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Assessment of Exclusive Breast-Feeding Practice and Associated Factors Among Mothers of Children Under Six Months in Arbaminch Town, Ethiopia, 2022 G.C

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Abstract

Background*: Breastfeeding is a natural food that is a complete source of infant nutrition for the first six months of life. The World Health Organization and other entities recommend that newborns be exclusively breastfed for the first six months without additional food or drink. Mothers' breast milk is believed to provide the newborn with all the necessary nutrients for its development. However, despite the wealth of evidence supporting the exclusive breastfeeding practice, its coverage has been indicated in the literature to be far below the recommended level in many parts of the world, especially in low- and middle-income countries. Several factors have also been indicated to be associated with exclusive breastfeeding practice.*

Objective: *To assess EBF practice and associated factors among mothers of children less than six months in Arab Minch town in 2022.*

Methods: *An institutional-based cross-sectional study was used to assess the status of EBF practice and associated factors among mothers of children under six months old in Arba Minch town. The sample size was calculated using a single population proportion formula, and the final sample size was 402. In this study, a systematic random sampling technique was used. Data was checked, coded, and entered into SPSS (Statistical Package for Social Science) version 2 5 for analysis.*

Results: *In this Study, 391 mothers participated, making a response rate of 97.2%. The prevalence of exclusive breastfeeding among mothers was 60.2 %. Mothers with education levels above secondary level were six times more likely to breastfeed exclusively than those who didn't attend formal education AOR (95%CI)6.021(2.877-12.603). Mothers who were housewives were two times more likely to exclusively breastfeed than government employees AOR (95%CI) 2.432 (1.031-5.740).*

Conclusion: *In this Study, the prevalence of exclusive breastfeeding practices (60.2 %) among women with infants under six months of age was low compared to the WHO recommendation that every woman breastfeed their children exclusively for the first six months. From the empirical result, the educational status of women and mothers' Occupations were*

statistically significant factors affecting exclusive breastfeeding practices.
Recommendation: *Health facilities need to make further efforts to promote the use of maternal health care services for those who don't visit the health facility at the community level and strengthen continuous, exclusive breastfeeding counseling. Governments should improve their policy towards maternity leave and increase antenatal coverage.*

Keywords: Exclusive Breastfeeding, Associated Factors, Among Mothers, Children Under Six Months

Abbreviations

- **AMT** Arba Minch Town
- **ANC** Antenatal care
- **EBF** Exclusive breastfeeding
- **EDHS** Ethiopian Demographic and Health Survey
- **ETB** Ethiopian birr
- **P.I.** Principal Investigators
- **PNC** postnatal care
- **UNICEF** United nation's international children's emergency fund
- **WHO** World Health Organization

Introduction

Background

Exclusive breastfeeding only gives breast milk to the infant, without any additional food or drink, not even water, in the first six months of life, except mineral supplements, vitamins, or medicines [1, 2]. Infants should be breastfed on demand- as often as the child wants, day and night. No bottles, teats or pacifiers should be used [1]. The WHO and UNICEF recommend initiating breastfeeding within the first hour after birth, exclusively breastfeeding for the first six months of age, and continuing breastfeeding for up to two years or beyond in addition to adequate complementary foods [3, 4]. However, nearly 2 out of 3 infants are not exclusively breastfed for the recommended six-month rate, which has not improved in 2 decades.

Breastfeeding is a natural food that is a complete source of infant nutrition for the first six months of life. It contains all the nutrients in a bioavailable and easily digestible form, protecting mothers and children against illnesses and diseases with immunological properties [5]. It contains essential fatty acids needed for the infant's growing brain, eyes and blood vessels, which are not available in other types of milk. Breastfeeding lowers the incidence of many childhood illnesses, such as diarrhea, pneumonia, sudden infant death syndrome, and diabetes mellitus [6]. Also, breastfeeding supports healthy brain development and is associated with higher performance on intelligence tests among children and adolescents [7].

In mothers, breastfeeding has been shown to decrease the frequency of bleeding, postpartum depression, breast cancer, ovarian and endometrial cancer, as well as facilitating weight loss [8]. The lactation amenorrhea method is an essential choice for postpartum family planning [4, 8] EBF is a significant public health strategy for improving children's and mother's health by reducing child morbidity and mortality and helping health care costs in society [9]. Every year, optimal breastfeeding practices can prevent about 1.4 million deaths worldwide among children under five [10].

