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# Prevalence and Determinant Factors of Exclusive Breastfeeding Practices among Mothers of Children Aged Less than 12 Months Attending Governmental Maternal and Child Health Clinics in Jijiga City, Ethiopia

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## Abstract

**Background:** Breastfeeding is a natural food that serves as a complete source of infant nutrition for the first six months of life. Infants that are exclusively breastfed have a lower chance of becoming ill or dying from diarrhea and infections and are less likely to acquire pneumonia, meningitis, and ear infections than those that were not exclusively breastfed. Therefore, the aim of this study was to assess the prevalence and determinant factors of EBF practice among mothers of children aged less than 12 months. **Methods:** Institutional based cross sectional study was conducted among 361 mothers with infants less than 12 months selected from two governmental hospitals. Descriptive statistics were employed to analyze the data by using SPSS version 21 statistical software. **Result:** Three hundred forty six (95.8%) practiced breastfeeding, 187 (54%) of mothers initiated breastfeeding within one hour after delivery, 138 (39.8%) initiated breastfeeding with in the period 1 hour to 1 day and the rest, 21 (6.1%) initiated within 1 – 3 days. ANC follow up, most 312 (86.4%) mothers were attend ANC during their pregnancy, 303 (97%) of mothers were getting Health education on breastfeeding and 181 (50.1%) delivered at home. **Conclusion and Recommendation:** The overall breast feeding practices among mothers' were high, Culture was found to influence the practice of exclusive breast feeding practice, the mothers practice on breast feeding their child on demand, and the continued breastfeeding practice were high and should be strengthened.

**Key Words:** Breastfeeding, Health Care Services, Initiation, Jigjiga

## 1. Introduction

### 1.1 Background

Exclusive breastfeeding (EBF) has been defined by the WHO as the situation where “the infant has received only breast milk from his/her mother or a wet nurse, or expressed breast milk and no other liquids, or solids, with the exception of drops or syrups consisting of vitamins, minerals, supplements, or medicines”(1). Breastfeeding is a natural food that serves as a complete source of infant nutrition for the first six months of life. It contains all the necessary nutrients provided in a bioavailable and easily digestible form, protecting both mothers and children against illnesses and diseases with immunological properties (2). Breast milk contains essential fatty acids needed for the infant’s growing brain, eyes, and blood vessels and these are not available in other types of milk. Breastfeeding on demand at day and night at least 8 times in 24 hours will provide more milk as suckling

stimulates milk production (3). Infants that are exclusively breastfed have a lower chance of becoming ill or dying from diarrhea and infections and are less likely to acquire pneumonia, meningitis, and ear infections than those that were not exclusively breastfed (4). However, more than 85% of mothers worldwide did not follow WHO recommendation and only 35% of infants younger than four months was exclusively breastfed (7). Globally, almost half of the 10 million deaths of children younger than 5 years old every year are direct or indirect consequences of malnutrition. 41% of these deaths occur in sub-Saharan Africa and 34% in south Asia. Many of those deaths are associated with inappropriate breastfeeding practices (5, 6).

In Ethiopia national breastfeeding practices is poor because of traditional and cultural beliefs, low educational level, heavy workload of mothers, poor sanitary condition, poor maternal knowledge, age, parity, ANC service utilization and place of delivery. Ministry of health of Ethiopia has enhanced to optimal breastfeeding practice by developing training manuals and implementation guidance on breastfeeding. These have been incorporated into the primary health care system in line with the health extension program but breastfeeding practice remains far from global recommendation. EDHS2011 showed that the proportion of infants less than six months who received exclusive breastfeeding as 52% (7). Which improved slightly compared to EDHS2005 (49%) (8).

Despite a few local studies conducted in Ethiopia, no sufficient studies tried to assess the prevalence and determinants of breastfeeding practice in Ethio-Somali region. Therefore, the aim of this research was to assess the prevalence and determinant factors of EBF practice among mothers Ethio-Somali region, Ethiopia.

