



Knowledge of Mothers Towards Exclusive Breastfeeding in Erbil's Maternity Hospital

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Abstract

Background: Exclusive breastfeeding (EBF) is defined as “an infant’s consumption of human milk with no supplementation of any type (no water, no nonhuman milk, and no foods) except for vitamins, minerals, and medications until six months. Mothers’ lack of knowledge and experience often results in difficulties in feeding especially when feeding the first time and it may result in the most frustrating experience for the mothers. The main aim of the study was to assess knowledge, towards breastfeeding among mothers attending Maternity Teaching Hospital in Erbil city.

Subjects and methods: A cross-sectional design was used to achieve study objectives in Erbil Maternity Teaching Hospital in Erbil city, a non-random consecutive sampling method was adopted and the researcher was planned to involve one thousand mothers those were undergoing delivery regardless the type of delivery .

Results: 73.7% of mothers have Knowledge about the benefits of BF for mothers and her baby but they don’t have good information about EBF about, and 74.1% of mothers thought EBF meaning feeding baby with breast milk and water and 13.7 were EBF. Up to 62% of mothers know that first breastfeeding has to be initiated after 1 hour of child life, half of the mothers know that child needs 6 months of exclusive breastfeeding. There was a relation between mother occupation and education level .

Conclusion: Mothers have positive knowledge concerning breastfeeding initiation, knowledge regarding the exclusivity of breastfeeding, and duration of breastfeeding. There was a significant statistical association between occupation status and educational level of mothers

Keywords: Knowledge, exclusive breastfeeding, Erbil maternity hospital

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Introduction

According to the World Health Organization (WHO) and United Nations Children Education Fund (UNICEF) references on breastfeeding are as follows: start of breastfeeding within the first hour after birth; Exclusive Breastfeeding (EBF) for the first six months; and nonstop breastfeeding for 24 months or more, together with harmless, nutritionally adequate, age appropriate, responsive matching feeding starting from the sixth month Worldwide (90%) reportage of coverage of exclusive breast feeding reported to avoid in low and middle income countries approximately 13 % of all deaths among under five year-age [1.]

Internationally, sub-optimal breastfeeding still accounts for an assessed 1.4 million deaths in children under five years annually. On average, only around 45% of infants under 6 months are exclusively breastfed globally, and only 38% of children less than six months of age in the developing world are exclusively breastfed and just 39% of those 20-23 months old benefit from the practice of continued breastfeeding [2]. The advanced of international breastfeeding rates in the last decade about 39 percent of children <6 months of age in the developing world are exclusively breastfed [2.]

According to the general characteristics of early breast-feeding, it is exposed higher in central and southern Iraq, the highest percentage than in the Kurdistan region and also higher in rural compared to urban

areas is higher when natural childbirth compared to caesarean birth and is reduced with high education all mothers [3]. While the number of children receiving the smallest amount of food diversity increases with the increase in the education mothers the old rages, especially 18 months and above, as well as in urban associated with the countryside [3]. Many studies conducted on EBF in the last years have shown progressive improvement in maternal knowledge in EBF among mothers. A study by Oche et al recorded a rate of 54 % of knowledge in EBF among mothers [4]. A a study conducted by Mogre et al. among lactating mothers in rural areas in Ghana noted that 74 % of mothers who participated in the study had general knowledge in exclusive breastfeeding [5]. Also, a study conducted by Ghana by Dun-Dery & Laar found that nearly all mothers (98%) who participate in that study had adequate knowledge about EBF[6]. Information on EBF according to mothers was acquired through their healthcare providers through antenatal care programs [5]. The main aim of the study was to assess Knowledge, towards breastfeeding among mothers attending Maternity Teaching Hospital in Erbil city.