Many factors contribute to creating a positive environment for breastfeeding. At the national level, policies guaranteeing parenteral leave and the right to breastfeed in the workplace are critical, as are restrictions on the marketing of breastmilk substitutes. Within health facilities, mothers need information and support to breastfeed immediately after birth and beyond. Positive social norms that support and encourage breastfeeding, including in public spaces, empower mothers to breastfeed. In communities, support is provided by trained counselors and peers and by men and husbands.

Statement of the Problem

Despite the well-recognized multiple benefits of exclusive breastfeeding, the coverage of exclusive breastfeeding is shallow globally as compared to the WHO recommendation of 90% coverage. Globally, only 38% of infants aged 0 to 6 months were exclusively breastfed in WHO 2014 [11]. The prevalence of EBF among infants under six months of age in developing countries indicated that only 39% of the infants were exclusively breastfed in 2010. In Ethiopia, breastfeeding is an almost universal practice among mothers, but the proportion of EBF infants less than six months of age was low at 59 % in 2019 [12]. Many studies in Ethiopia indicated the different prevalence of EBF in other areas. Debre tabor was 52%, Tigray 70.8%, and Oromia region was 71.3% [13-15].

The low practice of EBF in Ethiopia is attributed to various maternal and child factors, such as having an infant aged 2-3 months, giving birth in a health facility, being a housewife in Occupation, receiving advice on infant and colostrum feeding, which are contributing factors to practice EBF. The mother's age and access to postnatal care were also encouraged to practice EBF. Mothers who received breastfeeding counseling during pregnancy and supported by their husbands were other encouraging factors [16]. Better maternal education, marital status, good wealth index and lower child age are more likely to practice EBF [17].

To increase EBF practices, integrated multi-level programs of advocacy and social mobilization that made progress in behavior and social change at individual, cultural, and institutional levels were used, and there were rapid and significant increases in breastfeeding to data collected in 16 countries. The programs involve action across levels: the national level-including the adoption of legislation on the international code of marketing of breast milk substitutes and maternal protection for working women; the health system level-including counseling and support to help ensure that optimal breastfeeding practices are implemented at critical contact points such as antenatal care, maternity facilities and child health clinics; the community level-including counseling, support and communication by family members, community leaders, community health workers and mother to mother support groups. Through this program, six countries have increased EBF by more than 50 % of the population [18].

Despite all the above studies made in Ethiopia, more data on our study area needs to be collected. Therefore, this Study aims to assess the status of EBF practice and associated factors in Arba Minch town in June 2020.

Significance of the Study

This Study will help to understand EBF practices and associated factors, which are essential measures to reduce mortality and morbidity among children. Moreover, the data will help information for service providers and makers understand to what extent EBF is being implemented, the underlying factors affecting it, and what changes might be required. The mothers will also benefit from having adequate Knowledge about EBF, benefit from the use of EBF, and save from extra expenses for breastmilk substitutes. As exclusively breastfed children have fewer infection rates and a shorter hospital stay, as shown in research, hospitals will also benefit by using their resources effectively. It can induce another researcher to explore further factors attributed to the low prevalence of EBF in AMT.

Literature Review

Prevalence of Exclusive Breast Feeding

Exclusive breastfeeding is feeding infants only breast milk, be it directly from the breast or expressed, except drops or syrups consisting of vitamins, mineral supplements or medicine. It is affected by various maternal and child-related factors such as educational level, cultural belief, place of residence, number of births and space between children, maternal age, mothers' domestic work and economic status [19].

Globally, about 40% of infants were exclusively breastfed, and this is expected to rise to 50% by 2025. Although the rates of EBF for the past two decades have been increasing, it is still a long road to achieving the 100% global target coverage recommended by UNICEF [20].

Despite the WHO recommendations and benefits of EBF, only 39% of newborns worldwide were put to the breast within one hour of birth, and only 37% of infants were exclusively breastfed. In Sub-Saharan Africa, 20% of women reported exclusive breastfeeding of their last-born infant. In North Africa, the rate of exclusive breastfeeding is 41, 44% in Asia, and the lowest in Latin America at 30%, 23% in West Africa, 39% in eastern/south Africa, 42% in East Africa, 59.3% in Ethiopia, 65.6% in afar, 61.8% in Oromia region, 71.3% in bale global,63.8% in SNNP,70.5% in Halabja [21, 22].

In a 2020 study conducted among EBF mothers in East Africa, sixteen studies were included in the review. This review indicates that almost 96.2% of mothers had heard about EBF, 84.4% were aware of EBF, and 49.2% knew that the duration of EBF was only the first six months. In addition, 42.1% of mothers disagreed, and 24.0% strongly disagreed that giving breast milk to a newborn immediately and within an hour is important, and 47.9% disagreed that discarding the colostrum is essential. However, 42.0% of mothers preferred breastfeeding their babies for the first six months breast milk alone. In contrast, 55.9% had practiced exclusive breastfeeding for at least six months [23].

