

# Prevalence of Exclusive Breastfeeding Practice and Its Associated Factors Among Mothers with Children Aged 6 - 12 Months in Hargeisa City, Somaliland

Ahmed Ismail Mohamed<sup>1</sup>, Yonatan Tegene<sup>2</sup>, Kiruja Jonah<sup>3</sup>

<sup>1</sup>Faculty of Public Health, University of Hargeisa, Hargeisa, Somaliland

<sup>2</sup>Collage of Health Science, Jigjiga University, Jigjiga, Ethiopia

<sup>3</sup>Collage of Health Science, University of Hargeisa, Hargeisa, Somaliland

## Email address:

mryasto@gmail.com (A. I. Mohamed), yonteg.emi@gmail.com (Y. Tegene), kirujajonah@yahoo.com (K. Jonah)

## To cite this article:

Ahmed Ismail Mohamed, Yonatan Tegene, Kiruja Jonah. Prevalence of Exclusive Breastfeeding Practice and Its Associated Factors Among Mothers with Children Aged 6 - 12 Months in Hargeisa City, Somaliland. *Science Journal of Public Health*. Vol. 8, No. 2, 2020, pp. 43-49. doi: 10.11648/j.sjph.20200802.13

Received: February 7, 2020; Accepted: March 16, 2020; Published: April 14, 2020

**Abstract:** Breastfeeding has many health benefits for both mother and infant. Breast milk contains all the nutrients an infant need in the first 6 months of life. Exclusive breastfeeding is the most widely known and effective intervention for preventing early-childhood deaths. Optimum breastfeeding practices can prevent 1.4 million deaths worldwide among children under five every year. The aim of this study was to assess the prevalence of exclusive breastfeeding and associated factors among mothers who have an infant six months up to one year old in Hargeisa, Somaliland. A community based cross-sectional study was conducted from November to December, 2019. A cluster along with simple random sampling technique was used to select sample population. A total of 357 mothers with children aged six months to one year old were included in this study. Data were collected using questionnaires administered at interview. Both bivariate and multivariate logistic regression analyses were carried out to identify factors associated with exclusive breastfeeding. The prevalence of exclusive breastfeeding was 68%. Those mothers who were heard information on EBF [AOR=14.243 CI (4.630, 43.816)], attend ANC service [AOR=25.412 (3.506, 184.179)], received breastfeeding counseling during antenatal care (ANC) [AOR=6.037 (2.878, 12.666)], aware that breastfeeding is enough the child up to six months [AOR=3.411 (1.536, 7.577)], and had fed colostrum [AOR=4.663 CI (2.107, 10.321)] were more likely to practice EBF than their counterparts. The proportion of exclusive breastfeeding in the city was below WHO Infant and Young Child Feeding recommendations. The practice of exclusive breastfeeding in mothers of under 6 months children was influenced by receiving information about EBF, colostrum discharging, awareness of breast feeding is enough the child up to six month and antenatal care visit were significantly associated with EBF practice ( $P < 0.05$ ).

**Keywords:** Exclusive Breastfeeding, Determinants, Community Based Cross-sectional Study, Hargeisa, Somaliland

## 1. Background of the Study

Exclusive breastfeeding (EBF) is defined as “an infant’s consumption of human milk with no supplementation of any type (no water, no juice, no nonhuman milk, and no foods) except for vitamins, minerals, and medications until six months” [1]. It is the best recommended infant feeding method for the first six months of life and has a protective effect against child morbidity and mortality [2]. Breastfeeding has many health benefits for both mother and infant. Breast milk contains all the nutrients an infant need in

the first 6 months of life. It is the most ideal, safe, and complete food that a mother can provide for her newborn [3]. Therefore, WHO recommends infants should be exclusively breastfed for the first 6 months in addition to its continuation with the addition of supplementary foods, for 2 years or more of life to achieve optimal growth, development and health [4]. Globally infant and young child deaths occur mainly due to inappropriate infant feeding practices and infectious diseases. Directly or indirectly, malnutrition has been responsible for 60% of 10.9 million under five deaths [4]. More than two third of these deaths were often associated