Methods and materials

A cross sectional study was used to study the knowledge, attitude and practices of mothers towards exclusive Breastfeeding

in Erbil's Maternity Teaching Hospital (EMTH). This hospital is the unique public hospital inside Erbil city and it provides obstetrical and gynecological services for the population inside the city and to the rural areas around the city. The majority of deliveries in Erbil city occurred in EMTH and the minority were taken place either at homes by Trained Birth Attendance or at a few private hospitals [7]. A non-random consecutive sampling method was adopted and the researcher was planned to involve (1000) mothers those were undergoing delivery at EMTH regardless the type of delivery (whether normal vaginal delivery or by caesarean section), and the mothers were interviewed at post-delivery care wards, and all mothers who were accepted to participate in the study were included.

Response rate

The response rate was 81% as about 190 mothers refused to participate in the study (all of them are undergoing caesarean section), the acceptable response rate for survey studies is 80-85% [8].

Data collection and interventional phase

Data were collected by interviewing the involved mothers through face to face (direct interview). The researcher visited the EMTH at different times per day (in the morning, noon, evening and at night times). The researcher before establishing each interview a prior verbal consent was obtained from each mother, and the interview was done by using a structured questionnaire prepared by the researchers.

Pilot Study

A pilot study was run to test the preliminary prepared questionnaire. It was conducted at the beginning of January 2019 in EMTH, and the researcher chosen sample of 30 mothers at post-delivery care ward, and after the pilot study the questionnaire was modified. The enrolled sample was excluded from original sample of the study.

Instrument of data collection

Data collection was done through a structured questionnaire prepared by the researchers and it consists of two sections. A list of (9) items consists of Socio-demographic variables which include (mother's age, occupation, educational level, residency, obstetrical history, Antenatal care type of delivery, ethnicity and monthly family income), the second section consists of list of (10) items testing mothers knowledge regarding infant and young child feeding and includes (first food that should be given for newborn, when should mother start BF after delivery, benefits of BF for baby and for the mother, the time start the BF after delivery, the meaning of EBF, the duration of EBF, source of information regarding EBF, right time of stating complementary foods, whether the BF enough for newborn feed.) Descriptive and inferential statistics used through the Microsoft Excel data base jointly with the statistical package for social sciences (SPSS version 23). Chi square test and P-value used to determine the significant relationships between the

variables. The P- value ≤ 0.05 considered as statistically significant .

Ethical consideration

Prior to data collection, the study was approved by the ethical committee in the Shekhan Technical College of Health and an official authorization was obtained from the Erbil General Directorate of Health Erbil and EMTH. A prior verbal consent was obtained from each mother before conducting the interview .

Limitations of the study

Some mothers were undergoing caesarean sections and because they complained from the surgery and some of their babies were admitted to Neonatal care units (in incubators) so many of them are refuse to participated in the study. The interview process at least took 35-40 minutes and some mothers regarded the process was tedious

Results

About 72.1% (721) of the studied mothers were resident in rural areas and the rest 27.9% (279) were from urban areas. Up to half of the mothers (506) are within third decade of life and only one mother is at age above 45 years. The mean age was 30.9 years and the median age 30 years. The majority of the mothers (85.2%) were housewives and 13.1% of them were government or public employers, and the rest were either have vocational skills or wage employer or worked at private sector .The educational level of mothers were ranked according to their percentages as primary graduates (22.9%), read and write (15.9%), institute graduates (14.8%), illiterate (13.6%) , Intermediate school graduate(12.2%) , College graduate and higher(10.5%) , and High school graduate (10.1%) .There was significant statistical association between occupation status and educational level of mothers table 1.

Table 1: Association between educational level and occupation

Educational Level	Occupation					Total
	House wife	Vocational skills	Wage employment	Government employment	Private employment	
Illiterate	134	0	0	1	1	136
Read and Write	155	0	0	4	0	159
Primary graduate	220	4	0	4	1	229
Intermediate school	117	2	0	2	1	122

graduate						
High school graduate	83	1	5	11	1	101
Institute graduate	92	0	0	56	0	148
College graduate and higher	51	1	0	53	0	105
Total	852	8	5	131	4	1000

P. value < 0.000

Regarding the gravidity, 216 of mothers are primigravida and 198 are grand multi gravida. On other hand, 226 of mothers are nulliparous and 67 are grand multi para. Up to 53% of mothers without any ANC visits and only 5.2% have four or more ANC visits. Up to 70.2 % of mothers have normal vaginal delivery and the rest

(29.8%) of labors was by caesarean section .

