternal and infant mortality and morbidity rates in the world. In 2016, maternal mortality was 412 deaths per 100,000 live births, while infant mortality was 48 deaths per 1000 live births (7).

Due to the unclean environment and improper care during pregnancy and delivery, many mothers suffer from infections of reproductive tract and neonatal sepsis, which, infant improperly delivered by unskilled birth attendants, and/or the traditional practices performed during delivery are the leading causes of sepsis and death (6).

The actual incidence in developing countries is unknown. However, it accounts for 5-15 percent of all maternal deaths. The occurrence of complications depends on the socio-economic status, education level, the community's perception of modern healthcare services, the available modern healthcare services, and the cultural approach to treating patients suffering from different diseases (8, 9). Despite their violation of human rights and harmful nature, Such practices persist because they are not questioned and take on an aura of morality in the eyes of those who practice them (10, 11). Generally, in Ethiopia, data on cultural practices during pregnancy, delivery, and postnatal periods are not entirely understood (incompletee). Little are known about either beneficial or full aspects at both local and national levels level. No study was conducted in Aysaita primary hospital Asayita town and around it to assess the problem. So this study assessed and tried to determine the type and magnitude of cultural malpractice practiced during pregnancy, delivery, and immediate postnatal time among women of the childbearing age group and its associated factor.

Materials and Methods

This study was done from May 17-June 17, 2018, in Aysaita primary hospital found in Aysaita town. Ethical clearance was obtained from the Institutional Health Research Ethics Review Committee of the College of Medicine and Health Sciences in Dire Dawa University (Ref. No. DDU/RTI/1851/2018). Aysaita town is among the five zones of afar regional state located in the eastern part of the region, which has an international boundary with the Republic of Diibouti. It is located 649 km from Addis Ababa and 60 km from Samara town, the capital city of Afar regional state. The study design was an institution based cross-sectional. Samples were randomly selected mothers attending maternal and child health (MCH) ward at Aysaita hospital during the study period. The inclusion criteria were all mothers who gave birth in the last 12 months attending maternal and child health ward. On the other hand, mothers attending MCH ward who had both hearing impairment were excluded from the study since the study was interviewer-based.

The sample size was determined using the single population formula, with the assumption that p= proportion of events was taken as 25.6 percent (prevalence of cultural malpractice) from a study conducted in Gonder (12). With a 95 percent confidence interval (CI), a 5% margin of error, and a 5% non-response rate. Based on this assumption, the actual sample size of this study was 308.

The study participants were selected using a systematic sampling method. The total sample was determined using the MCH clinic's previous regular client flow, which was collected by referring to the client registration book for a month prior to the data collection period, and revealed that 183 and 443 mothers attended for immunization of their children and under five OPD respectively. Since we are going to use systematic random sampling technique, proportionate allocation was used then = 2.03, every 2-unit interval, was used from the 2, lottery method was used then 1st, 3rd ,5th, 7th women attending MCH clinic during the study

period was included till the required sample size was achieved.

Α pretested, structured questionnaire adapted from various related studies was used to collect the data. The Amharic version questionnaires were used to collect the data using face-to-face interview methods. It was then changed to English version questionnaires for analysis. The instrument contains sociodemographic characteristics (age, religion, ethnicity, marital status, occupational status, and educational status) and history of previous pregnancy like parity which was assessed with various formats like 'nominal and ordinal using open-ended and multiple-choice questions. Furthermore, the data was collected by 4th-year Midwifery students after giving two-day intensive training. The tools were developed after extensive literature review and validated for content by two experts in the field.

A structured questionnaire was prepared in English and translated to Amharic and back to English by experts and checked for consistency. Participants included in the study were informed about the purpose/aim, benefits, risk, and duration of the study. Data collectors were familiarized with the interview technique, participant rights, reading through all the questions and understanding them and way of decreasing under-reporting and maintaining confidentiality. The questionnaire was pretested (5%) in Dubti town, which are not part of the study. The necessary adjustments were made after the pre-test. The collected data was cross-checked on each day of data collection for consistency and completeness.

After entering all the important variables into statistical software, data was checked for completeness and consistency. Cleaning and recoding were done before starting the actual analysis. Raw data was coded and entered into SPSS version 20 for statistical analysis. Descriptive statistics were summarized using frequencies and percentages. Descriptive statistics were computed using standard statistical parameters such as frequencies and percentages to present categorical data. The X2 test with a p-value of less than 0.05 was used to declare the significance of the association with independent and outcome variable. Finally, texts, tables, and graphs were used to summarize the result.

Ethical clearance was obtained from College of Health Science ethical review committee, Samara University, Ethiopia (RERC 0134/2018(11/05/2018). A permission letter was provided to the Aysaita primary hospital chief administrator, and then we proceed to data collection. Informed consent was obtained from individuals included in the study. Confidentiality of the interviewee's information and privacy was kept throughout the data collection and the entire study period. To keep confidentiality, names or other identification were omitted.

Results

Socio-demographic characteristics of the respondents

The total sample was 308, with a response rate of 100%. The majority of them were Muslims 246(79.9%), and the majority were married 296(96.1%). Among study participants, 165(53.6%) were never attended formal education, and 50(16.2%) of women attended primary education. The majority of the respondents' occupation was housewife 202(65.6%) (Table 1). Concerning the reproductive history of mother, 223(72.4%) of the respondent had parity with 2-4 range, and 40(13%) have parity \geq 5. Regarding the estimated monthly income of the family majority of the respondents has greater than 1000 Ethiopian birr, 175(56.8%).

Traditional Practice

Traditional practice during pregnancy

Out of 308 women included in the study, 101(32.8%) practiced nutritional taboo. Among the avoided foods during pregnancy 51(50.5%) were milk, 39(38.6%) were honey the remaining 11(11%) are fruits, fafa, and vegetables. Among study participants, 39(12.7%) women practiced abdominal massage during pregnancy, of this 161 (52.3%) delivered their babies at home (Table 2).