In a 2020 study conducted in Burao District, Somaliland, out of 464 participants, the prevalence of exclusive breastfeeding practice was 20.47% (95% CI 18.84, 23.63%). Almost all mothers breastfed their youngest child at least once in their lifetime. About 419 (90.3%) of the mothers were still breastfeeding their children during the study period. Of all respondents, only 36 (7.8%) of the mothers expressed and discarded their colostrum; 18 (50%) of these mothers who spoke believed that colostrum causes abdominal cramps.

A study conducted in Tanzania reported that more than 91% of mothers received antenatal care.

In a 2016 study conducted in Debre Tabor Town, Northwest Ethiopia, out of 453 study participants, almost all 452 (99.8%) children had ever breastfed at some point. Of those who had ever breastfed, 356 (78.6%) of the mothers-initiated breastfeeding within one hour of birth, 441 (97.3%) had fed colostrum, and 116 (25.6%) of mothers gave one or more pre-lacteal feeds [24].

In a 2013 study conducted in Jimma Town southwest, Ethiopia, among 410 study participants, 220(53.7%) (95% CI: 0.451-0.572) had good Knowledge, while 190 (46.3%) (0.234-0.672) had poor Knowledge about breastfeeding practice. Among mothers who had ever breastfed, 312(76.1%) mentioned that breastfeeding should be initiated within one hour after delivery, and 98(23.9%) initiated breastfeeding within one hour to one day. Regarding timely initiation of breastfeeding, a 34-year-old mother with a one-month-old infant made the following remark, "...As usual, most mothers initiate breastfeeding after one and half hours. I initiated breastfeeding after 4 hours because I had abdominal cramps and associated illnesses". Similarly, a nurse from Jimma University Specialized Hospital stated that mothers who deliver at health institutions started breastfeeding as soon as possible since we counsel and advise them about the benefit of early initiation of breast milk for infants and mothers, but mothers who deliver at home didn't provide breast milk soon due different cultural beliefs and attitudes [25].

In a 2012 study conducted in Bale Goba District, South East, Ethiopia, Of the total mothers (668) who had ever breastfed their infant (98.7%), about 96.3% were breastfeeding at the time of the survey. The prevalence of exclusive breastfeeding for infants under six months in the study area was 71.3%, as measured by the last 24-hour recall period preceding the survey date. The median duration of exclusive breastfeeding for infants under six months was three months. The median frequency of exclusive breastfeeding for infants under six months per day was 6. The results of month-specific lifetime exclusive breastfeeding analysis showed that the majority, 88.8% of infants were breastfed exclusively for two months, while 84.4% of infants were breastfed solely for 2 to 3 months of age [26].

In a 2017 study conducted in Guzman District, Northwest, Ethiopia, Among all mothers (506) first six months of age (95% CI 70.8, 79.1). In this Study, among mothers with male infants, 73% practiced exclusive breastfeeding, while 77.2% of the mothers with female infants did so. Similarly, among mothers who health professionals attended during delivery, 78.4% practiced EBF, while only 43.8% of the mothers attended by relatives or friends breastfed their infants exclusively. The incidence of exclusive breastfeeding in this work was relatively high compared to previous studies. A mother's Occupation, giving birth at health

facilities, and the provision of counseling about breastfeeding after delivery were significantly associated with EBF practice. Therefore, health institutions should encourage hospital births and increase breastfeeding counseling after delivery [27].

In 2013 and 2014, a study was conducted in Halaba Special Woreda, SNNP, Ethiopia, about exclusive breastfeeding for the 0-6 months age group. The prevalence of exclusive breastfeeding was (70.5%) The practice of exclusive breastfeeding mothers who participated in the Study was influenced by the awareness of mothers about the benefit of exclusive breastfeeding, antenatal follow-up, postnatal follow-up, early initiation of breast milk within one hour and advice about EBF during ANC, PNC and delivery. Furthermore, the family's average monthly income, education, and unemployment were the predictors of EBF. Strategies that target improving awareness among women at health facilities and community levels help to improve exclusive breastfeeding. Working mothers were more likely not to breastfeed their babies exclusively. So, the promotion of EBF for working mothers through the working environment is recommended.