## **2. Methodology**

### **2.1. Study Area**

Jijjiga city is the capital city of Somali Regional state. It's located at 605 km to the east of the capital Addis Ababa. Jijjiga city has a latitude and longitude of 09°41'N and 41°51'E with an elevation of 1079 meters above sea level. It is characterized by arid and semi-arid climate with an altitude and annual rain fall ranges between 900-1150masl and 450 to 550mm/year respectively with high evaporation and percolation. Based on population projection 2007 in to 2018 the population of the city is estimated to be 277,560 from which the male accounts 149,292 while female are 128,268. The annual temperature is varying from 25 to 32 degree centigrade. There are private and governmental health facilities in the city but majority of the city's population is served by the government-owned and operated health facilities. Currently, there are one referral hospital, two hospitals and two health centers owned by government.

### **2.2. Study Design & Period**

Institutional based descriptive cross sectional study was conducted among women's having infants less than six months from February 2018 – May 2018.

**2.3. Source of population:** - were all mothers who were residents of jigjiga city. Study subject were all women having children aged 0-6 months during study period who met inclusion criteria.

### **2.4. Sample Size Determination**

The sample size was estimated by using a single population proportion formula by Epi info. Based on the following assumptions: expected EBP prevalence (p), 52%, (EDHS2011), 95% CI±1.96, precision error (d) 5% and allowing 10% non- response rate. The total sample size was 422.

### **2.5. Eligibility criteria**

**2.5.1 Inclusion criteria:** Mothers with their index child aged from 0 to 12 months who attend the MCH clinics

**2.5.2 Exclusion criteria:** Mothers who are acutely ill and unconscious and/or having acutely ill child will not be included in the study.

## 2.6. Sampling procedure

There are five governmental health facilities in Jigjiga city administration. Study subjects were obtained proportionally to the client flow from two hospitals selected randomly by using simple random sampling technique and all mothers with their index child less than 1 year who attend the selected government owned MCH clinics during the data collection period interviewed using convenience sampling technique until the predetermined sample size was obtained.

## 2.7. Data Collection Techniques

Data was collected using a self-administered questionnaire to the mothers by trained local data collectors who completed grade 10 and had previous experience. The questionnaire was adopted from different literatures and incorporated the local context, translated into local language (Af Somali). Training was given for data collectors and supervisor on collection technique and objective of the study, Questionnaire, sampling methods and securing informed verbal consent from the study participants for three day at jigjiga city by investigator. The questionnaire was pre-tested on 10% of total sample size at other district & the necessary arrangements & corrections were made to standardize & ensure its validity.

## 2.8. Data Analysis Technique

Data was cleaned, coded, and entered into Epi Data software version 3.1 and exported to SPSS version 21 statistic software. Descriptive statistics such as frequencies, proportions, and measures of central tendency and measures of variation were used to describe the distributions of variables.

## 2.9. Variables

### 2.9.1. Dependent Variables.

Exclusive breastfeeding practice

### 2.9.2. Independent Variables.

- **Socio-demographic variables-** Age, marital status, residence, occupation, maternal educational status, ethnicity, religion, monthly income, educational status, information access, sex of the child and age of child
- **Health service related factors-** Attendance of antenatal care services, number of antenatal visits, Provision of advice on breastfeeding by healthcare staff during ANC and postnatal care service
- **Obstetrics and Medical variables-** Place of delivery, birth attendance, Mode of delivery, birth order, Parity and birth interval.

## 2.10. Operational Definition

- **Exclusive breastfeeding-** infant receives only breast milk within 24 hours proceeding to six months.
- **Ever breastfeeding-** Breastfeeding at any point of time since birth
- **Maternal and child health clinic-** refers to EPI, under five OPD, Postnatal clinic
- **On demand breast feeding-** breastfeeding greater than or equal to 8 times per 24 hours
- **Optimal breast feeding-** relates to adherence to standard recommendations such as initiation of breastfeeding within one hour, exclusive breastfeeding for 6 months and introduction of safe , nutritious, age appropriate complementary food around 6 months, on demand breast feeding and giving colostrums.
- **Pre-lacteal feeding-** feeding of an infant with something other than breast milk during the first three days of life.
- **Timely initiation of breast feeding- putting** the neonate on the mother's breast to suckle within one hour (including one hour).

### 2.11. Ethical clearance

Ethical approval for this study was obtained from the ethical clearance committees of JJU. Official letter was written to Somali Regional Health Bureau and other concerned bodies to allow implementing the study. The objective and importance of the study was explained & informed consent was obtained from enrolled mothers. Privacy and confidentiality was ensured by omitting the names of the respondents from the questionnaire. Participants who were unwilling to participate in the study & those who went to quit from the study at any juncture were informed to do so without any restriction. Child care and nutritional advice was given to mothers by the data collectors during the data collection period.