Table 1. Socio-demographic characteristics	of respondents	in Aysaita	primary	hospital, Aysaita	town,
Afar region, northeast Ethiopia (n=308)					

Variable (s)	Frequency (%)
Mother's Age (years)	
15-19	19(6.2)
20-24	71(23.1)
25-29	113(36.7)
30-34	76(24.7)
35-39	27(8.8)
40-44	2(0.6)
Religion	
Muslim	246(79.9)
Orthodox	57(18.5)
Protestant	5(1.6)
Ethnicity	
Afar	162(52.6)
Amhara	118(38.3)
Oromo	19(6.2)
Tigre	6(1.9)
*other	3(1.0)
Educational status	
Can't read and write	165(53.6)
Only read and write	17(5.5)
Attended elementary school (1-8)	50(16.2)
Attended junior or high s	23(7.5)
Attended (tertiary)education	53(17.2)
Marital status	
Currently married	296(96.1)
Divorced	8(2.6)
Widowed	4(1.3)
Occupational status	
Merchant	35(11.4)
Housewife	202(65.6)
government employee	49(15.9)
daily labor	10(3.2)
**other	12(3.9)

Key *Sidama, ** student, farmer

Table 2. Traditional practice during antenatal period among mothers attending MCH clinic of Aysaita

 primary hospital, Northeast, Ethiopia

Variable	Response	
Traditional practice	Yes	No
	Frequency (%)	Frequency (%)
Food taboo	101(32.8)	207(67.2)
Abdominal massage during Pregnancy	53(17.2)	269(87.3)
Abdominal massage during delivery	56(18.2)	252(81.8)
Home delivery	161(52.3)	147(47.7)
Cutting cord by unclean blade	48(29.8)	85(52.8)
Avoiding colostrum	65(21.1)	243(78.9)
FGM* (n=151)	78(51.7)	73(48.3)
Avoiding colostrum	54(17.5)	54(82.5)
Prelacteal food	75(24.4)	233(75.6)
Practice used to stump on umbilicus	30(9.7)	278(90.3

*= Female Genital mutilation

Traditional practice during Delivery and Post Natal Period

Of the 308 mothers who participated in the study, 54 (17.5%) washed their babies within one hour of giving birth, 196 (63.6%) within 1 to

24 hours, and 58 (18.8%) after 24 hours. Of the study participants, 65 (21.1%) mothers did not gave colostrum to their newborns, and 48 (29.8%) mothers cut the umbilical cord with unsterile or unsafe material.

Table 3. Socio-demographic factors and parity associated with nutritional taboo among the study participants, in Aysaita primary hospital, Afar, Northeast, Ethiopia (n=308)

	Nutritional taboo			
Variable (s)	Yes (%)	No (%)	p-value	
Mother's Age (years)			*	
15-19	1(1.0)	19(9.2)		
20-24	20(19.8)	52(25.1)		
25-29	24(23.8)	89(43.0)		
30-34				
30-34 35-39	38(37.6)	38(18.4)	< 0.001	
40-44	17(16.8)	8(4) 1(0.5)		
Religion	1(1.0)	1(0.5)		
0	02(02.2)	1(2(707)		
Muslim Orthodox	83(82.2) 16(15.8)	163(78.7) 41(19.8)	.644	
Protestant	2(2.0)	3(1.5)	.044	
	2(2.0)	5(1.5)		
Ethnicity Afar	60(59.4)	102(49.3)		
Amhara	32(31.7)	86(41.5)		
Oromo	8(7.9)	11(5.4)		
Tigre	1(1.0)	5(2.4)	.176	
*other	0(0.0)	3(1.4)		
Educational status	0(0.0)	5(1.4)		
Can't to read and write	61(60.4)	104(50.2)		
Only read and write	8(7.9)	9(4.3)		
Attended elementary school(1-8)	17(16.8)	33(16)		
Attended junior or high s	5(5.0)	18(5.7)	.041	
Attended (tertiary)education	10(9.9)	43(20.8)		
Marital status	10(5.5)	43(20.0)		
Currently married	96(95.0)	200(96.6)		
Divorced	2(2.0)	6(2.9)	.181	
Widowed	3(3.0)	1(0.5)	.101	
Occupational status	5(5.0)	1(0.5)		
Merchant	14(13.9)	21(10.1)		
Housewife	73(72.3)	129(62.3)		
government employee	9(8.9)	40(19.3)		
daily labor	4(4.0)	6(3)	.031	
**other	1(1.0)	11(5.3)		
Estimated monthly income	1(1.0)	11(0.0)		
<500	30(29.7)	65(31.4)		
500-1000	10(9.9)	28(13.5)	.518	
>1000	61(60.4)	114(55.1)	.510	
Parity	01(00.1)	111(00.1)		
Primi(=1)	7(6.9)	38(18.4)		
multi Para(2-4)	74(73.3)	149(71.9)	.003	
grand Para (>=5)	20(19.8)	20(9.7)	1000	

*= Sidama **= self-employed

Of the study participants, 56 (18.2%) women had an abdominal massage at the delivery time.

(Table 2). Regarding female genital mutilation from 151 female newborns, 78(51.7%) were

J Midwifery Reprod Health. 2021; 9(3):2817-2827.

Traditional Practice Affecting Maternal Health in Pastoralist Community

circumcised. Among 151 delivered babies during the study period, 75(24.4%) received Prelacteal feeding. Of these Prelacteal feedings, 37(49.3%) were sugar mixed with water, 17(22.7%) dates, 11(14.7%) water 4 (5.3%), honey 3(4%) butter, and 3(4%) Zamzam water. Most of the respondents, 198 (64.3%)

initiated breastfeeding within one hour,

108(35.7%) of them within 24 hours, and only 3(1%) of participants were initiate after 24 hours. Regarding practicing stump on the umbilicus, 28(9.1%) and 2(0.6%) of women applied butter and cow dung on umbilicus, respectively.

Table 4. Socio-demographic factors and parity associated with abdominal massage among the study
participants, in Aysaita primary hospital, Aysaita town, Northeast, Ethiopia (n=308)