with inappropriate feeding practices during the first year of life. In order to reduce infant and young child mortality, exclusive breastfeeding has been recognized as one of the major interventions worldwide [3]. Colostrum, the “pre-milk” is a chock-full of antibodies to protect the newborn, its higher in protein and low in sugar to meet the needs of the newborn but after few days (usually three to four days) the breast milk becomes more in sugar and in volume than Colostrum because more calories and frequent feeding are needed to accelerate growth. Exclusive breastfeeding is important for the mothers too as it lowers their risks in postmenopausal osteoporosis and chances developing breast and ovarian cancers, breastfeeding the baby exclusively keeps the menstrual cycle at bay therefore causing lactation amenorrhea which could be a natural way of birth control [5]. Breastfeeding promotes growth and cognitive development of the child. Breast milk contains living cells and defensive factors which empowers the immune system therefore protecting the infant from infections and respiratory conditions. In many countries in the world including Somalia, the morbidity and mortality rates of infant and young children under five years of age are high. The main causes of these deaths are mainly due to inadequate breastfeeding practices with combination of diseases like infant diarrhea, pneumonia, malaria and measles [6]. The rate of exclusive breast feeding is low in Africa, especially in west and central Africa which is only 20%. Over the past 10 to 15 years exclusive breastfeeding rates have increased in the developing world as a whole and in many countries of Africa and Asia in particular, however, the progress has been modest, from 33% in 1995 to 37% in 2008 in the developing world [7]. In Somalia, the statistics on infant and young child feeding practices are alarming. Feeding practices relating to breastfeeding including breastfeeding within the first hour of an infant's life, exclusive breastfeeding for the first six months and continued breastfeeding for up to two years – are extremely poor at 23 per cent, 5.3 per cent and 26.8 per cent respectively [7]. Exclusive BF has progressively gained scientific support. Prevention of infections, allergies and chronic diseases and a favorable cognitive development are highlighted in the recent scientific literature [8]. Several factors are associated with low practice of exclusive breast feeding. These factors include maternal knowledge and attitude, maternal occupation, EBF counselling, Antenatal care, and postnatal care [9].

## 2. Research Methodology

### 2.1. Study Settings

A community based cross-sectional study was conducted on mothers with children aged six month to one year in Hargeisa, Somaliland in November – December, 2019.

Hargeisa is the capital city of Somaliland and locates in the northern part of Somalia. Hargeisa is on latitude 9°56'24" and longitude, 44°17'7" and 1,334 meters (4,377 feet) of above the sea level [10] with a population of approximately

1.5 million individuals. It should therefore provide an overview what is expected in the rest on the country.

### 2.2. Sample Size Determination

Single population proportional formula  $N = \frac{z^2 \cdot p \cdot (1-p)}{d^2}$  was used to determine sample size where N=sample size, Z=confidence interval at 95% which is 1.96, P=proportion of target population and r=margin of error.

In order to conduct this study following assumptions was taken; the proportion of women who exclusively breastfed to be 39% (prevalence of breast feeding in buntland state of Somalia according to UNICEF report 2016 [11]) and maximum margin of error to be 5%. Substituting to the formula, sample size was 366. After taking 10% of non-respondent rate, the final sample size designed for this study was 403 but 357 respondents returned complete questionnaires. This was 88.6% response return-rate which was acceptable since it was more than the 70% return-rate recommended in several science research.

### 2.3. Sampling Procedure

To select number of respondents to be interviewed from households cluster sampling method and simple random was used. The households of Hargeisa city was divided into 8 clusters. About equal households (50) was randomly selected from each cluster. One household will be selected at randomly and then followed by consecutively selecting the next –nearest household until 403 children aged 6-12 months found from 8 cluster

### 2.4. Study Variables

The dependent variable (outcome) of this study was whether the mother exclusively breastfed to her infant or not.

Socio-demographic profile of mothers (Age, educational level and occupational status), knowledge and attitude of mother towards exclusive breastfeeding, obstetric factors (mode of delivery, complication during pregnancy, parity gravidity and birth interval) and service related factors (ANC, PNC and BF counselling) are independent variables of the study.