Table 2 shows that about three quarter of the mothers were used breast milk as the first food to feed their babes, 19.4% used formula, 5.8% water alone and the rest 1.3% used water and sugar.

Table 2: First Baby Food

First baby food	no	%
Breast milk	735	73.5
Formula milk	194	19.4
Water	58	5.8
Water and sugar	13	1.3
Total	100.0	100.0

All mothers of sample study feed their babies BF (colostrum) after delivery but within different times, only 1.6% started within ideal time (within less than half hour), 34.9% started in time between half

to one hour , the majority 61.7% started BF within period between one to 24 hours and the rest 1.8% started after 24 hours

Table 3.

Time	NO.	%
Less than half hour	16	1.6
1/2 -1hour	349	34.9

After 1 hour	617	61.7
After 24 hours	18	1.8
Total	1000	100.0

About knowledge of mothers regarding benefits of BF for infants up to 75% of mothers said that BF is healthy, 9.5% of

them said it enhance intimacy between mother and baby, 7.1% economic reason and 8.8% they do not know. Figure 1.

Table 3: Time of starting BF after delivery

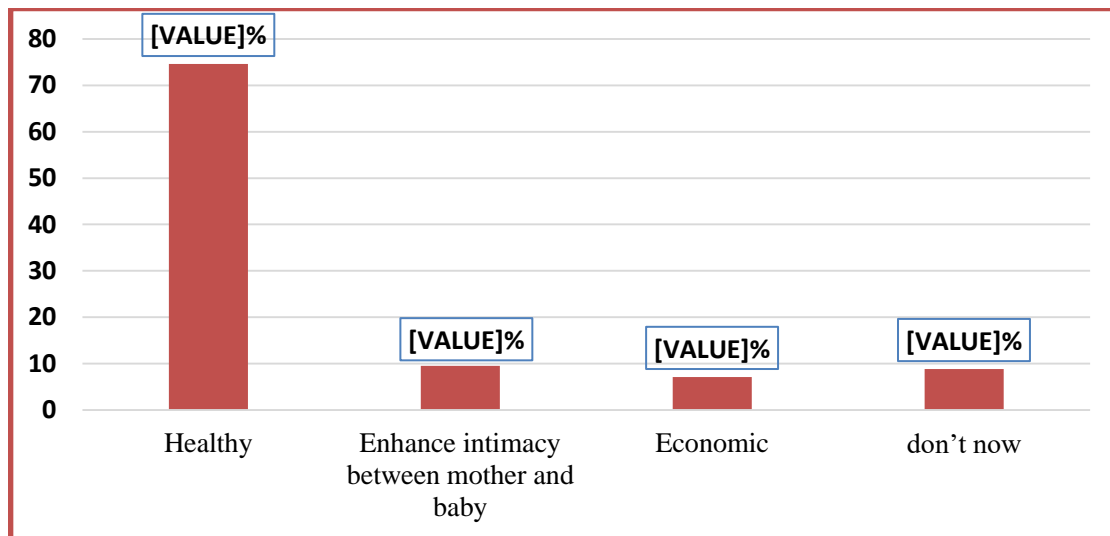


Figure 1: Benefits of BF for infants

About knowledge of mothers regarding benefits of BF for mothers, about 73.7% of mothers thought that BF has benefits for the mothers, 44.5% of

them thought the BF protect mothers from breast cancer, 20.6% thought it is healthy for the mothers and 11.7% thought BF losing weight. Figure 2.