Variable (s) — Mother's Age (years) 15-19 15-19 20-24 25-29 30-34 35-39 40-44 Religion Muslim	Yes Frequency (%) 1(1.6) 18(29.5) 14(23) 18(29.5) 9(14.8) 1(1.6)	No Frequency (%) 18(7.3) 53(21.5) 99(36.1) 58(23.5) 18(7.3)	p-value .025
15-19 20-24 25-29 30-34 35-39 40-44 Religion	1(1.6) 18(29.5) 14(23) 18(29.5) 9(14.8)	18(7.3) 53(21.5) 99(36.1) 58(23.5) 18(7.3)	025
20-24 25-29 30-34 35-39 40-44 Religion	18(29.5) 14(23) 18(29.5) 9(14.8)	53(21.5) 99(36.1) 58(23.5) 18(7.3)	025
25-29 30-34 35-39 40-44 Religion	14(23) 18(29.5) 9(14.8)	99(36.1) 58(23.5) 18(7.3)	025
30-34 35-39 40-44 Religion	18(29.5) 9(14.8)	58(23.5) 18(7.3)	025
35-39 40-44 Religion	9(14.8)	18(7.3)	025
40-44 Religion			11/5
40-44 Religion			.025
		1(0.4)	
Muslim			
	55(90.2)	191(77.3)	
Orthodox	5(8.2)	52(21.1)	.068
Protestant	1(1.6)	4(1.6)	
Ethnicity	-()	-()	
Afar	50(82)	112(45.3)	
Amhara	7(11.5)	111(50.0)	
Oromo	4(6.5)	15(6.1)	< 0.001
Tigre	0(0.0)	6(2.4)	
*other	0(0.0)	3(1.2)	
Educational status			
Unable to read and write	53(86.9)	112(45.3)	
Only read and write	2(3.3)	15(6.1)	
Attended elementary school(1-8)	5(8.2)	45(18.2)	< 0.001
Attended junior or high s	0(0.0)	23(9.3)	
Attended (tertiary)education	1(1.6)	52(21.1)	
Marital status			
Currently married	55(90.2)	241(97.6)	
Divorced	4(6.4)	4(1.6)	.028
Widowed	2(3.3)	2(0.8)	
Occupational status			
Merchant	2(3.4)	33(13.4)	
Housewife	56(91.8)	146(59.1)	
government employee	1(1.6)	48(19.4)	< 0.001
daily labor	1(1.6)	9(3.6)	<0.001
**other	1(1.6)	11(4.5)	
Estimated monthly income			
<500	35(57.4)	60(24.3)	
500-1000	4(6.5)	34(13.8)	< 0.001
>1000	22(36.1)	153(61.9)	
Parity			
Primi(=1)	4(6.5)	41(16.6)	
multi Para(2-4)	40(65.6)	183(74.1)	< 0.001
grand Para (>=5)	17(27.9)	23(9.3)	

*= Sidama **= self-employed

J Midwifery Reprod Health. 2021; 9(3):2817-2827

Traditional practice and Associated Factors

X2 test was done to assess nutritional taboo with socio-demographic characteristics and parity of the mother. Then, age, parity, educational status, respondents' occupation status, and nutritional taboo were found significant (Table 3).

Table 5. Socio-demographic factors and parity associated with home delivery among the study participants, in Aysaita primary hospital, Aysaita town, Northeast, Ethiopia (n=308)

Variable (a)	Place of delivery		
Variable (s)	Home	Health facility	p-value
Mother's Age (years)			
15-19	9(5.6)	10(6.8)	
20-24	39(24.2)	32(21.8)	
25-29	50(31.0)	63(42.8)	
30-34	45(30.0)	31(21.1)	.305
35-39	17(10.6)	10(6.8)	.303
40-44	1(0.6)	1(0.7)	
Religion			
Muslim	135(83.8)	111(75.5)	
Orthodox	23(14.3)	34(23.1)	.133
Protestant	3(1.9)	2(1.4)	
Ethnicity			
Afar	106(65.9)	56(38.1)	
Amhara	42(26.1)	76(5.7)	< 0.001
Oromo	11(6.8)	8(5.4)	<0.001
Tigre	1(0.6)	5(3.4)	
*other	1(0.6)	2(1.4)	
Educational status			
Unable to read and write	108(67.1)	57(38.8)	
Only read and write	11(6.8)	6(4.1)	
Attended elementary school(1-8)	22(13.7)	28(19.0)	< 0.001
Attended junior or high s	6(3.7)	17(11.6)	<0.001
Attended (tertiary)education	14(8.7)	39(26.5)	
Marital status			
Currently married	151(93.8)	145(98.6)	.064
Divorced	6(3.7)	2(1.4)	.004
Widowed	4(2.5)	0(0.0)	
Occupational status			
Merchant	17(10.6)	18(12.2)	
Housewife	118(73.3)	84(57.1)	.012
government employee	16(9.9)	33(22.4)	.012
daily labor	6(3.7)	4(2.7)	
**other	4(2.5)	8(5.4)	
Estimated monthly income			
<500	60(37.3)	35(23.8)	020
500-1000	18(11.2)	20(13.6)	.038
>1000	83(51.5)	92(62.3)	
Parity			
Primi(=1)	19(11.8)	26(17.7)	0.000
multi Para(2-4)	112(69.6)	111(75.5)	< 0.001
grand Para (>=5)	30(18.6)	10(6.8)	
Stand Lata (* -0)	50(10.0)	10(0.0)	

*= Sidama **= self-employed

Furthermore, the mother's parity, ethnicity and educational status were significantly

associated with home delivery and abdominal massage (Table 4 and 5). Prohibiting colostrum

J Midwifery Reprod Health. 2021; 9(3):2817-2827.

Traditional Practice Affecting Maternal Health in Pastoralist Community

also were significantly associated with Age group, educational status, occupational status,

religion and ethnicity (Table 6).

Table 6. Socio-demographic factors and parity associated with abdominal massage among the study participants, in Aysaita primary hospital, Aysaita town, Northeast, Ethiopia (n=308)