### 2.5. Data Collection Procedure

Structured questionnaire was prepared after reviewing different published literatures and then adapted to the local situation. The questionnaire was first prepared in English and then translated to Somali language. Retranslation was also be made to see the consistency of both questionnaires. After this, the questionnaire was used in interviewing the study participants through face to face interview method. Data collection was facilitated by health professionals using structured and pretested questionnaire. Further, supervision was also made by the principal investigator.

### 2.6. Data Quality Control

To keep quality control, regular guidance from supervisor

was done and also the researcher itself was collected and analyze the data. The data collectors were trained for 2 days on the study instrument, consent form, how to interview and data collection procedures. Data was checked and rechecked for reliability and the questionnaire was pretested by 10% of sample size.

## 2.7. Data Processing and Analysis

Data was entered using EpiData version 3.1 and exported SPSS version 22 for analysis. Descriptive summary statistics such as frequency distribution, proportions (percentages) was used to describe different characteristics.

Relationship between dependent and independent variables was tested by using bivariate and multivariate logistic regression. Data was analyzed at 95% degree of confidence, 0.05 level of significance and 5% of margin of error.

## 2.8. Ethical Considerations

The study protocol was reviewed and approved by Ethical review committee of University of Hargeisa. Before data collection, written or oral agreement was obtained from the respondents such as parents and caregivers. Acceptance Permission of the study was obtained from every relevant authority in the Hargeisa city. Data collection was conducted confidentially.

# 3. Results

## 3.1. Socio-demographic Characteristics of Mothers and Their Children

Total of 357 mother-infant pairs were included in the study, making a response rate of 88.6%.

Fifty-seven percent of mothers were aged between 15 – 30 years old. About one-third of mothers were illiterate. Moreover about 72.8% of mothers were housewives (unemployed).

56% of children were aged between 9 – 12 months whereas the remaining 44% were aged between 6 – 8 months. In child's sex, 52.9% and 47.1% were male and female child respectively (Table 1).

**Table 1.** Socio-demographic characteristics of mother-child pairs in Hargeisa, Somaliland, 2019.

Variable	Categories	N	%
Maternal age (years)	15 - 30	206	57.7
	31 - 45	136	38.1
	46 - 60	15	4.2
	Total	357	100.0
	Illiterate	116	32.5
Maternal education	Elementary	77	21.6
	high school	68	19.0
	University	96	26.9
	Total	357	100.0
	Housewife	260	72.8
Maternal occupation	Employed	97	27.2
	Total	357	100.0
	6 – 8	157	44.0
Child's age (months)	9 - 12	200	56.0
	Total	357	100.0

Variable	Categories	N	%
Child's sex	Male	189	52.9
	Female	168	47.1
	Total	357	100.0

## 3.2. Knowledge of Mothers Towards Exclusive Breast Feeding

The majority 311 of study participants had received information about EBF (87.1%). The majority (85.2%) of mothers aware that breastfeeding is important for both mother and child. In terms of frequency of breastfeeding, 44% of mothers breastfed their children more than 10 times per day. More than two-third (69.7%) of mothers fed colostrum to their children. Concerning initiation, the half (50.1%) of mothers started immediately within first hour after birth (Table 2).

**Table 2.** Knowledge of mother towards exclusive breastfeeding in Hargeisa, Somaliland, 2019.

Variable	Categories	N	%
Have you ever heard exclusive breastfeeding	Yes	311	87.1
	No	46	12.9
	Total	357	100.0
Frequency of breastfeeding per day	< 10	200	56.0
	> 10	157	44.0
	Total	357	100.0
Do you think the breast milk is enough the child up to six month	Yes	304	85.2
	No	52	14.6
	Missed	1	0.3
	Total	357	100.0
	Yes	107	30.0
Have you discharge colostrum after delivery	No	249	69.7
	Missed	1	0.3
	Total	357	100.0
	First hour	179	50.1
	After 2 hour	120	33.6
Breastfeeding initiation	More than three hour later	57	16.0
	Missed	1	0.3
	Total	357	100.0

## 3.3. Obstetric Characteristics of Mothers

According the parity level of mothers, the 28.3% had more than three children, 28% had three children, 24.5% had two children and only 19.3% had their first child. The birth interval of children, the majority (81.7%) was 1 – 2 years interval. Considering with the mode of delivery 60.2%, 29.1% and 9.8% delivered normally, C-section and assisted respectively. Nearly all (90.1%) of mothers delivered in health centers while only 9.9% delivered in their home (Table 3).