## 3. Results

A total of 361 mothers' of children aged less than 24 months were included in this study and interviewed, yielding the response rate of 86%.

### 3.1. Socio-demographic characteristics of the Study population

One hundred twelve (31%) of respondents were within the age group of 20-24 years, considered as productive age group, while, 22 (6.2%) being in the age ranges 35 and above years old. Majority of the respondents 321 (88.9%) were married, 27 (7.5%) were single, and the rest 9 (2.4%) and 4 (1.2%), were widowed and separated, respectively. Majority of the study subjects 325 (90.2%) were Muslim by religion and a substantial amount 317 (87.8%) were Somali by ethnicity. Above Half of the respondents 199(55.2%) were grade 1-8, illiterate 61 (16.9 %) and the rest 101 (27.9%) were grade 9 and above. Regarding their occupation of the interviewee, house wife were predominant 177 (49%), followed by 72 (19.9%) business woman/merchant, 69 (19.2%), government employee, and the rest 29 (8.2%), 9 (2.4%) and 5 (1.3%) were daily labor, private organization and others respectively. Regarding about sex of infants 189(52.6%) were female while 172(47.4%) were male. One hundred ninety nine (51.1%) of infants were 3-6months age group while 162(48.9%) were less than 3 months age group. Most of respondent 176(48.8%) earn 501-1000 Ethiopian Birr per month while 33(9.2%) of respondent earn more than 1000ETB per month (Table 1).

**Table 1: Socio-demographic characteristics of mother & infants attending at MCH**

Variables	Frequency	Percent
<b>Mother's age</b>		
15-19	57	15.7
20-24	112	31
25-29	108	30
30-34	62	17.1
35+	22	6.2
<b>Current marital status</b>		
Married	321	88.9
Single	27	7.5
Widowed	9	2.4
Separated	4	1.2
<b>Religions</b>		
Muslim	325	90.2
Orthodox	31	8.5
Protestant	5	1.3
<b>Ethnicity</b>		
Somali	317	87.8
Amhara	27	7.4
Other	17	4.8
<b>Mothers' educational level</b>		

Illiterate	61	16.9
Primary (1-8)	199	55.2
Secondary and higher(9+)	101	27.9
<b>Mother's occupation</b>		
Housewife	177	49
Government employee	69	19.2
Daily labor	29	8.2
Business woman	72	19.9
Private Organization	9	2.4
Other	5	1.3
<b>Infant sex</b>		
Male	172	47.6
Female	189	52.4
<b>Age of infant</b>		
Less than 3 months	162	44.9
3-6 months	199	55.1
<b>Monthly income</b>		
≤500	103	28.5
501-1000	176	48.8
>1000	33	9.2
Don't know	49	13.5

### 3.2 Obstetrics history and health care services

Majority of respondents 183 (50.6%) were pregnant two – four times, 42 (11.7%) were pregnant five and above times, and 136 (37.7%) were pregnant only one time.

Regarding ANC follow up, most 312 (86.4%) mothers were attend ANC, and the rest 49 (13.6%) were not attend ANC throughout their pregnancy. About frequency of ANC visit, out of three hundred twelve mothers who attend ANC 228 (73%) were attended one to four time, 84 (27%) attended four to eight times. Mothers who attend ANC 303 (97%) of them were getting Health education on breastfeeding. Regarding about the place of delivery, almost half 181 (50.1%) delivered at home while the remaining 181 (50.1%) were delivered in health facilities, 152 (42.1%) delivered at hospital and 28(7.8%) at health centre. Regarding about the mode of delivery majority 349 (96.6%) mothers deliver through vaginal and the rest 12 (3.4%) of mothers gave birth with C/S. One hundred eighty one (50.2%) of mothers were assisted by health professional during delivery, 126 (34.9%) were attended by their relatives, 54 (14.9%) were assisted by traditional birth attendants. Majority of mothers 336 (93.1%) had not received postnatal follow up.