Factors Associated with Exclusive Breast Feeding

Regarding associated factors, studies revealed that different maternal and health service-related factors influenced EBF; maternal educational level, current marital status, place of residence, employment, economic status of mothers, institutional delivery, history of antenatal and postnatal care, age of the infant, breastfeeding counseling during pregnancy and place of delivery were identified as significantly associated factors of exclusive breastfeeding practice among mothers of infants less than 6 months of age, were some of the factors associated with EBF practice[28, 29].

Health Care Associated Factors

Antenatal Care (ANC) is one of the fundamental strategies recommended to reduce the risk of maternal and neonatal mortality in both developing and developed countries. During ANC visits, different nutritional and other health-related education from healthcare professionals are provided, which could significantly contribute to the practice of exclusive breastfeeding. This could be because mothers who had ANC visits may receive different nutritional and health-related education from health professionals during their follow-up. These might have a great impact on exclusive breastfeeding. Another conceivable explanation could be the increased Knowledge and attitudinal changes due to the information provided by the healthcare professional about infant feeding and the nutritional values of breast milk Mothers who received breastfeeding counseling during pregnancy practiced EBF double of their counterparts.

Institutional delivery encourages infants to receive skin-to-skin contact from their mothers, increasing the likelihood of timely initiation of breastfeeding, exclusive breastfeeding and prolonged duration of breastfeeding. Mothers who gave birth at a health institution were almost 2.2 times more likely to practice exclusive breastfeeding than those who gave birth at home. This might be because mothers who gave birth at health institutions have an excellent opportunity to receive postnatal counseling regarding the importance of EBF, good position and attachment to breastfeeding from healthcare professionals.

Socio Economic Factors

The mother's educational level, average family monthly income, and support from the husband were identified as statistically significant factors for exclusive breastfeeding practice. Mothers who did not attend formal education and mothers who attended elementary schools were 68 and 52% less likely to exclusively breastfeed their children than those who attended secondary school and above. Full-time maternal employment is essential to the low rates of exclusive breastfeeding practice. In the first six months, full-time employed mothers were 57% less likely to practice exclusive breastfeeding than mothers not in paid employment in Ethiopia, 60.42%.

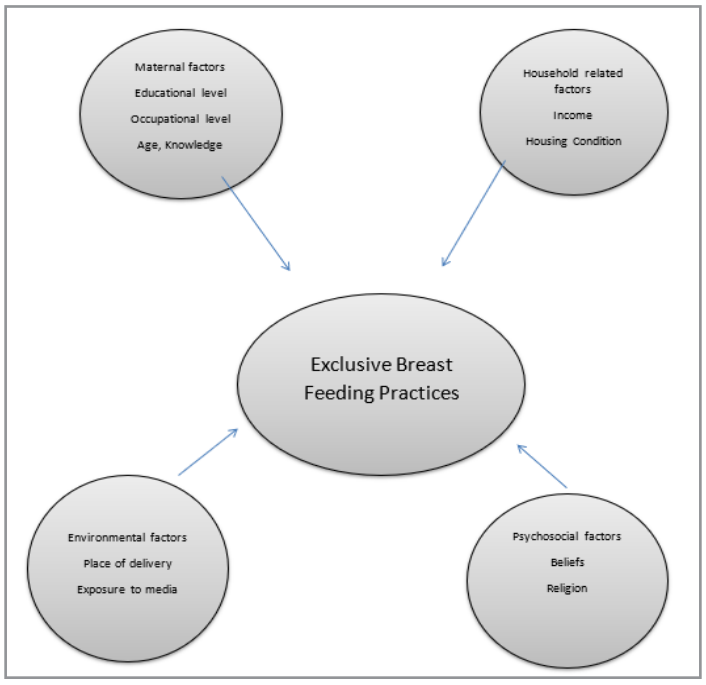


Figure 1: Conceptual framework

Objective

General Objective

- To assess Exclusive Breastfeeding practice and associated factors among mothers of children less than 6 months who visited Arbaminch Governmental Health Institution in 2022.

Specific Objectives

The Specific Objectives of the Study were;

- To assess the EBF practice among mothers who have children less than six months visiting Arbaminch Governmental Institution in 2022
- To assess factors associated with exclusive breastfeeding practice among mothers with children less than six months visiting Arbaminch Governmental Institution in 2022.

Method and Materials

Study Area

This study was conducted from June to July in Arba Minch town in Gamo Zone, 505 km south of Addis Ababa, the country's capital city. Arba Minch Town has four sub-cities; within the four sub-cities, it has 12 administrative kebeles. According to the information obtained from the District Health Office, the total population size of the Town was estimated to be 1,920,430 from the 2021 census. There is 1 General Hospital, one primary hospital, two health centers, 20 clinics, 11 health posts, and 13 pharmacies that provide health services for the community. The Study will be conducted on mothers with children attending health services for less than six months.