**Table 3.** Obstetric characteristics of mothers related to EBF practice in Hargeisa, Somaliland, 2019.

Variable	Categories	N	%
Parity level of mothers	One	69	19.3
	Two	87	24.4
	Three	99	27.7
	More than three	101	28.3
	Missed	1	0.3
	Total	357	100.0
Birth interval	1 - 2 year	259	81.7
	3 - 4 year	58	18.3
	Total	317	100.0

Variable	Categories	N	%
Mode of delivery	Normal	215	60.2
	C - section	104	29.1
	Assisted	35	9.8
	Total	354	99.2
Place of delivery	Home	35	9.9
	Health care center	319	90.1
	Total	354	100.0

### 3.4. Health Care Service Related with Exclusive Breastfeeding

Nearly four in every five mothers had antenatal care service during their last pregnancy for at least one time (81.4%), but 54.9% of them received breastfeeding counselling during their visit. One-fourth of them attend antenatal care service more than three times (25.5%). Nearly half (49%) of mothers had postnatal care service, and majority (82.4%) of them were counseled breastfeeding practice (Table 4).

**Table 4.** Health care related factors with EBF practice of mothers-child pairs in Hargeisa, Somaliland 2019.

Variable	Categories	N	%
ANC attendance	Yes	290	82.4
	No	62	17.6
	Total	352	100.0
	Once	51	17.1
Frequency of ANC visit (298)	Twice	92	30.9
	Three times	64	21.5
	More than three times	91	30.5
	Total	298	100.0

**Table 5.** Binary logistic regression analyses of the factors associated with exclusive breastfeeding among mothers of children aged 6 – 12 months in Hargeisa, Somaliland, 2019.

Variable	Categories	EBF practice		COR (95% CI)	P-value
		No	Yes		
Maternal Age	15 – 30	61	145	1	
	31 – 45	52	84	0.680 (0.430, 1.074)	0.098
	>45	2	13	2.734 (0.599, 12.483)	0.194
Education	Illiterate	44	72	1	
	Elementary	34	43	0.773 (0.430, 1.388)	0.389
	High school	21	47	1.368 (0.724, 2.585)	0.335
	University	16	80	3.056 (1.587, 5.881)	0.001
Heard of EBF	Yes	79	232	10.572 (5.016, 22.285)	0.000
	No	36	10	1	
Frequency of BF	<10	73	127	1	
	>10	42	115	1.574 (0.998, 2.483)	0.051
Knowing the important of EBF	Yes	79	225	6.408 (3.371, 12.181)	0.000
	No	36	16	1	
Colostrum discharge	Yes	53	54	2.960 (1.840, 4.763)	0.000
	No	62	187	1	
Breastfeeding initiation	Within first hour	50	129	1.876 (1.010, 3.484)	0.046
	2 hrs. later	41	79	1.401 (0.734, 2.677)	0.307
	> 3 hrs. later	24	33	1	
BF enough the child up to 6 months	Yes	69	197	2.985 (1.818, 4.901)	0.000
	No	46	44	1	
Place of delivery	Home	18	17	1	
	Health facilities	97	222	2.423 (1.198, 4.902)	0.014
ANC visit	Yes	81	209	3.133 (1.786, 5.497)	0.000
	No	34	28	1	
BF counselling during ANC	Yes	36	160	4.444 (2.615, 7.554)	0.000
	No	51	51	1	
PNC visit	Yes	43	132	2.066 (1.310, 3.258)	0.002
	No	72	107	1	

Variable	Categories	N	%
BF counselling during ANC visit (298)	Yes	196	65.8
	No	102	34.2
	Total	298	100.0
PNC attendance	Yes	175	49.4
	No	179	50.6
	Total	354	49.4
BF counselling during pNC visit (171)	Yes	144	84.2
	No	27	15.8
	Total	171	100.0

### 3.5. Factors Associated with Exclusive Breast Feeding Practice

To identify factor associated with exclusive breastfeeding in children aged 6-12 months, initially bivariate analysis was done to select candidate variables for multivariate regression.