**Table 2: Distribution of obstetrics and health care services of mothers Attending at MCH**

Variable	Frequency	Percent
<b>Parity</b>		
1	136	37.7
2-4	183	50.6
5 and above	42	11.7
<b>History of ANC</b>		
Yes	312	86.4
No	49	13.6
<b>Number of ANC visit</b>		
1-4	228	73
5-8	84	27
>8	-	-
Don't remember	-	-

<b>Health education on BF during ANC</b>		
Yes	303	97
No	9	3
<b>Place of delivery</b>		
Home	181	50.1
Hospital	152	42.1
Health center	28	7.8
<b>Mode of delivery</b>		
Vaginal	349	96.6
C/S	12	3.4
<b>Birth attendant</b>		
TBA	54	14.9
Health professional	181	50.2
Relatives	126	34.9
<b>Postnatal follow up</b>		
Yes	25	6.9
No	336	93.1

Mothers were also asked about the information received during ANC visit. From those who had visited ANC facility, majority 303 (97.1%) were informed on BF at ANC visit. Among those mothers who were informed on BF, 158 (43.7%) were informed to breastfeed exclusively for six months and not to introduce pre-lacteal feeding and 162 (44.8%) of them were informed to initiate breast feeding within one hour and the rest 148(40.9%) were informed to breast feed during maternal or child illness.

**Table 3: Distribution to breastfeed exclusively for six months of mothers attending MCH**

Variable	Frequency	Percentage
Breastfeeding for 2yrs	142	39.3%
EBF for six months	203	56.2%
No pre-lacteal feeding	162	44.8%
Initiate BF within one hour	148	40.9%
Bf during maternal or child illness	71	19.6%

### 3.3 Breast feeding practice

Majority of mothers 346 (95.8%) practiced breastfeeding while 15(4.2%) of mothers never practiced breastfeeding. For mothers who did not ever breastfeed, the perceived reasons were mother can't go back to work or school 6 (40%), breastfeeding is painful 3 (20%), those mothers who afraid breasts suck 3 (20%) breasts are too small to feed the baby 1 (6.6%), and bottle feeding is enough 2 (13.2%).

### 3.4 Initiation of breastfeeding

All the study subjects were asked whether they have ever breastfed or not and for those who had ever breastfed they were also asked the time of initiation of breastfeeding to their child. Almost of mothers 187 (54%) initiated breastfeeding within one hour after delivery, 138 (39.8%) of mothers initiated breastfeeding with in the period 1 hour to 1 day and the rest, 21 (6.1%) initiated within 1 – 3 days. The distribution of timely initiation of breastfeeding versus history of ANC visit was assessed, accordingly from the total mothers who attended ANC service, 171 (57.3%) of them initiated within one hour, 121 (39.1%) initiated within 1-24 hour, 11 (3.6%) initiated within 1-3 days. But from those mothers who did not attend ANC service 16 (32.6%) initiated within one hour and the rest 17 (46.9%), 10 (%) and 6 (20.5%) were initiated within 1-24 hour, 1-3 days and ever not breast feed their child respectively. As shown on the graph below, having history of ANC visit, higher proportion of mothers initiated BF within one hour but lesser proportion of them initiated after 1-24 hour. (Figure 2)