Study Design and Period

An institution-based cross-sectional Study was conducted over six weeks from June to July 2022.

Source Population

All mothers with children under six months visited EPI and under five OPDs of health institutions in Arba Minch Town.

Study Population

All selected mothers have children aged less than six months attending EPI and under five OPDs of health institutions in Arba Minch Town.

Study Unit

Individual mothers who have a child aged less than six months.

Inclusion and Exclusion Criteria

Inclusion Criteria

All selected mothers have children aged less than six months attending EPI and under five OPDs of health institutions in Arba Minch Town.

Exclusion Criteria

Mothers who don't breastfeed at all due to various reasons.

Sample Size Determination

The sample size was calculated using a single proportional population formula based on the following assumption; 95% confidence interval, we used the prevalence from research made in Arbaminch town at 2018 E.C., which is 53.9 %

n = Z2 p(1-p) / w2

Where n= Sample size

Z= Confidence interval (1.96)

p = Prevalence=53.9%=0.53

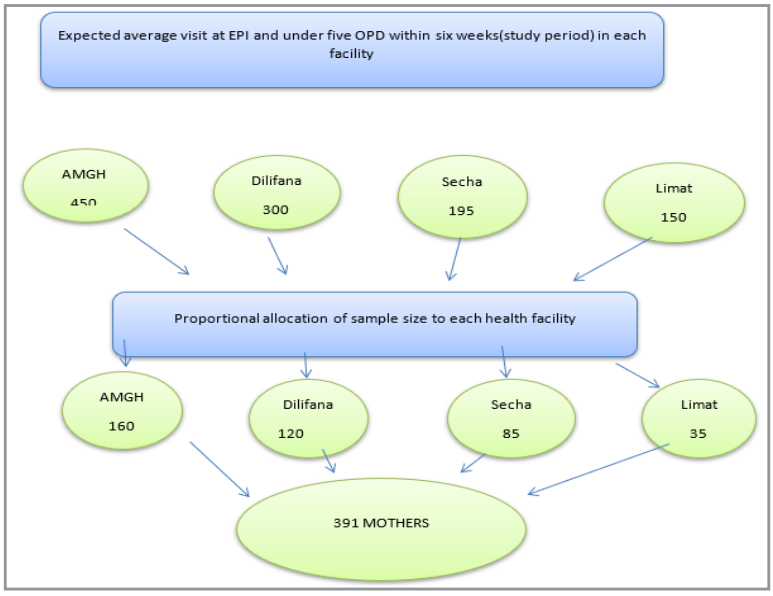
w= margin of error = 5% = 0.05

Therefore n= (1.96)2 * o.53(1-o.53)/ o. o52 n = 382

By considering 5% non-response rates and yielding a final sample size of 401.

Sampling Technique

Systematic random sampling was employed to select study participants. The study was conducted on mothers with children under six months attending EPI and under five OPD services in the health institutions of Arba Minch town, which are Arba Minch General Hospital, Dilfana Primary Hospital, Shecha Health Center and Limat Health Centers. The K value for systematic sampling was determined considering the flow of mothers at the EPI and under five OPDs of the respective health institutions, and it was 2 in Arbaminch General Hospital and Secha Health Center and 1, 4 in Dilifana Primary Hospital and Limat Health Center respectively. The mothers were approached after they received the services, and the purpose of the Study was explained to them.



Study Variable

Dependent Variable

Maternal Exclusive Breast-Feeding Practice.

Independent Variable

Maternal factors (age, educational level, Knowledge about EBF, parity, Occupation, HIV status), Household factors (income, housing condition), Environmental factors (exposure to media, place of delivery), psychosocial and cultural factors (beliefs, religion).

Operational definitions and Definition of Terms

Exclusive Breastfeeding. The infant has received only breast milk from their mother, or expressed breast milk from their mother, or expressed breast milk and no other liquids, except drops or syrups consisting of vitamins, minerals supplements or medicine.

A Neonate is a child under 28 days of age (WHO)

The Infant is a period from 28 days to 1 year of age (WHO)

Adequacy of Breastfeeding is defined as feeding a newborn at least 8 to 12 times per day, and the newborn sleeps immediately after feeding and having adequate urination.

Knowledge about EBF: It assesses mothers' Knowledge about EBF duration, frequency, attachment, and positioning during breastfeeding.