Variable (s) Yes (%) No (%) p-value Mother's age (years) 15-19 16(6.6) $3(4.6)$ 20-24 61(25.1) 10(15.4) 25-29 95(39.1) 18(27.7) 30.34 54(22.2) 22(33.8) .014 35-39 16(6.6) 11(17.0) 40.44 40-44 1(0.4) 1(1.5) Religion 100(78.2) 56(86.2) 012 Orthodox 51(21.0) 6(9.2) .012 Protestant 2(0.8) 3(4.6) 2(18.5) Orthodox 51(21.0) 6(9.2) .006 Ethnicity 4 4 106(43.6) 12(18.5) Oromo 14(5.8) 5(7.7) .006 Tigre 5(2.1) 1(1.5) 4006 Educational status 20(.8) 1(1.5) 4006 Can't to read and write 109(44.8) 56(86.1) 0.001 Attended elementary school(1-8) 45(18.5) 5(7.7) .0001 Attended (tertiary)		Giving colostrum for newborn			
Mother's age (years) 15.19 16(6.6) $3(4.6)$ 20.24 $61(25.1)$ $10(15.4)$ 25.29 $95(39.1)$ $18(27.7)$ 30.34 $54(22.2)$ $22(33.8)$ 0.14 35.39 $16(6.6)$ $11(17.0)$ 40.44 $1(0.4)$ $1(1.5)$ ReligionMuslim $190(78.2)$ $56(86.2)$ 0.12 Orthodox $51(21.0)$ $6(9.2)$ 0.12 Protestant $2(0.8)$ $3(4.6)$ $12(18.5)$ Orthodox $51(21.0)$ $46(70.8)$ $46(70.8)$ Amhara $106(43.6)$ $12(18.5)$ 006 Oromo $14(5.8)$ $5(7.7)$ $.006$ Tigre $5(2.1)$ $1(1.5)$ $.006$ *other $2(0.8)$ $1(1.5)$ $.006$ *other $2(0.8)$ $2(3.1)$ $.006$ *tother $23(6)7.1)$ $60(92.3)$ $.0011$ Attended lementary school(1-8) $45(18.5)$ $5(7.7)$ Attended lementary school(1-8) $45(18.5)$ $5(7.7)$ Attended lementary school(1-8) $45(18.5)$ $5(7.7)$ Attended lementary school 1.81 $3(4.6)$ 1.11 Morital status 1.15 $.009$ Attended lementary school 1.81 $3(3.6)$ $2(3.1)$ Merchant $28(17.5)$ $7(10.8)$ Herchant $28(11.5)$ $7(10.8)$ Herchant $28(11.5)$ $7(10.8)$ Herchant $8(3.3)$ $2(3.1)$ Attended lementary school $3(3.0)$ $2(3.8)$ Gouren	Variable (s)				
15-1916(6.6) $3(4.6)$ $20-24$ $61(25.1)$ $10(15.4)$ $25-29$ $95(39.1)$ $18(27.7)$ $30-34$ $54(22.2)$ $22(3.3)$ $.014$ $35-39$ $16(6.6)$ $11(17.0)$ $40-44$ $1(0.4)$ $1(1.5)$ ReligionWMuslim $190(78.2)$ $56(86.2)$ Orthodox $51(21.0)$ $6(9.2)$ $.012$ Protestant $2(0.8)$ $3(4.6)$ EthnicityAfar $116(47.7)$ $46(70.8)$ Amhara $106(43.6)$ $12(18.5)$ Oromo $14(5.8)$ $5(7.7)$ $7igre$ $5(2.1)$ $1(1.5)$ Educational statusCan't to read and write $109(44.8)$ $56(86.1)$ Only read and write $109(44.8)$ $56(86.1)$ Orthored $5(2.1)$ $3(4.6)$ 181 Witewed $20.8)$ $2(3.1)$ Attended lementary school(1-8) $45(18.5)$ Orcup $5(2.1)$ $3(4.6)$ 181 Widowed $20.8)$ $2(3.1$	Mother's age (years)			•	
$\begin{array}{ccccc} 25-29 & 95(39.1) & 18(27.7) \\ 30.34 & 54(22.2) & 22(33.8) & .014 \\ 35-39 & 16(6.6) & 11(17.0) \\ 40-44 & 1(0.4) & 1(1.5) \\ \hline \begin{tabular}{lllllllllllllllllllllllllllllllllll$		16(6.6)	3(4.6)		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	20-24	61(25.1)	10(15.4)		
35-39 $16(6.6)$ $11(17.0)$ 40.44 $1(0.4)$ $1(1.5)$ Religion $10(78.2)$ $56(86.2)$ Muslim $190(78.2)$ $56(86.2)$ Orthodox $51(21.0)$ $6(9.2)$ $.012$ Protestant $2(0.8)$ $3(4.6)$ $816(4.6)$ Ethnicity $4670.8)$ $Amhara$ $106(43.6)$ $12(18.5)$ Oromo $14(5.8)$ $5(7.7)$ $.006$ Tigre $5(2.1)$ $1(1.5)$ $.006$ *other $2(0.8)$ $1(1.5)$ $.006$ Educational status $Can't to read and write$ $15(6.2)$ $2(3.1)$ Can't to read and write $15(6.2)$ $2(3.1)$ $.0011$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ $.0001$ Attended fuertiary)education $51(21.0)$ $2(3.1)$ $.0011$ Marital status $Currently married$ $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$ $.181$ Widowed $2(0.8)$ $2(3.1)$ $.181$ Widowed $2(0.8)$ $2(3.1)$ $.009$ daily labor $8(3.3)$ $2(3.1)$ $.009$ daily labor $8(3.3)$ $2(3.1)$ $.009$ stofter $9(3.7)$ $3(4.6)$ $.805$ Stolo $73(30.0)$ $22(33.8)$ <t< td=""><td>25-29</td><td>95(39.1)</td><td>18(27.7)</td><td></td></t<>	25-29	95(39.1)	18(27.7)		
40-44 $1(0.4)$ $1(1.5)$ Religion I Muslim190(78.2) $56(86.2)$ Orthodox $51(21.0)$ $6(9.2)$ $.012$ Protestant $2(0.8)$ $3(4.6)$ Ethnicity I Afar $116(47.7)$ $46(70.8)$ Amhara $106(43.6)$ $12(18.5)$ Oromo $14(5.8)$ $5(7.7)$ Oromo $14(5.8)$ $5(7.7)$ 006 *other $2(0.8)$ $1(1.5)$ *other $2(0.8)$ $1(1.5)$ Educational status I Can't to read and write $109(44.8)$ $56(86.1)$ Only read and write $15(6.2)$ $2(3.1)$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital status I I Currently married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$ $.181$ Widowed $2(0.8)$ $2(3.1)$ Occupational status I Merchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$ 0.09 $3(3.3)$ $2(3.1)$ **other $9(3.3)$ $2(3.1)$ **other $9(3.3)$ $2(3.6)$ Estimated monthly income I <500 $73(30.0)$ $22(33.8)$ $500-1000$ $31(12.8)$ $7(10.8)$ $500-1000$ $319(57.2)$ $39(16.0)$ $6(9.2)$ I	30-34	54(22.2)	22(33.8)	.014	
Religion190(78.2)56(86.2)Muslim190(78.2)56(86.2)Orthodox51(21.0) $6(9.2)$ Protestant2(0.8) $3(4.6)$ EthnicityAfar116(47.7)46(70.8)Amhara106(43.6)12(18.5)Oromo14(5.8) $5(7.7)$.006**other2(0.8)1(1.5)*other2(0.8)1(1.5)Educational statusCan't to read and write109(44.8)Can't to read and write15(6.2)2(3.1)Attended elementary school(1-8)45(18.5)5(7.7)Attended iunior or high s23(9.5)0(0.0)Attended (tertiary)education51(21.0)2(3.1)Marital statusCurrently married236(97.1)60(92.3)Divorced5(2.1)3(4.6).181Widowed2(0.8)2(3.1)009daily labor8(3.3)2(3.1)28(11.5).009daily labor8(3.3)2(3.1)45(18.8)1(1.5).009government employee48(19.8)1(1.5).00943(11.8)7(10.8)Housewife150(61.7)52(80.0)government employee48(19.8)1(1.5).009government employee48(19.8)1(1.5).00943(12.8)7(10.8).805Housewife9(3.7)3(4.6)Estimated monthly income43(3.2)2(3.3)<500-1000	35-39	16(6.6)	11(17.0)		
Muslim190(78.2) $56(86.2)$ Orthodox $51(21.0)$ $6(9.2)$ $.012$ Protestant $2(0.8)$ $3(4.6)$ $46(70.8)$ Atar $116(47.7)$ $46(70.8)$ Amhara $106(43.6)$ $12(18.5)$ Oromo $14(5.8)$ $5(7.7)$ Oromo $14(5.8)$ $5(7.7)$ Tigre $5(2.1)$ $1(1.5)$ *other $2(0.8)$ $1(1.5)$ Educational status $Can't to read and write$ $109(44.8)$ $56(86.1)$ Only read and write $15(6.2)$ $2(3.1)$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital status $Currently married$ $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$.181Widowed $2(0.8)$ $2(3.1)$ $2(3.1)$ Herchant $28(11.5)$ $7(10.8)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ 009 government employee $48(19.8)$ $1(1.5)$ $.009$ daily labor $8(3.3)$ $2(3.1)$ 450 **other $9(3.7)$ $3(4.6)$ $500-1000$ $31(12.8)$ $7(10.8)$ $500-1000$ $31(12.8)$ $7(10.8)$ $.805$ $500-1000$ $31(25.7)$ $3(655.4)$ $7(10.8)$ Parity $7(10.9)$ $.805$ $.805$ $7(10.9)$ $.805$ $.900(10.9)$ $.805$	40-44	1(0.4)	1(1.5)		