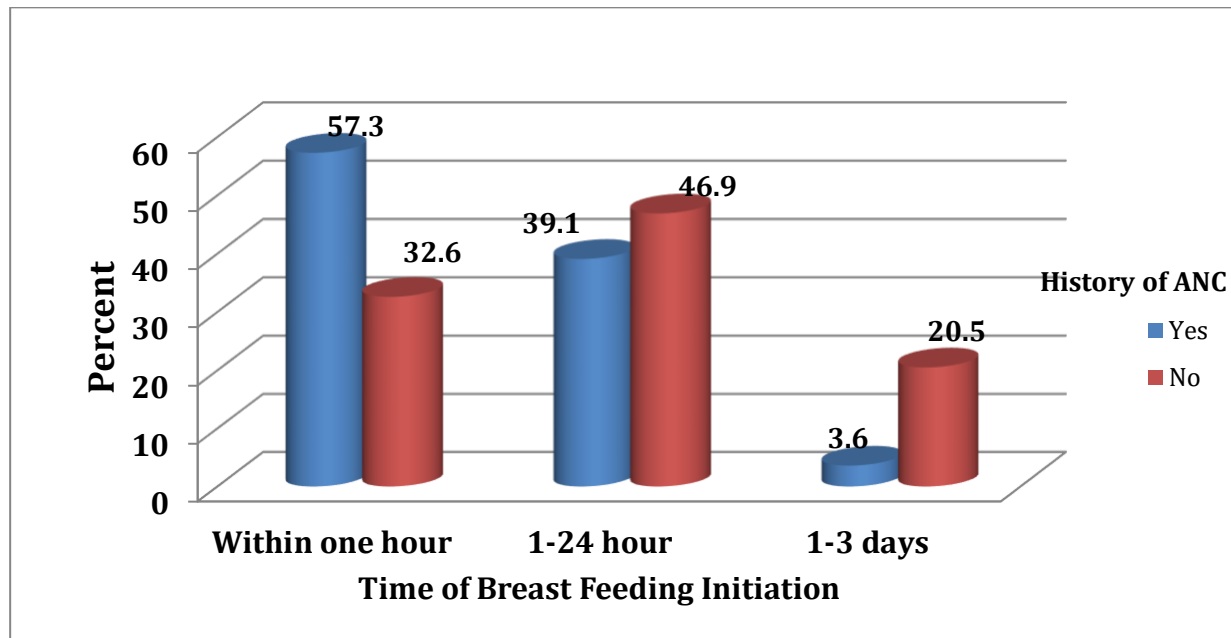


Figure 1. Mother's history of ANC by time of breastfeeding initiation

### 3.5 Colostrum and pre-lacteal feeding

Among mothers who practiced breastfeeding, 142 (41%) of them squeezed and threw the colostrum. Regarding the reason of throwing colostrum, most 76 (53.6%) believed it is dirty, 48 (33.8%) believed it creates abdominal pain to the baby and the rest 18 (12.6%) of mothers believed the baby was unable to suck.

Regarding pre-lactation 127 (36.7%) of mothers gave pre-lacteal food to their infants and the reason for introducing pre-lacteal feed 59 (46.5%) of them said it is due to culture/tradition, 28 (22.1%) reported maternal illness 22 (17.3%) mothers reported that creates child abdominal cramp, 18(14.1%) said Painful breast.

The common pre-lacteal food was butter reported by 55 (43.4%) mothers, followed by sugar solution 32 (25.2%), cow milk 22 (17.3%) and 18 (14.1%) were mentioned water. (Table 4)

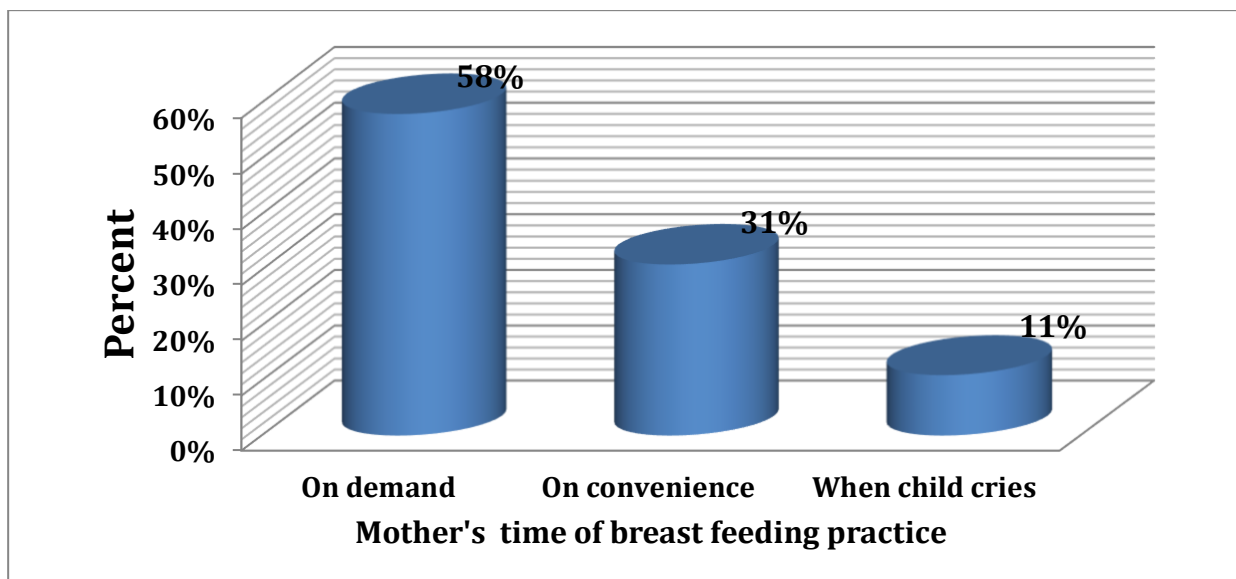
Table 4 Mother's breast feeding practice of infant and young children