Data Collection tool and Procedure

Data was collected using a semi-structured, interviewer-administered questionnaire. The Questionnaire was prepared in English. The Questionnaire has six sections. The first section assesses the sociodemographic characteristics of respondents; the second section is about child-related questions; the third is about Knowledge of EBF; the fourth section assesses the adequacy of breastfeeding; the fifth is about experiences during pregnancy; and the last is about the birth and maternity period.

Group members collected the Data. Before data collection, the mothers were explained the Study's purposes, and verbal consent was obtained.

Data Quality Assurance

The Questionnaire was translated into the Amharic language using a translation and back translation procedure. First, two translators translated the English version into Amharic. Then, another translator translated the Questionnaire into English. The three versions were compared, and inconsistencies were resolved with discussion. Before data collection, all the data collectors were discussed, and a common understanding was reached. After the data was collected, it was checked for completeness and consistency.

Data Processing and Analysis

After the data was collected, it was checked for completeness and consistency and entered into SPSS v .26 statistical software for analysis. After data cleaning, frequencies, proportions, means and standard deviation were determined and are presented using texts, tables and figures. Bivariate binary logistics regression analysis was employed to determine factors associated with EBF. Those significantly associated variables on bivariate analysis were entered into multivariate logistics regression to control for confounders. $P<0.25$ for bivariate and $P<0.05$ for multivariate analysis were used to declare statistical significance.

Ethical Consideration

Ethical clearance for the Study was obtained from the Arbaminch University Institutional Health Research Ethics Review Committee, and permission was obtained from the College of Medicine and Health Sciences. Verbal consent was obtained from each participant. Participation in the Study was voluntary, and participants were informed of their right not to participate if they did not want to participate and the right to withdraw from the Study at any point during the interview. Moreover, the confidentiality of the information was ensured through anonymous questionnaires and by keeping the data secure. The first page of the Questionnaire provided complete information to the study participants regarding the purpose and nature of the research.

Dissemination of the Result

After the completion of the Study, the final report will be submitted to the School of Medicine, Arba Minch University. The reports were also submitted to the Arba Minch Town administration health office and other stakeholders. Efforts will be made to publish the Study's findings in a scientific journal.

Results

Sociodemographic Characteristics of the Participants

Of 402 mother-infant pairs sampled, 391 participated in the Study, making the response rate 97.2%. The age of respondents ranged from 19 to 42 years old. The mean age was 30.08 years, with a standard deviation (S.D.) of 9.49 years. Half (50.8%) of the study participants were 20 to 29 years old. More than half, 241 (61.6%) of the respondents were Protestant Christians, followed by 124 (31.7%) Orthodox Christians. The majority of the participants (70.1) were Gamo, followed by 88 (22.5%) of Amhara ethnic group (Table 1). Two hundred twenty-seven (58.1%) mothers had no formal education, while 104 (26.6%) had a grade 1–8 educational level. About sixty percent of the participants have an average monthly household income. About thirty-eight percent of the participants have an average monthly household income of 2000-3000 Ethiopian birr, and 165(42.2%) of husbands' educational status was primary (Grade 1-8).205(52.4%) gave birth to a male infant, and 230(58.9%) infants were between the ages of 4-6 months.

Table 1: Sociodemographic Characteristics

Variable name	Category	Frequency	Percent
Age of mother	<19	11	2.8%
	20-29	151	38.7%
	30-39	185	47.0%
	>40	45	11.3%

Age of mother	Protestant	241	61.6%
	Orthodox	124	31.7%
	Muslim	26	6.6%
Ethnicity	Gamo	274	70.1%
	Amhara	88	22.5%
	Oromo	5	1.3%
	Other	24	6.1%
Mothers educational	No formal education	227	58.1%
	Primary (grade 1-8)	104	104%
	Secondary (grade 9-12)	40	12.4%
	Above secondary	20	3.06
Occupation of the mother	Housewife	173	44.2%
	Student	44	11.3%
	Private	54	13.8%
	Government	120	30.7%
Sex of child	Male	205	52.4%
	Female	186	47.6%
Infant age	<1 month	15	3.8%
	2 -4month	146	37.3%
	4-6 month	230	58.9%
Husbands educational status	No formal education	1	0.3%
	Primary(grade 1-8)	165	42.2%
	Secondary (grade 9-12)	156	39.9%
	Above secondary	69	17.6%
Average monthly income of the household	<1000	27	6.9%
	1000-2000	106	27.1%
	2000-3000	152	38.9%
	4000-5000	50	13.5%
	>5000	50	13.5%

Obstetric and Health Care Related Factors of the Participants

Most mothers in the Study, 94.6% (370), have heard about EBF .214(54.7%) of them heard about EBF from the health center during ANC follow-up. Sixty percent of them gave birth to their current child at a health facility, and 252 (64.5%) gave birth via spontaneous vaginal birth. Three hundred and sixty-six (88.5%) of the mothers attended PNC. Sixty-five percent of the mothers had two to four children, 285(72.9%) received help from health professionals, and 318(81.3%) were shown about breastfeeding positioning.