Orthodox $51(21.0)$ $6(9.2)$ $.012$ Protestant $2(0.8)$ $3(4.6)$ $4(4.6)$ Ethnicity $2(0.8)$ $3(4.6)$ Afar $116(47.7)$ $46(70.8)$ Amhara $106(43.6)$ $12(18.5)$ Oromo $14(5.8)$ $5(7.7)$ Tigre $5(2.1)$ $1(1.5)$ *other $2(0.8)$ $1(1.5)$ *other $2(0.8)$ $1(1.5)$ Educational status U Can't to read and write $109(44.8)$ $56(86.1)$ Only read and write $109(44.8)$ $56(86.1)$ Only read and write $15(6.2)$ $2(3.1)$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ Attended junior or high s $23(9.5)$ $0(0.0)$ Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital status U Currently married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$ $.181$ Widowed $2(0.8)$ $2(3.1)$ Merchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$ 0.09 $aily labor$ $8(3.3)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income $45(12.8)$ $7(10.8)$ $500-1000$ $31(12.8)$ $7(10.8)$ $.805$ $500-1000$ $319(57.2)$ $36(55.4)$ Parity 100.0 $6(9.2)$	Religion				
Protestant $2(0.8)$ $3(4.6)$ EthnicityAfar $116(47.7)$ $46(70.8)$ Amhara $106(43.6)$ $12(18.5)$ Oromo $14(5.8)$ $5(7.7)$ Oromo $14(5.8)$ $5(7.7)$ Tigre $5(2.1)$ $1(1.5)$ Educational status (0.8) $2(3.1)$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital status (0.00) <0.001 Currently married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$ $.181$ Widowed $2(0.8)$ $2(3.1)$ Merchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$ 0.09 $aily labor$ $8(3.3)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income $<$ <500 $73(30.0)$ $22(33.8)$ $500-1000$ $31(12.8)$ $7(10.8)$ 805 $500-1000$ $39(57.2)$ $30(16.0)$ $6(9.2)$	Muslim				
EthnicityAfar $116(47.7)$ $46(70.8)$ Amhara $106(43.6)$ $12(18.5)$ Oromo $14(5.8)$ $5(7.7)$ Oromo $14(5.8)$ $5(7.7)$ Tigre $5(2.1)$ $1(1.5)$ *other $2(0.8)$ $1(1.5)$ Educational status $Can't$ to read and write $109(44.8)$ $56(86.1)$ Only read and write $109(44.8)$ $56(86.1)$ 0001 Only read and write $15(6.2)$ $2(3.1)$ $4tended$ elementary school(1-8) $45(18.5)$ $5(7.7)$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ 0.001 Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital status $Currently$ married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$.181Widowed $2(0.8)$ $2(3.1)$ 009 daily labor $8(3.3)$ $2(3.1)$ $2(3.1)$ Merchant $28(11.5)$ $7(10.8)$ 009 daily labor $8(3.3)$ $2(3.1)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$ $.009$ daily labor $8(3.3)$ $2(3.1)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ $31(12.8)$ $7(10.0)$ $31(12.8)$ $7(10.8)$ $.805$ $500-1000$ $31(12.8)$ $7(10.8)$ $.805$ 51000 $39(57.2)$ $36(55.4)$ $7(10.8)$ Parity $7(10.8)$ $.60$	Orthodox	51(21.0)		.012	
Afar116(47.7) $46(70.8)$ Amhara106(43.6)12(18.5)Oromo14(5.8) $5(7.7)$ Oromo14(5.8) $5(7.7)$ Tigre $5(2.1)$ 1(1.5)*other $2(0.8)$ 1(1.5)Educational statusCan't to read and write109(44.8) $56(86.1)$ Only read and write15(6.2) $2(3.1)$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital statusCurrently married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$.181Widowed $2(0.8)$ $2(3.1)$ $2(3.1)$ MerchantAlso (61.7) $52(80.0)$ government employee $48(19.8)$ $1(1.5)$.009daily labor $8(3.3)$ $2(3.1)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income<500	Protestant	2(0.8)	3(4.6)		
Amhara $106(43.6)$ $12(18.5)$ Oromo $14(5.8)$ $5(7.7)$ Oromo $14(5.8)$ $5(7.7)$ Tigre $5(2.1)$ $1(1.5)$ *other $2(0.8)$ $1(1.5)$ Educational status $2(0.8)$ $1(1.5)$ Educational status $109(44.8)$ $56(86.1)$ Only read and write $109(44.8)$ $56(86.1)$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ Attended junior or high s $23(9.5)$ $0(0.0)$ Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital status $Currently$ married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$.181Widowed $2(0.8)$ $2(3.1)$ $2(3.1)$ Occupational status W (0.0) (0.0) government employee $48(19.8)$ $1(1.5)$ $.009$ daily labor $8(3.3)$ $2(3.1)$ (23.1) **other $9(3.7)$ $3(4.6)$ $.181$ Estimated monthly income $(500 - 73(30.0)$ $22(33.8)$ $500-1000$ $31(12.8)$ $7(10.8)$ $.805$ >1000 $139(57.2)$ $36(55.4)$ $.805$ Parity W $9(16.0)$ $6(9.2)$	Ethnicity				
Oromo $14(5.8)$ $5(7.7)$.006Tigre $5(2.1)$ $1(1.5)$.006*other $2(0.8)$ $1(1.5)$.006Educational status $2(0.8)$ $1(1.5)$.006Can't to read and write $109(44.8)$ $56(86.1)$ Only read and write $156(2.2)$ $2(3.1)$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital status U $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$.181Widowed $20(0.8)$ $2(3.1)$ Werchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$ 009daily labor $8(3.3)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income U $30(16.0)$ $22(33.8)$ $500-1000$ $31(12.8)$ $7(10.8)$ 1000 $139(57.2)$ $36(55.4)$ Parity U <	Afar	116(47.7)	46(70.8)		
Tigre $5(2.1)$ $1(1.5)$ $.006$ *other $2(0.8)$ $1(1.5)$ $.006$ *other $2(0.8)$ $1(1.5)$ $.006$ Educational status $2(0.8)$ $1(1.5)$ $.006$ Can't to read and write $109(44.8)$ $56(86.1)$ $.019$ Only read and write $15(6.2)$ $2(3.1)$ $.001$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ $.0001$ Attended iunior or high s $23(9.5)$ $0(0.0)$ <0.001 Attended (tertiary)education $51(21.0)$ $2(3.1)$ $.0091$ Marital status $Currently$ married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$ $.181$ Widowed $2(0.8)$ $2(3.1)$ $.009$ Divorced $5(2.1)$ $3(4.6)$ $.181$ Widowed $20(8.3)$ $2(3.1)$ $.009$ daily labor $8(3.3)$ $2(3.1)$ $.009$ daily labor $8(3.3)$ $2(3.1)$ $.009$ stronge $48(19.8)$ $1(1.5)$ $.009$ daily labor $8(3.3)$ $2(3.1)$ $.009$ stronge $73(30.0)$ $22(33.8)$ $.009$ 500-1000 $31(12.8)$ $.7(10.8)$ $.805$ >1000 $139(57.2)$ $36(55.4)$ $.1000$ Parity $.129(16.0)$ $6(9.2)$ $.129(16.0)$	Amhara		12(18.5)		
ligre $5(2.1)$ $1(1.5)$ *other $2(0.8)$ $1(1.5)$ Educational status $2(0.8)$ $1(1.5)$ Can't to read and write $109(44.8)$ $56(86.1)$ Only read and write $15(6.2)$ $2(3.1)$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ Attended junior or high s $23(9.5)$ $0(0.0)$ Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital status U U Currently married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$.181Widowed $2(0.8)$ $2(3.1)$ Occupational status U Merchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$.009 $43(12.8)$ $7(10.8)$ Housewife $9(3.7)$ $3(4.6)$ Estimated monthly income $4(12.8)$ $7(10.8)$ Stolo $73(30.0)$ $22(33.8)$ $500-1000$ $31(12.8)$ $7(10.8)$ Stolo $73(30.0)$ $22(33.8)$ $500-1000$ $31(12.8)$ $7(10.8)$ 805 805 >1000 $139(57.2)$ $36(55.4)$ Parity Y Y Primi (=1) $39(16.0)$ $6(9.2)$				006	
