



Knowledge, Attitude and Practice of Exclusive Breast Feeding Among Lactating Mothers in Bedelle Town, Southwestern Ethiopia: Descriptive Cross Sectional Study

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Abstract: Breast feeding contributes to reduced infant morbidity and mortality due to diarrhea, respiratory or ear infections and other infectious diseases even though it remains a challenging due to lack of knowledge mothers. There is only limited information on exclusive breastfeeding practices in urban settings of Ethiopia especially in Bedelle town, Illubabor Zone, Southwestern Ethiopia. Thus, this study was aimed to assess knowledge, attitude and practice related with exclusive breastfeeding among lactating mothers in study area. A community based descriptive cross-sectional study was conducted among 220 lactating mothers who had a child aged less than 24 months from April to May, 2013 using a structured interviewer questionnaire. Systematic random sampling was used selected the study participants and descriptive statistics was carried out using SPSS for windows version 20.0. The majority of mothers, 91.8% knew the importance of exclusive breastfeeding and 87.3% mothers were had good attitude and strongly agree that the exclusive breastfeeding is advantageous for infants aged less than six months. Only 43.6% of mothers practiced exclusive breastfeeding for the first six months after delivery. This study indicated better understanding and perception of the importance of exclusive breastfeeding and poor practice to exclusive breastfeeding for the first six months postpartum among urban mothers. Thus, health care providers and decision makers should be comprehensively addressed on adverse work related issues to improve exclusively breast feeding practices in the study community.

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1. Introduction

Over the last decade, over whelming scientific evidence supporting the integral role of breast feeding in the survival, growth and development of a child, as well as in the health and wellbeing of mothers, has come to light. According to world health organization (WHO), breast milk has the complete nutritional requirements that a baby needs for health development. Furthermore, it is safe and contains anti bodies that help protect infants and boost immunity. Consequently, breast feeding contributes to reduced infant morbidity and mortality

due to diarrhea, respiratory or ear infections and other infectious diseases. For the mother, breast feeding is economical; breast milk is always available, clean and at the right temperature. Breast feeding also delays the return of fertility and reduces the risk of developing breast and ovarian cancers [1].

The WHO recommends that for the first six months of life, infants should be exclusively breast feed to achieve optimal growth, development and health. Thereafter, infants should receive nutritionally adequate and safe complementary foods, while continuing to breast for up to two years or more [2].

Globally, less than 40% of infants under six months of age are exclusively breast fed, despite the documented benefits of breast feeding [3]. In addition, only 38% of infants aged less than six months in the developing world, Africa included, are exclusively breast fed [4]. Breast feeding is known to promote optimal nutrition for infants during early post natal life. Although the promotion of breast feeding is integral part of the special supplemental nutrition program for women, infants and children (WIC). According to WIC participant's study of five agencies in San Diego country, California, were recruited to complete on attitudinal survey on breast feeding [5].

Poor practices and attitudes toward exclusive breastfeeding have been reported to be among the major reasons for poor health outcomes among children, particularly in developing countries. The six causes of 90% of under-five child mortality worldwide - acute respiratory infections, diarrhea, measles, malaria, HIV and AIDS and neonatal conditions - are easily preventable [6]. The highest levels of under-five mortality continue to be found in Sub-Saharan Africa, where one in eight children die before the age of five (129 deaths per 1,000 live births) - nearly twice the average in developing regions overall and around 18 times the average in developed regions [7]. Diarrhea, malaria and pneumonia are responsible for more than half the deaths of children under five in Sub-Saharan Africa [8]. Breastfeeding strengthens children's immunity, ensures child health and survival, and reduces their vulnerability to these diseases. Scientific evidence has shown that breastfeeding could lead to a 13% reduction in deaths of children under five, if infants were exclusively breastfed for six months and continued to be breastfed for up to one year [8].

The 2011 Ethiopian DHS shows, 52 percent of children under six months (aged 0-5 months) are exclusively breastfed. In addition to breast milk, 19 percent of infants under six months are given plain water only, while 14 percent are given milk other than breast milk and 4 percent are given non-milk liquids and juice. Furthermore, 10 percent of infants under six months are given complementary foods. By age 6-9 months, 51 percent of infants are given complementary foods. Sixteen percent of infants under six months are fed using a bottle with a nipple, a practice that is discouraged because of the risk of illness to the child [9].

This may be due to the barriers of translating the message of exclusive breast feeding into practice. Therefore, this study was designed to investigate the different aspect of lactating mothers of Bedelle town to assess their knowledge, attitude and practice (KAP) on exclusive breast feeding. In addition to the

above stated aims, this study also used to collect base line information about current knowledge, attitude and practice related to feeding of infants with special focus on exclusive breast feeding. The information generated from this study will be provided to the concerned bodies and can be useful for designing appropriate strategies for exclusive breast feeding.