Table 2: Obstetric and Healthcare-Related Factors of the Participants

Variable name	Category	Frequency	Percent
Ever heard about EBF	Yes	370	94.6%
	No	21	5.4%
Source of information about EBF	From health center	214	54.7%
	From Radio/TV	138	35.3%
	From health extension workers	39	10.0%
Place of delivery	Health center	333	85.1%
	Home delivery	58	14.9%
Type of delivery	SVD	252	64.5%
	CS	103	26.3%
	AVD	36	9.2%
Staff helped with breastfeeding	Yes	285	72.9%

	No	106	27.1%
Staff helped with positioning	Yes	318	81.3%
	No	73	18.9%

Breastfeeding Practices and Knowledge about EBF Factors

Two hundred seventy-nine (71.4) of the mothers-initiated breastfeeding within one hour of birth, and 28.7 of them initiated breastfeeding within 1–24 hours. The majority of mothers, 160(40.9%), breastfeed about 10-12 times, and One hundred twelve (28.6%) breastfeed their baby about 7-9 times. Three hundred twenty -(82.1%) mothers think a mother who is HIV/AIDS positive can breastfeed. Two hundred sixty-six (68.1%) knew the risk of giving water and formula, and one hundred twenty-five (32.0%) didn't know. About two hundred seventy (55.5%) changed one to two diapers daily. Three hundred sixty-four (93.1%) infants slept adequately after breastfeeding.

Non-exclusively breastfeeding mothers supplemented their breast milk with additional foods like cowmilk, atmier(cereal-based fluid), water, formula milk, and tea /sugar solution. The common reasons reported for not feeding breast milk only during the first six months of life include the following: the mothers had left home from work, perceiving that breastfeeding only is not sufficient for an infant after 4 or 5 months old; to make the child stronger; perceiving that the baby might get thirsty: and the mother did not have adequate milk.

Table 3: Breast Feeding Practices of Participants

Variable	Category	Frequency	Percent
Initiation of breastfeeding	Within 1 hour	279	71.4%
	1-6 hour	89	22.6%
	6-24 hour	25	6.4%
Frequency of breastfeeding per day	< 3 times	20	5.1%
	3 to 6	99	25.3%
	7 to 9	112	28.6%
	10 to 12	160	40.9%
Adequate sleep after breastfeeding	Yes	364	93.1%
	No	27	6.9%
Diaper change per day	One to two	217	55.5%
	More than two	174	44.5%
Health center visit while pregnant	Yes	346	88.5%
	No	45	11.5%
Water, formula or other supplements benefit the baby	Yes	265	68.0
	No	125	32.0
HIV infection in a baby while breastfeeding	Yes	321	82.1%
	No	70	17.9%

Prevalence of Exclusive Breast-Feeding Practice

The prevalence of Exclusive Breastfeeding Practice in our Study was 60.2%

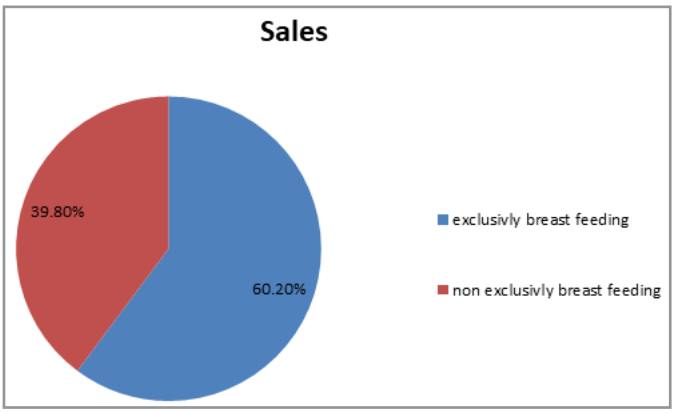


Figure 2: Prevalence of Exclusive Breastfeeding

Factors associated with Exclusive Breast-Feeding Practices

Fifteen independent variables were analyzed by logistic regression with the dependent Variable. The bivariate analysis showed that mothers in the age group mothers with no formal education (COR=4.121 95% CI:2.281-7.445), mothers with gamo ethnicity (COR=3.0 95% CI:1.178-7.637), mothers who were housewives (COR=2.810 95% CI:1.501-5.263), mothers who had Knowledge about EBF (COR=2.4 95% CI:1.512-3.841). After adjusting for the potential cofounders, multivariable logistic regression showed that mothers' educational level, maternal occupational level, and Knowledge about exclusive breastfeeding were significantly associated with exclusive breastfeeding practices.