Educational statusCan't to read and write $109(44.8)$ $56(86.1)$ Only read and write $15(6.2)$ $2(3.1)$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ Attended junior or high s $23(9.5)$ $0(0.0)$ <0.001 Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital status $Currently$ married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$.181Widowed $2(0.8)$ $2(3.1)$ 0 Occupational status W V V Merchant $28(11.5)$ $7(10.8)$ 009 daily labor $8(3.3)$ $2(3.1)$ 009 daily labor $8(3.3)$ $2(3.1)$ 009 < 500 $73(30.0)$ $22(33.8)$ 805 >1000 $139(57.2)$ $36(55.4)$ 805 Parity V V V Primi (=1) $39(16.0)$ $6(9.2)$	Tigre	5(2.1)	1(1.5)	.000	
Can't to read and write $109(44.8)$ $56(86.1)$ Only read and write $15(6.2)$ $2(3.1)$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ Attended junior or high s $23(9.5)$ $0(0.0)$ Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital status $Currently$ married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$.181Widowed $2(0.8)$ $2(3.1)$ 0 Occupational status V V V Merchant $28(11.5)$ $7(10.8)$ 009 daily labor $8(3.3)$ $2(3.1)$ V **other $9(3.7)$ $3(4.6)$ 009 Stool $73(30.0)$ $22(33.8)$ 805 $500-1000$ $31(12.8)$ $7(10.8)$ 805 >1000 $139(57.2)$ $36(55.4)$ 805 Parity V V V Primi (=1) $39(16.0)$ $6(9.2)$	*other	2(0.8)	1(1.5)		
Only read and write $15(6.2)$ $2(3.1)$ Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ Attended junior or high s $23(9.5)$ $0(0.0)$ Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital status $Currently married$ $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$.181Widowed $2(0.8)$ $2(3.1)$ Occupational status V V Merchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$.009daily labor $8(3.3)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income $<$ 500 $73(30.0)$ $22(33.8)$ $500-1000$ $31(12.8)$ $7(10.8)$.805>1000 $139(57.2)$ $36(55.4)$ ParityPrimi (=1) $39(16.0)$ $6(9.2)$	Educational status				
Attended elementary school(1-8) $45(18.5)$ $5(7.7)$ $0(0.0)$ <0.001Attended junior or high s $23(9.5)$ $0(0.0)$ <0.001	Can't to read and write		56(86.1)		
Attended junior or high s $23(9.5)$ $0(0.0)$ <0.001 Attended (tertiary)education $51(21.0)$ $2(3.1)$ $Marital status$ Currently married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$.181Widowed $2(0.8)$ $2(3.1)$ 0 Occupational status $Marital status$ $Marital status$ Merchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$ $dily labor$ $8(3.3)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income $<$ <500 $73(30.0)$ $22(33.8)$ $500-1000$ $31(12.8)$ $7(10.8)$ >1000 $139(57.2)$ $36(55.4)$ Parity $Nartial status$ Primi (=1) $39(16.0)$ $6(9.2)$					
Attended junior or high s $23(9.5)$ $0(0.0)$ Attended (tertiary)education $51(21.0)$ $2(3.1)$ Marital status $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$ $.181$ Widowed $2(0.8)$ $2(3.1)$ 0 Occupational status $7(10.8)$ 009 Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$ $.009$ daily labor $8(3.3)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income $<$ 500 $73(30.0)$ $22(33.8)$ $500-1000$ $31(12.8)$ $7(10.8)$ $.805$ >1000 $139(57.2)$ $36(55.4)$ $Parity$ Primi (=1) $39(16.0)$ $6(9.2)$ 1000				<0.001	
Marital statusCurrently married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$.181Widowed $2(0.8)$ $2(3.1)$ Occupational statusMerchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$.009daily labor $8(3.3)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income<500	Attended junior or high s	23(9.5)	0(0.0)	<0.001	
Currently married $236(97.1)$ $60(92.3)$ Divorced $5(2.1)$ $3(4.6)$.181Widowed $2(0.8)$ $2(3.1)$ 0 Occupational statusMerchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$.009daily labor $8(3.3)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income <500 $73(30.0)$ $22(33.8)$ $500-1000$ $31(12.8)$ $7(10.8)$.805>1000 $139(57.2)$ $36(55.4)$ ParityPrimi (=1) $39(16.0)$ $6(9.2)$	Attended (tertiary)education	51(21.0)	2(3.1)		
Divorced $5(2.1)$ $3(4.6)$ $.181$ Widowed $2(0.8)$ $2(3.1)$ Occupational statusMerchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$.009 $daily labor$ $8(3.3)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income $<$ <500	Marital status				
Divorced $5(2.1)$ $3(4.6)$ $.181$ Widowed $2(0.8)$ $2(3.1)$ Occupational statusMerchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$.009 $daily labor$ $8(3.3)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income $<$ <500	Currently married	236(97.1)	60(92.3)		
Occupational statusMerchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$ $.009$ daily labor $8(3.3)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income <500 $73(30.0)$ $22(33.8)$ $500-1000$ $31(12.8)$ $7(10.8)$ $.805$ >1000 $139(57.2)$ $36(55.4)$ ParityPrimi (=1) $39(16.0)$	Divorced		3(4.6)	.181	
Merchant $28(11.5)$ $7(10.8)$ Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$ $.009$ daily labor $8(3.3)$ $2(3.1)$ **other $9(3.7)$ $3(4.6)$ Estimated monthly income $<$ <500	Widowed				
Housewife $150(61.7)$ $52(80.0)$ government employee $48(19.8)$ $1(1.5)$ $.009$ daily labor $8(3.3)$ $2(3.1)$ **other9(3.7) $3(4.6)$ Estimated monthly income<500	Occupational status				
government employee 48(19.8) 1(1.5) .009 daily labor 8(3.3) 2(3.1) **other 9(3.7) 3(4.6) Estimated monthly income <500	Merchant	28(11.5)	7(10.8)		
government employee48(19.8)1(1.5).009daily labor8(3.3)2(3.1)**other9(3.7)3(4.6)Estimated monthly income<500	Housewife	150(61.7)	52(80.0)		
daily labor8(3.3)2(3.1)**other9(3.7)3(4.6)Estimated monthly income<500	government employee	48(19.8)		.009	
**other 9(3.7) 3(4.6) Estimated monthly income					
Estimated monthly income 73(30.0) 22(33.8) 500-1000 31(12.8) 7(10.8) .805 >1000 139(57.2) 36(55.4) Parity Primi (=1) 39(16.0) 6(9.2)					
<500 73(30.0) 22(33.8) 500-1000 31(12.8) 7(10.8) .805 >1000 139(57.2) 36(55.4) Parity Primi (=1) 39(16.0) 6(9.2)	Estimated monthly income				
500-1000 31(12.8) 7(10.8) .805 >1000 139(57.2) 36(55.4) Parity 7 7 Primi (=1) 39(16.0) 6(9.2)		73(30.0)	22(33.8)		
Parity Primi (=1) 39(16.0) 6(9.2)	500-1000	31(12.8)	7(10.8)	.805	
Parity Primi (=1) 39(16.0) 6(9.2)	>1000				
	Parity				
	Primi (=1)	39(16.0)	6(9.2)		
multi Para(2-4) 173(71.2) 50(77.0)	multi Para(2-4)	173(71.2)	50(77.0)	205	
$\begin{array}{cccc} \text{grand Para} (>=5) & 31(12.8) & 9(13.8) \end{array} \\ \end{array} $. ,	. ,	.385	