Breast feeding practice of infant and young children		Frequency	Percent
<b>Have you ever breast fed the child?</b>	Yes	346	95.8
	No	15	4.2
<b>If no, reason for not breastfeeding? (More than one answer is possible) (n=15)</b>	BF takes too much time.	-	-
	Can't go back to work or school.	6	40
	BF will make my breasts sag	3	20
	BF is painful	3	20
	My breasts are too small to breastfeed	1	6.6
	With bottle feeding	2	13.4
<b>How long after birth did you first put the Child to breast? (n=346)</b>	Within 1 Hour	187	54
	1- 24hr	138	39.9
	1-3days	21	6.1
<b>Did you give the child pre-lactation food/fluid?</b>	Yes	127	36.7
	No	219	63.3
<b>If yes, what did you gave him (her)? (n=127)</b>	Butter	55	43.4
	Sugar solution	32	25.2



	Salt solution	-	-
	Cow's milk	22	17.3
	Water	18	14.1
<b>306 What was the reason for introducing prelacteal feed (n=127)</b>	Breast milk insufficiency	-	-
	Culture/tradition	59	46.5
	Maternal illness	28	22.1
	C/S delivery	-	-
	Child abdominal cramp	22	17.3
	Painful breast	18	14.1
<b>Did you squeeze out and throw the first milk?</b>	Yes	142	43.5
	No	204	56.5
<b>Why didn't you give it for your child? (n=142)</b>	It is dirty	76	53.5
	It creates abdominal pain to the baby	48	33.8
	Baby was unable to suckle	18	12.6

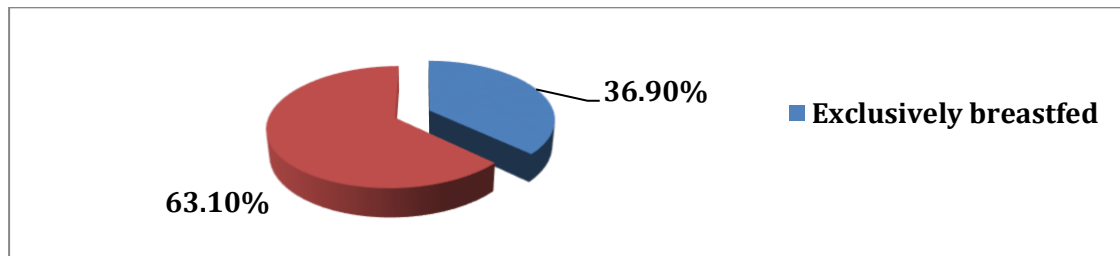
Regarding mother's time of breastfeeding practice, most 202(58%) mothers feed their child on demand, 108 (31%) reported that they feed on convenience and the rest 36 (11%) mothers feed when the child cries.



**Figure 2.** Mother's time of breastfeeding practice of infant and young children

### 3.6. Exclusive breastfeeding practice

Regarding exclusive breastfeeding, 128 (36.9%) of infants were exclusively breastfed and the rest 218 (63.1%) infants were not exclusively breastfed. Those two hundred eighteen mothers who introduced additional feeding were asked about the types of additional feeding 101 (46.4 %) introduced cow's milk, 67 (30.8 %) formula milk, 30 (13.7 %) porridge, 12 (5.5 %) sugar solution, and 8 (3.6 %) juice.



**Figure 3.** Mother's exclusive breastfeeding practice of infant and young children

### 3.7. Frequency and duration of breastfeeding

Respondents were asked whether they breastfed their child yesterday during the day or at night, 107 (52.4%) mothers feed and 97 (47.6%) were not feed. Among mothers who breastfeed their child 265 (76.6%) mothers feed almost for about more than eight times per day and the rest reported less than eight times per twenty four hours

From the total mothers who had ever breastfed their infant the continued breastfeeding for less than six months 154 (44.6 %), 6 to 12 months 113 (32.7 %), 13 to 24 months 68 (19.6 %) and for above 24 months was 11 (3.1 %). Regarding reason for breast feeding cessation were 127 (36.8 %) of mother reasoned out due to pregnancy, 166 (47.9%) of mothers reported that they felt it was time to stop, 41 (11.9 %) of mothers mentioned due to inadequate breast milk and the rest 12 (3.4%) of mothers reasoned due to maternal illness. Regarding with what utilities they use to feed their child, 23 (23.7%) use bottle, 18 (18.5%) feed using cup, 11 (11.4%) mothers use spoon, 39 (40.2%) not yet supplemented or weaned, and the rest 6 (6.2%) were use their hand/finger to feed the child.