Variables	Categories	Status of EBF practice		COR		AOR	
		Yes	No	95%CI	p-value	95%CI	p-value
Ethnicity	Gamo	158	116	0.250 (0.024-2.577)	0.244		
	Amhara	66	22	3.000 (1.178-7.637)	0.021		
	Oromo	1	4	1.362 (0.591-3.140)	0.048		
Educational status	No formal education	100		4.121 (2.281-7.445)	0.000		
	Primary	100	65	4.121 (2.281-7.445)	0.000	6.021 (2.877-12.603)	0.000
	Secondary	98	58	1.281 (0.641-2.559)	0.483		
	Above secondary	39	30	2.810 (1.501-5.263)	0.001	2.432 (1.031-5.740)	0.042
Occupational status	Housewife	114	59	1.914 (0.854-4.287)	0.115		
	Student	25	19	2.512 (1.302-4.850)	0.006		
	Private	22	32	2.512 (1.302-4.850)	0.006		
	Government	76	44	1			
Do you know the risk of giving water or formula	Yes	140	121	1			
	No	92	33	0.415 (0.260-0.662)	0.000		

Discussion

This Study assessed exclusive breastfeeding practice and associated factors among mothers of children in Arba Minch town for less than six months in southwest Ethiopia. The prevalence of exclusive breastfeeding in the study subject was 60.2 %, comparable with the Study in Debre Markos, Northwest Ethiopia (60.8%). But higher than the result from previous Study done in Arba Minch town (53.9 %), in Harare (51.9 %), the national exclusive breastfeeding prevalence in Ethiopia (52 %), Burao District, Somaliland (20.47%), Tanzania (58 %), and Bangladesh (36 %), and lower than finding in Hossana town (70.5 %), Dubti town (81.1 %), Madagascar (70 %), and Zambia (74 %), These results showed a wide variation of exclusive breastfeeding prevalence between and within countries over time. This is due to different non-governmental organizations, in collaboration with the Woreda Health Office, implementing Infant and young child feeding (IYCF) and community-based nutrition (CBN) intervention in study areas.

This Study revealed that housewife/unemployed mothers, exclusively B.F., are two times more likely to breastfeed than government employers. Government-employed mothers were less likely to practice EBF than housewife mothers. This finding aligns with studies done in the rural communities of northwest Ethiopia, the eastern region of Ghana, Kinshasa, and Saudi Arabia. Perhaps this is because employed mothers have no time to breastfeed their infants exclusively, they have short maternity leave to stay with and establish breastfeeding their newborn babies, or they lack convenient locations to breastfeed at their workplaces, which is consistent with the findings of several studies. This might be explained by the fact that there is less maternity leave (two months after delivery in our context), which means that workers and mothers have less opportunity to stay at home. Mothers also may have to leave their babies to search for a job. These findings call for policy arguments, as well as the extension of maternity leave to encourage mothers to exclusively breastfeed their babies to improve child health outcomes.

This Study revealed that mothers with educational levels above secondary level were six times more likely than those who didn't attend formal education. Children from mothers who attended formal school are more likely to practice breastfeeding than those who did not attend. This can be explained by the mother who attended formal school having the opportunity to expose herself to exclusive breastfeeding information through different media channels such as posters, family health cards and other electronic information and education materials that might influence breastfeeding practice.

Strengths and Limitations of the Study

Strength

The study had a high response rate. Of the 402 planned study participants, 391(97.2%) responded utterly.

Limitation

Formulating a causal association regarding how and when the associations are established is limited since the study design was cross-sectional, allowing for casual reference. The current Study also did not assess individual factors, including Knowledge rather than awareness and attitude of the mother, as well as variables related to family and peers.

Conclusion

In this study, the prevalence of exclusive breastfeeding practices (60.2 %) among women with infants less than six months of age was low compared to the WHO recommendation that every woman should breastfeed their children exclusively for the first six months. From the empirical result, the educational status of women and the mothers' Occupation were statistically significant factors affecting exclusive breastfeeding practices.

Recommendation

For Health Centers

- Promoting the use of maternal health care services for those who don't visit the health facility at the community level.
- Strengthening continuous, exclusive breastfeeding counseling
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For Health Extension Workers

- To improve the education of women, promoting the use of maternal health care services for those who don't visit the health facility at the community level

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