*= Sidama **= self-employed

Discussion

This institutional-based cross-sectional study attempted to determine the prevalence and associated factors of cultural malpractices during pregnancy, delivery and postnatal period among women who gave birth in the last 12 months attending MCH ward in Aysaita primary hospital afar region, Northeast Ethiopia.

The current study result shows that the prevalence of nutritional taboo was 32.8%. This result was lower than the study result found in

Shashemene, which was 49.8% (13). Even if it seems to be lower, nutritional taboos have an extensive effect on pregnancy outcomes. However, our study result was higher than the study conducted in limmu genet, which was 19.1%(14). According to this finding nutritional taboo was significantly associated with educational status of mothers, which is similar to a study done in Shashemene Oromia Ethiopia (13). It shows that education has influence on avoiding nutritional taboos during pregnancy and its consequences.

According to cross sectional study conducted in Jimma zone limmu genet town, Out of 303 study participants, 58(19.1%) women practiced nutritional taboo, 67(22%) women practiced abdominal massage, and 116(38.3%) women gave birth at home(14). According to cross sectional study conducted in Ethiopia, Debre tabor, cultural malpractice among women of child bearing age is 25.6% (14). According to a study done on pregnant women in Hadiya zone, southern Ethiopia, more than half (65 %) avoided at least one type of food due to food taboos. According to this study, nearly half of the women (44.4%) consider milk and cheese to be taboo foods, followed by linseed (16%), and fatty meat (11.1%). Fear of a difficult delivery (51 percent), disclosures of the fetus (20 percent), and fear of abortion (9.75 percent)are all explanations for avoiding food (15).

Our study finding shows that abdominal massage during pregnancy was 17.2%. This finding was higher than that of study finding done in North Gonder, which was 12.1% (12). This result demonstrates that current study participants were practicing abdominal massage seemingly, which may have led to adverse outcomes during pregnancy. However, lower than a study conducted in meshenti, which was 29.7% of participants practiced abdominal massage during pregnancy (16). The variation may be due to difference in the study setting, ethnicity, and culture.

According to this study finding homebased childbirth was 52.3%. This study finding was seems lower than the study result found in Aysaita and dubti town Afar Ethiopia which was 54.2% it may be due to government is focusing more care to maternal and child health (17). In this research, parity and educational status were found to be important predictors of home birth. This is supported by a study conducted in Aysaita town, north-eastern Ethiopia (17).

The result of this study showed that mothers who did not gave colostrum were 21.1%. This study's results are consistent with the study conducted in limmu town in southern Ethiopia, which was 22.41% (14). However, the current study finding was lower the study done in North Ethiopia on complementary feeding, which was 10.75% (18). This discrepancy may be due to different study time, study setting and study design.

