

## Attitudes and Trends of Kurdish Mothers Towards Breast Feeding in the First Six Months of Age in Duhok

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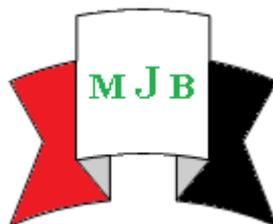
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### Abstract

**Background:** Breast feeding is the ideal way of providing young infants with nutrients they need for healthy growth and development. One in 3 infants is exclusively breastfed during the first 6 months of life. Unfortunately, compliance with breastfeeding recommendations in developing countries is low.

**Objective:** To assess the trends and attitudes of Kurdish mothers in Duhok towards breastfeeding, the main factors determining them and the reasons for not exclusively breastfeeding in the first 6 months.

**Methods:** A cross-sectional study carried out in Heevi Pediatric Hospital and 2 Health Care centers in Duhok, North of Iraq in the period between November 2012 and August 2013. A pre-coded questionnaire was used that included: Age of the mother, education, employment, Types of feeding in the first 6 months, mode of delivery, parity, gender of the baby and the reason for not exclusively breastfeeding. Data were analyzed using SPSS 18. Chi-square and Fischer's exact tests, the level of significance is 0.05.

**Results:** The study included 588 mothers. The type of feeding they used in the first 6 months was exclusive breastfeeding in 8% cases only. Most of mothers who are not only breastfeeding (58.93%) fell within the age group between 20-29 years. Most mothers who were only breastfeeding (37.77% for each) were uneducated or had primary school education while 34.43% of those who were not only breastfeeding in the first 6 months were uneducated. Most mothers were unemployed. Multiparity was present in 66.66% of mothers who were only breastfeeding and 78.64% of those who were not only breastfeeding. Normal spontaneous vaginal birth was the most common mode of delivery Females babies predominate in those who are only breastfed (53.34%) while males predominate in the other group (56.16%) The most common reasons for not only breastfeeding in the first 6 months were not enough breast milk (51.56%), illness of the baby(16.57%) and illness of the mother(12.52%).

**Conclusion:** Most Kurdish mothers in Duhok do not exclusively breastfeed their babies in the first 6 months. The main reason is thinking that breast milk is not enough. Most of them were aged 20-29 years, had male babies, were uneducated, unemployed and fed their babies solids but none of these variables was found significant. Spontaneous vaginal delivery was significantly associated with exclusive breastfeeding. Health care providers should be encouraged to educate mothers of young infants on the benefits of breastfeeding and give them motivation to continue with breastfeeding for at least 6 months.

**Keywords:** Breastfeeding, Kurdish.

### Introduction

**B**reast feeding is the ideal way of providing young infants with nutrients they need for

healthy growth and development. Most women can successfully breastfeed provided they have accurate information, and support [1]. However,

for some women breastfeeding may not be possible or milk supplies not sufficient despite their best efforts. Benefits for maternal and infant health are well recognized, and extensive efforts to promote breastfeeding have been implemented in many countries. Breastfed babies gain nutritional, and growth benefits, and enhanced immune system [2]. Breastfeeding is also one strategy that has a possible protective effect on the risk of obesity later in life [3]. Breastfed infants receive antibodies from breast milk, which protects against infection in the early postpartum period [4].

Yet, barely one in 3 infants is exclusively breastfed during the first 6 months of life. Unfortunately, compliance with breastfeeding recommendations in developing countries is low, and more attention should be given to increasing breastfeeding rates and to monitor trends [5].

Many factors that affect how women feed their infants include socioeconomic status, maternal education regarding breastfeeding [6], employment situation, commercial pressures, and availability of breast milk substitutes, as well as professional and peer support [7].

It was reported in the United States that infants who were ever breastfed increased from 60% among infants born during 1993-1994 to 77% among infants born during the period between 2005-2006 [8]. The Holy Quran says "the mothers shall give suck to their offspring for 2 whole years" (Surah Al-Baqarah:233). Many mothers start breastfeeding their infants, which is favorable and then they turn to formula feeding as they assume that breastfeeding is not sufficient [6].

Although breastfeeding initiation in Australia is around 83% [9,10], Australian studies have found, similar to others, that women are more likely

to breastfeed if they are older [11], have more education [12], have higher income [10,13], and if they have social support.

Traditionally in Turkey almost all women breastfeed [14,15], however one study conducted in Istanbul reported that although 97% of women initiated breastfeeding, only 47% of women were exclusively breastfeeding at one week [14]. Some studies have reported a decreasing duration of breastfeeding in Turkey particularly related to maternal employment [16] and formula supplementation [15].