2. Methods and Materials

2.1 Study area

The study was conducted in Oromia regional state, Illu-Abba-Bora zone at Bedele City which is found south west of Addis Ababa about 480 km, the capital city of Ethiopia. The City is located between latitude 826'60.0000''N, longitude of 3621'0.0000''E and altitude of 253m. According to the 2007 population census, the population of the town was estimated to be 19,904. Of these 9,824 are males and 9,680 are females [14].

2.2 Study population

The study population was lactating mothers who had infant less than 24 months were participated in Bedelle town, Illu-Abba-Bora zone. A community based descriptive cross-sectional study was employed to assess mother's KAP towards exclusive breast feeding among lactating mothers of Bedelle town from April to May, 2013.

2.3 Sampling and Size Determination

The sample size was calculated using a sample size determination formula for a single population proportion ($n = \frac{[Z_{(1-\alpha/2)}]^2 \cdot p \cdot (1-p)}{d^2}$) with the following assumptions: 52% prevalence of exclusive breast feeding at national level (9), 95% confidence level, 5% degree of desired precision, finite population correction factor formula ($n = \frac{no}{1+no/N}$) since the total number of lactating mothers in the city (N) is 460 and 5% for non-response rate. A total of 220 mothers were selected by systematic random sampling from households who had a child of less than two years old. Mothers with infants presenting specific feeding problems (cleft palate or lip, severely ill) were excluded.

2.4 Study Methodology

A structured interviewer administered questionnaire was used to collect data related to the objectives of the study. The questionnaires on KAP levels were adopted from the Ethiopian DHS and different literatures. The questionnaire covered a range of topics including socio-economic and demographic factors, knowledge, attitude and practices of exclusive breastfeeding. 5% pre-test of questionnaires was done in a similar area, which was not included in the study area and some

modifications were made on the basis of the findings. Three days intensive training was given for five diploma nurses as enumerators. The data collection was supervised by the principal investigator. The principal investigator supervised and reviewed every questionnaire for completeness and logical consistency and made corrections on the spot.

The collected data were checked for completeness, coded and entered in to a computer. Statistical analysis was carried out using SPSS for windows version 20.0. The quantitative data were summarized by descriptive statistics using the frequency, percentage and tables for categorical variables.

Ethical clearance was obtained from Wollega University, College of Medical and Health

Sciences and the research was done in conformity with the ethical guidelines approved by the Institutional Review Board (IRB) of Wollega University. Supporting letter was written by Wollega University to concerned institutions to get institutional consent and official permission.

3. Results

3.1 Demographic characteristics

In total 220 mothers who had children less than 24 months were successfully interviewed and participated in the study, yielding a response rate of 100%. The majority 194(88.18%) mothers were in the age group of ≤ 30 years (**Table 1**).

Table 1: Socio-demographic characteristics of study participants in study area

Variables		Frequency	Percent (%)
Age of mothers in year	≤ 30	194	88.2
	> 30	26	11.8
Age of child in months	0-6	74	33.6
	7-12	74	33.6
	13-24	72	32.7
Sex of child	Male	108	49.1
	Female	112	50.9
Religion of mothers	Orthodox	78	35.46
	Muslim	58	26.36
	Protestant	74	33.64
	Others	10	4.54
Ethnicity of mothers	Oromo	178	80.90
	Amhara	32	14.55
	Others	10	4.55
Maternal Education level	Illiterate	38	17.27
	\leq Grade 4	30	13.63
	Grade 5–8	50	22.73
	$>$ Grade 8	102	46.36
Maternal employment	Employed	92	41.82
	Unemployed*	128	58.18

*Mothers have no formal job; they are mostly self-employed subsistence farmers.

3.2 Factors influencing breast feeding

All mothers in the study 216 (98.2%) were ever practiced breast feeding and were got health information about breast feeding. Their main source of information was health institutions 146(66.36%), health institutions and mass media 64 (29.1%), books

08 (3.64%) and others 02(0.90%). From the total 220 mothers who were participated in the study, 104 (47.3%) mothers had good health status with fertility determinants showed that 54 (24.5%) long birth interval greater than 04 years (**Table 2**).