The result shows; that the maternal age, maternal education, receiving information about exclusive breastfeeding, frequency of breastfeeding, awareness the importance of EBF in both child and mother, awareness of that breastfeeding is enough the child up to six month, colostrum discharging, early initiation of breastfeeding, antenatal care visit, receiving breastfeeding counselling during ANC visit and postnatal care visit were associated with the exclusive breastfeeding practice compared to their respective counterparts ( $P < 0.2$ ).

However the child's sex, child's age, birth interval, parity and mode of delivery didn't show significant association with exclusive breast feeding practice (Table 5).

To control possible confounder effect of one variable to another, multiple logistic regression was used. Receiving information about EBF, colostrum discharging, awareness of breast feeding is enough the child up to six month and antenatal care visit were significantly associated with EBF practice ( $P < 0.05$ ). But, maternal age, maternal education, frequency of breastfeeding, awareness of importance of breastfeeding to both mother and child, breastfeeding initiation, place of delivery, mode of delivery and postnatal care visit were not associated with EBF practice.

Mothers who received information about EBF were 14.2 times more likely to breastfed their children exclusively [AOR=14.243 CI (4.630, 43.816)]. Those mothers who didn't discharge colostrum were 4.6 times more likely to

breastfed their children exclusively than those who discharge colostrum [AOR=4.663 CI (2.107, 10.321)]. The mothers who aware that breastfeeding is enough the child up to six month were 3.4 times more likely to breastfed their children exclusively compared to those who didn't aware that [AOR=3.411 (1.536, 7.577)]. For those who get antenatal care service were 25.4 times more likely to breastfed their children exclusively than those who didn't get ANC service [AOR=25.412 (3.506, 184.179)] and those who get breastfeeding counselling during their visit in ANC service were 6 times more likely to breastfed their children exclusively than those who didn't get counselling [AOR=6.037 (2.878, 12.666)] (Table 6).

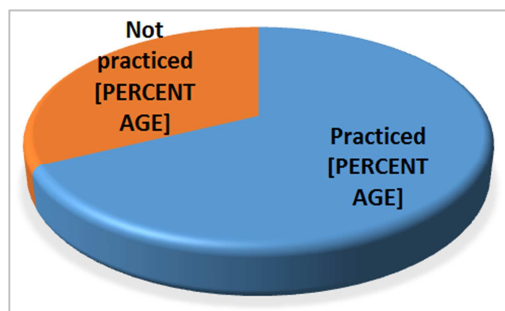
**Table 6.** Multivariate logistic regression analyses of the factors associated with exclusive breastfeeding among mothers of children aged 6 – 12 months in Hargeisa, Somaliland, 2019.

Variable	Categories	EBF practice		AOR (95% CI)	P-value
		No	Yes		
Heard of EBF	Yes	79	232	14.243 (4.630, 43.816)	0.000
	No	36	10	1	
Colostrum discharge	Yes	53	54	4.663 (2.107, 10.321)	0.000
	No	62	187	1	
BF enough the child up to 6 months	Yes	69	197	3.411 (1.536, 7.577)	0.003
	No	46	44	1	
ANC visit	Yes	81	209	25.412 (3.506, 184.179)	0.001
	No	34	28	1	
BF counselling during ANC	Yes	36	160	6.037 (2.878, 12.666)	0.000
	No	51	51	1	

## 4. Discussion

This study aimed to determine the prevalence of exclusive breastfeeding and associated factors.

The prevalence of exclusive breastfeeding was 68% (Figure 1) which is similar the study done in Iran 66.4% [12]. The rate of exclusive breastfeeding in this study was higher than the studies done in the United Arab Emirates, 1.9% [13] in Egypt, 9.7% [14] in Qatar, 18.9% [15] and Turkey, 54% [16]. However some previous studies shows higher rates of exclusive breastfeeding including Ethiopia [17] and Iran [18]. This variation might be due to methodological, time, socio-demographic, economic and cultural differences across areas.