**Table 5.** Frequency and duration of breastfeeding practice of infant and young children

Frequency and duration of breastfeeding		Frequency	Percent
At what age did the child stop breast feeding?	Less than six months	154	44.6
	6 to 12 months	113	32.7
	13 to 24 months	68	19.6
	24 <sup>+</sup>	11	3.1
Reason of breast feeding cessation	Pregnancy	127	36.8
	Oral contraceptive use	-	-
	Felt it was time to stop	166	47.9
	Inadequate breast milk	41	11.9
	Maternal illness	12	3.4
What did you use to feed the child	Not supplemented or weaned	39	40.2
	Bottle	23	23.7
	Cup	18	18.5
	Spoon	11	11.4
	Hand/finger	6	6.2

## 4. Discussion

This institution based descriptive cross-sectional study attempted to explore determinants of breastfeeding practice among mothers of children aged less than 24 months attending MCH clinics, in Jigjiga city, Somali Region, Ethiopia.

The dominance of breast milk over any other nourishment to infant and young children is clearly recognized, and over the years it has become more and more evident that it is the most ideal, safe and complete food that a mother can provide for their child. Breastfeeding will have the intended outcome if it is initiated timely, be exclusive for the first six months, pre-lacteal feed discouraged and colostrums provided to the neonate and continue on demand feeding up to two years.

In this study, it was found that 346 (95.8 %) of mothers had practiced breastfeeding. This result is more or less similar with the study in Ghana that shows 100%, Cameroon 98% and Ethiopian (96%) of mothers had breastfeeding practice (5,49 & 50.) But it is higher than the ever breastfeeding practice in Nigeria (82%), and ever breast feeding practice in United States of America (73.8%). This high rate of breastfeeding could be due to the fact that breast feeding is a norm in the society (25, 29).

Regarding timely initiation of breastfeeding, this study finding showed that 187 (54%) were initiated breastfeeding within one hour after delivery, almost 138 (39.9%) of them initiated breastfeeding with in the period 1 hour to 1 day and the rest 21 (6.1%) initiated within 1 – 3 days. This finding was higher than the study conducted in Turkey (35.2%); in Burkina Faso, (33.3%), in Chad (43.3%), and in Colombia (48.9%) (18). But lower than the study done in Eritrea (77.9%), Namibia, (80.9%) (28). The prevalence of timely initiation of breastfeeding in this study could possibly be explained in terms of higher proportion of mothers attended ANC which could be the important service delivery point to establish timely initiation of breastfeeding. In addition, majority of them delivered via normal vaginal delivery which could help them to initiate breastfeeding early.

Although Global strategy on infant and young child feeding recommends feeding colostrum and discourages pre-lacteal feeds, in this study two hundred four (59%) of mothers gave colostrums to their baby. This finding was lower than the finding in Nepal, 2005(22) where colostrum was given as the first fed in 86% of babies and south Gonder zone 85.6 %. (15). This finding higher than the data from Nigeria, 24% and consistent with the national finding in Ethiopia 45% of mothers provided colostrums for their babies (5, 26).