Table 2: Influencing factors of breast feeding of respondents in study area

Variables	Frequency	Percent (%)	
Have you ever practiced breast feeding	Yes	216	98.2
	No	4	1.82
Have you ever get any health information BF	Yes	216	98.2
	No	4	1.82
If yes can you mention the source of information	Health institution	146	66.4
	Books	08	3.64
	Health institutions and mass media	64	29.1
	Others	02	0.90
How you evaluate your general health status	Very good	94	42.7
	Good	104	47.3
	Bad	20	9.10
	Very bad	02	0.90
What is the interval between this child and one just before	1-2 years	24	10.9
	3 years	34	15.5
	≥4 years	86	39.1
	Not applicable	76	34.6

3.3 Knowledge of respondents about exclusive breast feeding

Regarding women's knowledge, all mothers 220 (100%) knew the importance of breast feeding/EBF and 202 (91.8%) were reported breast milk alone is important for new born infant. 200 (90.9%) mothers reported frequent breast feeding needed for less than 6 months of infant and 100 (45.5%) mothers were reported between 6-8 times breast fed per day. From study participants, 192 (87.3%) had knowledge about EBF and 28 (12.7%)

mothers hadn't the knowledge about EBF and were started complementary feeding before 4 months of age due to the reason they didn't think breast milk alone is sufficient for the baby 12 (5.45%), their breast milk is not sufficient 10 (4.55%), 6 (2.73%) were due to work related problems. Of study subjects, only 136 (61.8%) mothers had knowledge about the danger of bottle feeding and said that it is not safe for the child, it can cause child hood infections like diarrhea, vomiting, respiratory infections and other infectious diseases (**Table 3**).

Table 3: Knowledge of lactating mothers towards exclusive breastfeeding in study area

Variables	Frequency	Percent (%)	
Do you know the importance of breast feeding	Yes	220	100
	No	0	0.00
Which one of the following do you think is/ are important for the new born	Breast milk only	202	91.8
	Breast milk with plain water	12	5.45
	Breast milk with Butter	6	2.73
For how long should infant EBF only	< 4 months	2	0.90
	4-6 months	200	90.9
	> 6 months	18	8.18
Do you think breast feeding harms the child	No	220	100
Do you think bottle feeding dangerous for the baby	Yes	136	61.8
	No	84	38.2
Did you start complementary feeding before 4 months of age	Yes	28	12.7
	No	192	87.3
If yes what is your possible reason	My breast milk is not sufficient.	10	4.55
	I don't think as breast milk alone is sufficient for baby	12	5.45
	Others	6	2.73
If the infant is less than 6 months how frequent he/she gets breast feeding	<4 times	10	4.55
	4-5 times	44	20.0
	6-8 times	100	45.5
	>8 times	66	30.0

3.4 Attitudes of respondents towards exclusive breast feeding

Regarding the community's attitude towards breast feeding, majority of mothers 192 (87.3%) had good attitude and strongly agree that the EBF is advantageous for infants aged less than 6 months. In contrary, 28 (12.7%) were disagree and had negative attitude on EBF. Furthermore, 78 (35.5%) agree that colostrum should be discarded, 140 (63.6%) agree that colostrum should not be discarded and the rest 2(0.91%) were neutral.

A large majority of mothers, 192 (87.3%) were suggested that EBF is useful and sufficient for

infants aged less than 6 months and 28 (12.7%) were forwarded their opinion that EBF is useful but not sufficient for infants aged less than 6 months. 202 (91.9%) mothers believed that the infant should be breast fed as frequently as he/she needs. 82 (37.3%) mothers were considered bottle feeding is dangerous and should not be used at all. Majority of mothers in this study were familiar with concept of breast feeding, 214 (97.3%) had perception that breast feeding is natural and appropriate today, 4 (1.82%) believed that it makes them old and 2 (0.91%) were suggested breast feeding is outmoded (**Table 4**).

Table 4: Attitudes of lactating mothers towards exclusive breastfeeding in study area

Variables	Frequency	Percent (%)	
What do you prefer to feed your baby for the first 6 months?	Breast milk alone	162	73.64
	Breast milk with formula	5	2.27
	Breast milk with cow milk	50	22.72
	Others	3	1.37
Do you feel the EBF for 6 months infant has advantageous?	Agree	192	87.27
	Disagree	28	12.73
Do you believe that the first milk (colostrum) should be discarded?	Agree	78	35.45
	Neutral	2	0.91
	Disagree	140	63.64
What is your opinion about EBF in the first 6 months?	It is useful and sufficient	192	87.27

3.5 Practice of study subjects towards exclusive breast feeding

142 (64.6%) mothers were started breast feeding immediately after delivery, but 78 (35.5%) were started breast feeding after few hours of delivery. The study have shown that 160 (72.7%) practiced optimal breast feeding. Of this only 96 (43.6%) mothers were exclusively breast fed their child. However, 60 (27.3%) were not practiced EBF. They initiated pre lacteal feeding for their child such as 8 (3.64%) plain water and 4 (1.82%) butter in the first six months.