**Figure 1.** EBF practice.

Several socio-demographic variables analyzed in multivariable logistic regression analysis showed that, all of

them was not significantly associated with exclusive breastfeeding.

About 87% of mother had heard about EBF. Those who heard EBF were 14.2 times more likely to breastfed exclusively to their child compared to those who didn't heard [AOR=14.243 CI (4.630, 43.816)]. This is similar to other studies conducted to other countries. Nigerian study showed the majority (88.0%) of the respondents had heard about EBF [19].

Furthermore the findings of this study revealed that, the mothers who fed colostrum were 4.6 times more likely to breastfed their child exclusively than those who discharged [AOR=4.663 CI (2.107, 10.321)]. This is support the results of survey from Ghana shows that the mothers who discarded colostrum were less likely to exclusively breastfeed their children than those who breastfed colostrum from birth [20]. This report could be due to, that colostrum helps the infant to make strong immune system as it contains white blood cells and antibodies. Later the infants becomes resistance to many infections that could reduce the chances of exclusive breastfeeding.

Regarding the recommended duration of EBF, about three of a four (74%) of mothers were answer EBF is enough the child up to six months. The mothers who aware that breastfeeding is enough the child up to six month were 3.4 times more likely to breastfed their children exclusively compared to those who didn't aware that [AOR=3.411 (1.536, 7.577)] which was lower than a study conducted in Ethiopia

in which 83.4% of mothers were knowledgeable about the recommended duration of EBF [21].

Having antenatal care was also significantly associated with EBF. Those mothers who get antenatal care service were 25.4 times more likely to breastfed their children exclusively than those who didn't get ANC service [AOR=25.412 (3.506, 184.179)]. The author of this study argued that this could be a reason for that, the mothers who attend ANC service had a lot medical and nutritional monitoring during their visits to ANC service. Similar findings were reported in Singapore [22].

Moreover receiving breastfeeding counselling was also associates the EBF outcomes in this study. For those mothers who get breastfeeding counselling during their visit in ANC service were 6 times more likely to breastfed their children exclusively than those who didn't get counselling [AOR=6.037 (2.878, 12.666)]. This is consistent with the study findings from Egypt [14], Nigeria [24]. This could be due to the start of an urban health extension program which increases the number of women who receive ANC services including breastfeeding counseling that in turn improves breastfeeding knowledge of mothers.

## 5. Conclusion

The proportion of exclusive breastfeeding in the city was below WHO Infant and Young Child Feeding recommendations. The practice of exclusive breastfeeding in mothers of under 6 months children was influenced by receiving information about EBF, colostrum discharging, awareness of breast feeding is enough the child up to six month and antenatal care visit were significantly associated with EBF practice ( $P < 0.05$ ).

## 6. Recommendations

Based on the findings of this study, I have the following recommendations:

1. Establishing Health extension workers that should mobilize the community using the health development army as key actors to transform views on breastfeeding practices in the study area towards achieving WHO recommendations in the immediate future.
2. Attention in health planning should be given to EBF promotion: health care providers and decision makers should comprehensively address issues to improve EBF practices in the community.
3. Improving access to information on recommended infant feeding during routine maternal and child health services and strengthening the nutrition counseling during antenatal and postnatal sessions.
4. Educating mothers about optimal child feeding practices at different occasion like holy day and other gatherings is better opportunity to enhance mothers' knowledge of child feeding practices.
5. Stakeholders must work intensively on a community based behavioral change and to further promote the

benefit of exclusive breastfeeding practices.

## 7. Limitation of the Study

This study can be interpreted in light of its strengths and limitations. Not using enough literatures from the surrounding towns on the study area in specific due to the unavailability of published journals on the topic of interest could be mentioned as a limitation. In addition to that, this study was cross-sectional study design, which made it difficult to establish causal effect relationship.