Regarding the prevalence of pre-lacteal feeding this study found that among mothers who practiced breastfeeding, 127 (36.7%) of mothers gave pre-lacteal food to their infants. Mothers were asked for the reason of throwing colostrums; 76 (53.6%) of them reported colostrum is dirty, 48 (33.8%) of them said it creates abdominal cramp and 18 (12.6%) mentioned that babies were unable to suckle the breast because of engorgement this is lower than study done in India revealed that pre-lacteal feeding (65.2%); Nigeria (75%); rural communities of Tigray (80%); Gursum, Somali region (79%), and consistent with Tigray regional (30.6%) but it is higher than the finding in south Gonder zone, Amhara region (11.1%). This might be due to cultural and traditional influence in the study area (5, 15, 17, 25 ). A study conducted in Gonder university hospital found that the commonest prelacteal food was Butter followed by sugar solution which is in agreement with this study finding the common pre-lacteal food was Butter 55 (43.3%) mothers, followed by sugar solution and cow milk 32 (25.2%). Tradition or culture was the most frequently mentioned reason 59 (46.5%) for the introduction of food for infants during the first three days after delivery followed by maternal illness 28 (22.1%), it was also consistent with study done in the rural communities of Tigray (32, 33). This study showed that the prevalence of exclusive breastfeeding was 128 (36.9%) infants in the age group 0-6months were exclusively breastfed which is lower than the WHO recommendations and the rest 218 (63.1%) infants were not exclusively breastfed. This finding is comparable with study done from India revealed that 7.8%, in Saudi Arabia (12.2%), Timor-Leste (30.7%), Nigeria (21.2%) and almost consistent with the finding of Ethiopian national prevalence (49%) and Adwa town, Tigray (41.8%) (20, 24, 25). The reason for this might be the result of the current policy implementation on the use of health extension workers in urban areas to promote breastfeeding (33, 34).

In this study mothers were asked about the frequency and duration of breastfeeding and it showed that on demand breastfeeding rate was found to be 202 (58%). This finding is less than study done in Kenya showed that the demand of breastfeeding was 90.6% of babies and with the study in rural communities of Tigray where on demand breastfeeding was 88% and the finding from Vietnam which was 96.7% (30, 31, and 33).

Similarly the continued breast feeding at one year and at two years in this study was 113 (32.7%) and 68 (19.6%) respectively. This finding was higher than the result from United State of America, where the continued breastfeeding rate at one year was 20.9% and, less than in Egypt where the continued breastfeeding rate at one year and at two years was 64.4% and 33.9% respectively (26, 31) Though breastfeeding is a common tradition in Ethiopia due to less urbanization where most of mothers become busy with different tasks.

## 5. Conclusion

This study touched tip of the ice-burg of breast feeding practice among mothers' of children aged less than 24 months attending maternal and child health clinics. The study revealed that the overall breast feeding practice among mothers' were high and should be appreciated. Though breast feeding is familiar to the communities, as nearly all the study mothers were informed to breastfeed exclusively for six months and not to introduce pre-lacteal feeding during ANC visit, but there is a gap and low coverage of exclusive breast feeding practice and few mothers initiate breastfeeding within one hour after delivery. Most of the mothers practice squeezed and threw the colostrums; provide pre-lacteal food to their infants because of culture/tradition. Culture/tradition was found to influence the practice of exclusive breast feeding practice in the study area. Whereas the study participant's practice on breast feeding their child on demand, and the continued breastfeeding practice were high.

## 5. Recommendations

- The Ethiopia Somali regional health bureau should strengthen the actions to empower women and promotion of exclusive breast feeding practice campaign are recommended to increase overall breast feeding practice among mothers.
- The Somali Regional Health Bureau should have to emphasize and promote an extensive health education programme to raise the level of mother's knowledge on breast feeding practice specifically about exclusive breast feeding, initiate breastfeeding within one hour after delivery and not to squeeze and throw the colostrum; and the Culture/tradition regarding pre-lacteal feeding to their infants
- Training should be considered by the woreda and regional health bureau to some selected mothers, traditional healers, traditional birth attendants and religious leaders to strength breast feeding practice and also to correct traditional inappropriate breastfeeding practices.

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**Abbreviations**

**ANC-** Antenatal Care  
**BF-** Breastfeeding  
**EBF-** Exclusive Breastfeeding  
**EPI-** Expanded Program of Immunization  
**FMOH-** Federal Ministry of Health  
**HEW-** Health Extension Worker  
**IF-** Infant Formula  
**IYCF-** infant and young child feeding  
**MCH-** Maternal and Child Health  
**NGO-**Non-Governmental Organizations  
**OC-** Oral Contraceptive  
**OPD-** Outpatient Department  
**PBF-** predominant Breastfeeding  
**PNC-** Postnatal Care  
**CS-** caesarean section  
**SPSS-** Statistical Package for Social Science  
**TBA-** Traditional Birth Attendant  
**TIBF-** Timely Initiation of Breastfeeding  
**UNICEF-** United Nations Children's Fund  
**USAID-**United States Agency for International Development  
**WHO-** World Health Organization

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**Competing interest**

We declare that there is no any competing interest