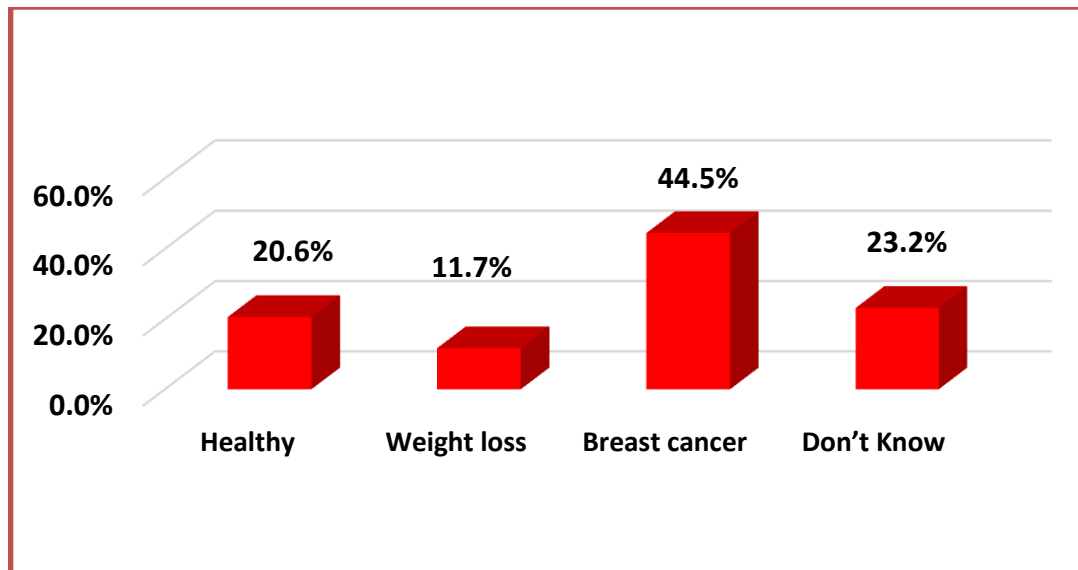


Figure 2: Benefits of BF for mothers

The mothers' knowledge regarding the EBF varied. The majority 74.1% thought EBF means feeding baby with Breast Milk (BM) and water, 13.7% thought it means feeding baby with only BM, 8.9% thought it means feeding with

BM, water and solid foods and the rest thought it means both BM and infant formula. There was significant statistical association between parity and mother's knowledge of EBF and parity. Table 4.

Table4: Association between mother's knowledge regarding EBF and Parity

Parity	Meaning of EBF				Total
	Feeding baby with only breast milk	Feeding baby with breast milk and water	Feeding baby with breast milk, water and solid foods.	Feeding baby with breast milk and infant formula	
0	33	176	12	5	226
1	22	171	23	7	223
2	50	270	36	16	372
3	0	0	1	0	1
4	22	80	7	2	111
5 and above	10	44	10	3	67
Total	137	741	89	33	1000

P. value < 0.022

According the mother's knowledge more than half (50.5%) of them thought the

duration of EBF is six months according their understanding (meaning) and the rest

was distributed from less than one week to even more than six months. Table 5.

Table 5: Knowledge about duration of exclusive EBF

Duration of EBF	NO.	%
Less than one week	6	0.6
1 week -1 month	13	1.3
1-2 months	4	0.4
2-3months	24	2.4
3-4 months	98	9.8
4-5months	270	27.0
5-6 months	66	6.6
6 months	505	50.5
more than 6 months	14	1.4
Total	1000	100.0

Family members had important role to give information to mothers regarding BF among more than three quarter of mothers 76.2% followed by mass media 10.6%, health staff 7.2% and 0.3% others subsequently .

Table 6 shows that the mothers' knowledge regarding the time of weaning

BF varied and the answers were 1-2 years among 59% of mothers, more than two years among 32.3% and the least was less than 6 months 3.8% .