Out of 60 (27.3%) mothers who were not practiced optimal BF/EBF, 4 (1.82%) were preferred to feed their infant/young child by breast milk with formula, 50 (22.7%) breast milk with cow milk, 4 (1.82%) breast milk with other semi solid food staffs because of work related issues. About 164 (74.6%) mothers did give colostrum for their infants. But 56 (25.5%) did not gave colostrum to their infants. The major reasons cited for not giving colostrum are believe that first milk is dirty like pus 40 (18.2%), everybody says it should not be given 8 (3.64%), and it had no white milk 8 (3.64%) (**Table 5**).

Table 5: Practice of lactating mothers towards exclusive breastfeeding

Variables	Frequency	Percent (%)	
When did you start breast feeding after delivery?	Immediately	142	64.55
	After few hours	78	35.5
Daily frequency of breast feeding	<4 times a day	6	2.73
	≥4 times a day	214	97.3
Do you breast feed your baby exclusively?	Yes	160	72.7
	No	60	27.3
If yes how long EBF?	2 months	8	3.64
	3 months	8	3.64
	4 months	48	21.8
	>4 months	96	43.6
Did you give colostrum to your baby?	Yes	164	74.6
	No	56	25.5
If your answer is no what is your reason not giving colostrum?	It had no white milk	8	3.64
	First milk is dirty like pus	40	18.2
	Everybody say it is shouldn't be given	8	3.64
What was the first nutrient given for the infant?	Plain water	8	3.64
	Breast milk	208	94.5
	Butter	4	1.82

4. Discussion

A global evidence-based public health resolution recommends exclusive breastfeeding for the first six months of life and continued breastfeeding up to two years of age and beyond [10]. In low-resource countries the prevalence of exclusive breastfeeding at six months is generally low and varies from 9-39% [11, 12]. Although this study showed that almost all lactating mothers (98%) ever breastfed their babies, exclusive breastfeeding up to six months of baby's life was not commonly understood and was practiced by only 43.6% of mothers. This is consistent with other low-resource countries.

The breast feeding initiation rate defined as the proportion of infants to receive any breast feeding what so ever within the first 48 hours, was found to be 100% and breast feeding was practiced by all mothers who were participated in this study which is higher than the reported evidence of Ethiopian DHS which is 96% [13]. This might be due to the expansion of health infrastructures, increasing number of health personnel and widely dissemination of IEC, community mobilization and health education given at large.

The majority of respondents 202 (91.9%) had good knowledge regarding the importance of EBF and 192 (87.3%) had good attitude towards EBF. But only 96 (43.6%) mothers were practiced exclusively breast fed their infant/young child up to 6 months without any supplementation which is lower than the reported EBF by EDHS in 2011 which is 52% [9]. This is due to work related issues and the role of extended family in decision making concerning infant feeding.

The finding of this study indicates that there is a positive attitude towards EBF evidenced by the fact that 192 (87.3%) agree the advantage of EBF, 58 (26.4%) participants were reported that breast milk alone is not enough for the baby, the baby needs some other food stuffs along with breast milk 50 (22.7%) were fed their baby breast milk with cow milk, 5 (2.27%) breast milk with formula milk and the rest 3 (1.37%) breast milk with water. The main barriers to EBF here are work related issues, mothers living in the extended family and the perception that breast milk alone is not satisfying the infant/young child. When the child is crying it is assumed that he/she is not satisfied and is crying for more food.

This study has shown 56 (25.5%) participants did not give colostrum to their infants. This finding is inconsistent with the finding in (13), 44.0% didn't give colostrum to their infants. The improved practice on giving colostrum for the newly born child is more probably due to the improved awareness of lactating mothers which is resulted from expansion of

health information on importance of EBF and giving colostrum for the infant, by the health personnel at any level of health institutions.

It is of outmost public health importance that optimal breast feeding practices, particularly EBF, are encouraged and practiced in order to promote the growth, survival and health of children. It is evident literature that countries in Sub-Saharan, including Ethiopia, share similar attitudes and practices regarding EBF. Major obstacles faced by mothers that affect the successful implementation of EBF include: the perception of insufficient milk production, the perception of 'bad milk', the strong role of the extended family in decision making concerning infant feeding and work related issues.

5. Conclusions

In the present study, the majority of mothers has known the importance of EBF and have good attitude so that strongly agree that the EBF is advantageous for infant aged less than six months. This study concluded that most of mothers were had good knowledge and attitude on the importance of EBF. However, poor practice to exclusive breastfeeding for the first six months postpartum among urban mothers. Exclusive breastfeeding promotions improve infant survival; more attention in health planning should be given to its promotion. Thus, health care providers and decision makers should be comprehensively addressed on adverse work related issues to improve exclusively breast feeding practices in the study community.

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