This study shows 64.3% of newborn initiated breastfeeding at early time, which is higher than the national Affar figure(7), which was 42%. Our study shows that prelacteal feeding was 24.4%, which is lower than Affar national figure (7), which was 41% according to Ethiopia Demographic and health survey 2016. This may be due to the Ethiopia Demographic and health survey sample size is very large. The study setting also including urban and rural areas, but comparable to a study done in Afar, which was 42.9%(19). This may be due to government interest raising community consciousness over time, emphasising on maternal and child health.

According to our study finding, 17.5% of participants washed their newborn babies immediately after birth. About 29.8% of respondents used unsterile utensils to remove the umbilical cord during home-based birth. This finding is higher than the study finding in limmu genet and south Gonder, which was 4.3% and 0.6%, respectively (14, 15). This may be due to the community of the Afar region is different from those community culturally.

The current study finding revealed that the practice of female genital mutilation was 51.7%. This finding is very low compared to the study finding of the Ethiopian demographic health survey in Afar, which was 91 %(7). This might be due to the government commitment to eradicate female genital mutilation to zero prevalence in 2030. Contrariwise, this study's result was higher than the result of the study done in Tigray regional state, which revealed that the practice of female genital mutilation was 23%. This deference may be explained by cultural and religious differences between the two regions(20).

Traditional Practice Affecting Maternal Health in Pastoralist Community

This study is an institution-based study that may not capture those respondents whose health-seeking behaviours are low. This study might introduce the possibility of recall bias. Furthermore, behavioral factors are not addressed. This research used a quantitative approach, which could not address the "why" questions in detail. Therefore, future research should focus on a qualitative approach to come up with additional findings.

Conclusion

The prevalence of cultural malpractice in the study area was found to be high. Health education and awareness creation focusing on the cultural malpractice using antenatal care visit opportunity and community mobilization is recommended to minimize or prevent the consequence of traditional malpractice.

Acknowledgements

We are thankful to Samara University, College of Medical and Health Science, Department of Midwifery for covering the cost of questionnaire duplication. We also want to express our gratitude to the Aysaita primary hospital administrator, staff, and data collectors, as well as the study participants.

Conflicts of interest

Authors declared no conflicts of interest.

References

- 1. Issayas SJA, Eritrea: UNFPA/UNICEF. Traditional beliefs and practices that affect the health of women and children in Eritrea. 1996.
- Granot M, Spitzer A, Aroian KJ, Ravid C, Tamir B, Noam RJWJoNR. Pregnancy and delivery practices and beliefs of Ethiopian immigrant women in Israel. Western Journal of Nursing Research. 1996;18(3):299-313.
- Kitila S, Molla W, Wedaynewu T, Yadessa T, Gellan M. Folk Practice During Childbirth and Reasons for the Practice in Ethiopia: A Systematic Review. Gynecology Obstetrics. 2018; 8(465): 2161-0932.1000465.
- 4. Issayas S. Traditional beliefs and practices that affect the health of women and children in Eritrea. Asmara, Eritrea: UNFPA/UNICEF. 1996.
- 5. Assefa D, Wassie E, Getahun M, Berhaneselassie M, Melaku A. Harmful traditional practices. The Carter Centre. 2005.
- WHO. Maternal mortality key facts: Word Health Organization; [cited 2019 Sebtember 19]. Available from: https://www.who.int/news-

room/fact-sheets/detail/maternal-mortality.

- 7. Central Statistical Agency (CSA) [Ethiopia] and ICF. 2016. Ethiopia Demographic and Health Survey 2016. Addis Ababa, Ethiopia, and Rockville, Maryland, USA: CSA and ICF.
- Basher T, Bannerman R, Rushwan H, Sharaf I. Traditional practice affecting the health of women and children, WHO EMRO technical 1992 volume 2.
- Choudhury N, Moran AC, Alam MA, Ahsan KZ, Rashid SF, Streatfield PK. Beliefs and practices during pregnancy and childbirth in urban slums of Dhaka, Bangladesh. BMC public health. 2012; 12(1): 791.
- Berg RC, Denison EJHcfwi. A tradition in transition: factors perpetuating and hindering the continuance of female genital mutilation/cutting (FGM/C) summarized in a systematic review. Health care for women international. 2013; 34(10): 837-59.
- 11. Tobin J. The international obligation to abolish traditional practices harmful to children's health: What does it mean and require of states?. Human Rights Law Review. 2009;9(3):373-96.
- 12. Zenebe K, Alem H, Merga A, Abate G, Taha H, Melese MJGO. Prevalence of cultural malpractice and associated factors among women attending MCH Clinic at Debretabor Governmental Health Institutions South Gondar, Amhara Region, North West Ethiopia, 2015. Gynecology Obstetrics. 2016; 6(371): 2161-0932.1000371.
- Zepro NB. Food taboos and misconceptions among pregnant women of Shashemene District, Ethiopia, 2012. Science Journal of Public Health. 2015; 3(3): 410-416.
- 14. Tola TN, Tadesse AH. Cultural malpractices during pregnancy, child birth and postnatal period among women of child bearing age in limmu genet town, southwest Ethiopia. Science Journal of Public Health. 2015; 3(5): 752-6.
- Demissie T, Kogi-Makau W. Food taboos among pregnant women in Hadiya Zone, Ethiopia. The Ethiopian Journal of Health Development. 1998; 12(1): 1-6.
- 16. Gedamu H, Tsegaw A, Debebe EJIjorm. The prevalence of traditional malpractice during pregnancy, child birth, and postnatal period among women of childbearing age in meshenti town, 2016. International journal of reproductive medicine. 2018; 1-7.
- 17. Abdella M, Abraha A, Gebre A, Surender R. Magnitude and associated factors for home delivery among women who gave birth in last 12 months in Ayssaita, Afar, Ethiopia-2016. Global Journal of Fertility and Research. 2017; 2(1): 030-039.
- 18. Tsegaye M, Ajema D, Shiferaw S, Yirgu R. Level of

J Midwifery Reprod Health. 2021; 9(3):2817-2827

exclusive breastfeeding practice in remote and pastoralist community, Aysaita woreda, Afar, Ethiopia. International Breastfeeding Journal. 2019; 14(1): 1-5.

- 19. Liben ML, Wuneh AG, Zepro NB, Mulugeta A. Factors associated with prelacteal feeding in Afar Regional State, Northeastern Ethiopia: a cross sectional study. International journal of research -Granthaalayah. 2017; 5(7): 116-27.
- 20. Setegn T, Lakew Y, Deribe K. Geographic variation and factors associated with female genital mutilation among reproductive age women in Ethiopia: a national population based survey. PloS one. 2016; 11(1): e0145329.

J Midwifery Reprod Health. 2021; 9(3):2817-2827.