Table 6: Distribution of mothers according to their knowledge on BF weaning

Period of time	No	%
Less than 6 months	38	3.8
6-12 months	49	4.9
1-2 years	590	59.0
More than 2 years	323	32.3
Total	1000	100.0

Discussion

The advantages of EBF compared to partial breastfeeding were recognized well in 1984, when a review of available literatures found that the risk of death from diarrhea of partially breastfed infants 0–6 months of age was 8.6 times the risk for exclusively breastfed children. For those who received no breast milk the risk was 25 times that of those who were exclusively breastfed [9]. In our study about two-thirds of the studied mothers were resident in rural areas while Majority (63.5%) of the respondents in Alamirew at al study were urban dwellers [10]. Up to half of the mothers within 20-29 years group and the mean age was 30.9 years. This result was similar to Al-Azzawi and Shaker et al studies in Erbil and Shaqlawa cities which were 61% of same age[11-12], Goyal et al in Libya which were 63.2% [13], and Alamirew et al from Ethiopia which were 66.9% [10]. That it may be most of mothers complete their study then marred. This implies that, most of the respondents were adults who were fully developed in their biological makeup (matured) that found to be good enough in terms of procreation and childcare [14.]

This study were indicate that the majority of mothers who participated in the study were of low educational level at same time the occupation of mothers more than three quarter of mothers were house wives, it may be due to that most mother comes from rural area., and on another hand

mother's education had a great impact on mothers knowledge of infant and young child feeding . This result was similar to a study done in Erbil city by she found 84.5% of mothers are housewives[15], another study also was done in Shqlawa city found that majority of studied population (76.5%) were low educational leve[12]. But Altamimi found in a study done in south of Jordan that 73.5% of working mothers are college graduated[16 [.

Good care during pregnancy is important for the health of the mother and the development of the fetus. Pregnancy is a crucial time to promote healthy behaviors and parenting skills. Good ANC links the woman and her family with the formal health system, increases the chance of using skilled health personnel at birth, and contributes to good health through the life cycle. Inadequate care during this time breaks a critical link in the continuum of care and affects both women and babies [1].In our study more than half of mothers didn't receive ANC it might be due to most mothers were illiterate and comes from rural areas and they don't have enough information about importance of antenatal visit , while Malema and Matlala found about 99% of mothers in n the Mahwelereng local area of Limpopo Province, South Africa received ANC [17]. The WHO recommends that pregnant women should have at least four visits to

care centers or health facilities. A study done by UNICEF and Iraqi health authorities found that the coverage of pregnant women during pregnancy is relatively high in Iraq, where 88% of pregnant women have at least one visit and 68% of pregnant women who received health care through at least four visits to any health care facility [3].

In this study 36% of mothers started BF within one hour after delivery near Shaker et al (2015) (38.1%) result, and to Multiple Cluster Indicator Survey Six (MICS6) results, they found about 32% of Iraqi mothers started BF within one hour after delivery [3]. While Adhikari et al found about 66.4% of Nepalese mothers started BF early [18].

This study show that three Quarter of mothers had information about benefits of BF for both infant and mothers. It may because of increased use of communication and mass media. Similar to this result Elmougy et al found that 78.1% of mothers others attending the ANC clinics at Saad Specialist Hospital, and King Fahad University Hospital in Saudi Arabia (SA) aware about benefits and duration of BF[19] , another study done by Naseem and Mazher they found the majority 72.8% of mothers in Hail district , northwestern SA had knowledge about BF [20].

Only 13.7% of studied mothers had the right knowledge about the EBF while up to three quarters of them thought that EBF means giving water with BM. Cascone et

al found that two thirds of the women in their study in Italy had heard on exclusive breastfeeding (64.6%) and the 71% of them knew that exclusive breastfeeding should be practiced for at least six months [21].

According to this study more than half of the mothers study thought the duration of EBF was six months according to their understanding .This result were same to another study in Shaqlawa city [12] but another study in Ghana by Nukpezah et al had different which were 27.7% gives EBF for 6 months[22] , also in Jordon the study by Altamimi was found that 29.5% of mothers were EBF this result different to this study [16].

The current study showed that more than half of the mothers Knowledge regarding the time of weaning BF varied and the answer were 1-2 years, It is may be because of BF has a religious basis in Islam and it is recommended that the mother suckle her infant for at least two years if possible[23].

Mohammed et al from Egypt found that 4.5% of mothers defend weaning correctly and 92,5% defined weaning as breastfeeding cessation [24] .

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