## References

- [1] UNICEF, WHO: Indicators for assessing infant and young child feeding practices. Part 1 Definitions. 2008, Geneva: WHO.
- [2] Vafaei, A., et al., Prevalence of exclusive breastfeeding during the first six months of life and its determinant factors on the referring children to the health centers in Mashhad, Northeast of Iran-2007. *J Appl Sci*, 2010. 10 (4): p. 343-348.
- [3] Horta, B. L., et al., Evidence on the long-term effects of breastfeeding: systematic review and meta-analyses. 2007.
- [4] Messele, T. and A. Kebede, Nutrition Baseline Survey Report for the National Nutrition Program of Ethiopia. Ethiopia: Ethiopian Health and Nutrition Research Institute, 2010.
- [5] Dieterich, C. M., et al., Breastfeeding and health outcomes for the mother-infant dyad. *Pediatric Clinics of North America*, 2013. 60 (1): p. 31.
- [6] Ahmed, A. H., Breastfeeding preterm infants: an educational program to support mothers of preterm infants in Cairo, Egypt. *Pediatric Nursing*, 2008. 34 (2): p. 125.
- [7] Communication, U. D. o., Tracking progress on child and maternal nutrition: a survival and development priority. 2009: Unicef.
- [8] Yngve, A. and M. Sjöström, Breastfeeding in countries of the European Union and EFTA: current and proposed recommendations, rationale, prevalence, duration and trends. *Public health nutrition*, 2001. 4 (2b): p. 631-645.
- [9] Mohamed, A. A., et al., Prevalence and Associated Factors of Exclusive Breastfeeding Practices Among Mothers of Infants Less Than Six Months in Galkayo, Somalia: A Community Based Cross-Sectional Study. *Sci J Public Health*, 2018. 6 (5): p. 133-9.
- [10] Government, H. L., 2016.
- [11] UNICEF, UNICEF 2016 Somali infant and Young child nutrition Assessment. <https://reliefweb.int/sites/reliefweb.int/files/resources/2016-Somali-IYCN-Assessment-Final-Report.pdf>, 2016.
- [12] Veghari G, M. A., Abdollahi A., Breastfeeding status and some related factors in northern Iran.. *Oman Med J*. 2011; 26: 342-348.
- [13] H., R., Patterns and determinants of breastfeeding and complementary feeding practices of Emirati Mothers in the United Arab Emirates. *BMC Public Health*. 2013; 13: 171.

- [14] Ghwass A, A. D., Prevalence and Predictors of 6-Month Exclusive Breastfeeding in a Rural Area in Egypt. *Breastfeeding medicine* 2011; 6 (4): 191-6.
- [15] S, A.-K., S. HA, and S. NA., Breastfeeding practice and determinants among Arab mothers in Qatar. *Saudi Med J*. 2012; 33: 436–443.
- [16] M, A., et al., Factors influencing the duration of exclusive breastfeeding in a group of Turkish women. *J Hum Lact*. 2001; 17: 220–226.
- [17] Lenja, A., et al., Determinants of exclusive breastfeeding practice to infants aged less than six months in Offa district, Southern Ethiopia: a cross-sectional study. *International breastfeeding journal*, 2016. 11 (1): p. 32.
- [18] Roudbari, M., S. Roudbari, and A. Fazaeli, Factors associated with breastfeeding patterns in women who recourse to health centres in Zahedan, Iran. *Singapore medical journal*, 2009. 50 (2): p. 181.
- [19] Mbada, C. E., et al., Knowledge, attitude and techniques of breastfeeding among Nigerian mothers from a semi-urban community. *BMC research notes*, 2013. 6 (1): p. 552.
- [20] I., S., Exclusive breastfeeding and family influences in rural Ghana: a qualitative study (Master's thesis). Malmö: Malmö University, 2013.
- [21] Maeza, M., D. Mesele, and K. Zelalem, Factors associated with exclusive breastfeeding practices in Debre Berhan District, Central Ethiopia. *International Breastfeeding Journal*, 2015. 10: p. 23.
- [22] Su, L.-L., et al., Antenatal education and postnatal support strategies for improving rates of exclusive breast feeding: randomised controlled trial. *Bmj*, 2007. 335 (7620): p. 596.
- [23] Agho, K. E., et al., Determinants of exclusive breastfeeding in Nigeria. *BMC pregnancy and childbirth*, 2011. 11 (1): p. 2.