### **Aim of the Study**

We aimed to study the trends and attitudes of Kurdish mothers towards breastfeeding, the main factors determining them and the reasons for not exclusively breastfeeding in the first 6 months.

### **Methods**

A cross-sectional study was carried out in Heevi Pediatric Hospital and 2 Health Care centers in Duhok, North of Iraq in the period between November 2012 and August 2013. The study population was all Kurdish mothers of babies admitted to the hospital and those who visited outpatient clinic and health care centers. The study was reviewed and approved by the Scientific Review Board at The College of Medicine, University of Duhok. The research tool that was used to collect the data was a pre-coded questionnaire that was administered by the authors and the doctors working in the health care centers. This questionnaire includes: Age of the mother, her level of education, state of employment, Type of feeding in the first 6 months, mode of delivery, parity, gender of the baby and the reason for not exclusively breast feeding

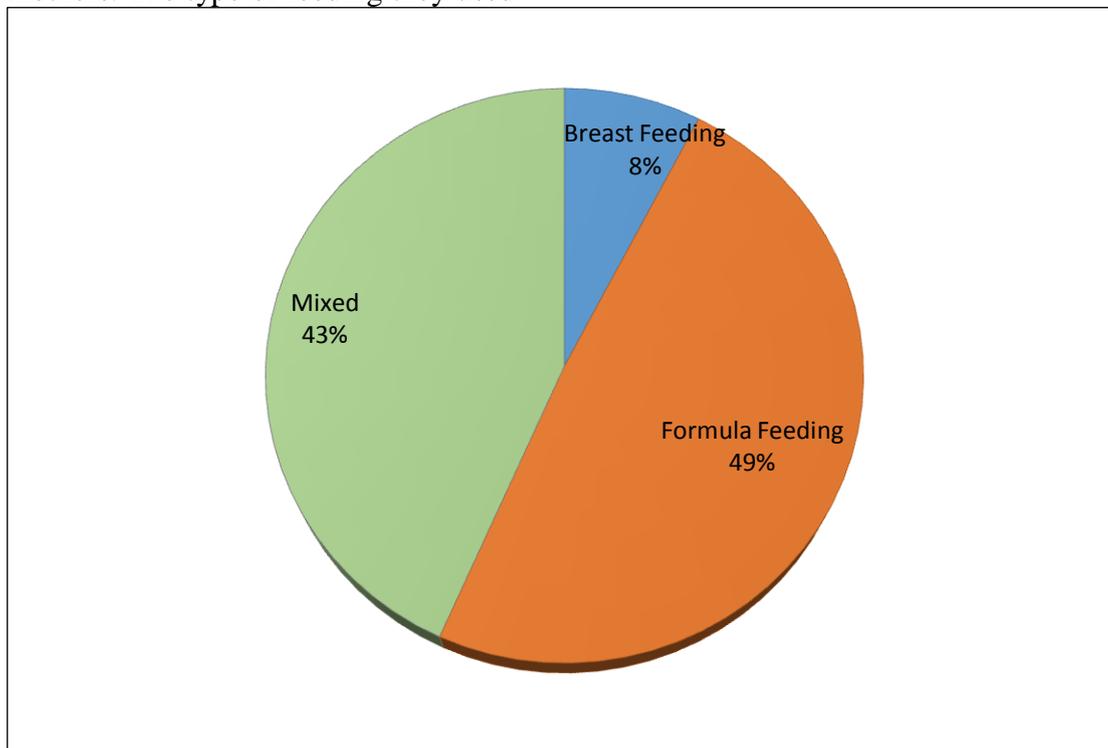
All data were analyzed using SPSS 18. Chi-square and Fischer’s exact tests were used to estimate the association

of selected variables with failure to breastfeed. The level of significance used in this study was 0.05.

**Results**

The study included 588 mothers. The type of feeding they used

in the first 6 months was exclusive breastfeeding in 8% of cases only as shown in figure 1.



**Figure 1** Distribution of mothers according to type of feeding in the first six months

Most of mothers who are not only breastfeeding (58.93%) fell within the age group between 20-29 years as shown in Table 1. Most mothers who were only breastfeeding were uneducated or had primary school education (37.77% for each) while 34.43% of those who were not only breastfeeding in the first 6 months were uneducated.

As for the working status, most mothers (88.88% of those who only breastfed and 92.08% of those who did not only breastfeed) were unemployed. Moreover, 66.66% of mothers who were only breastfeeding and 78.64% of those who were not only breastfeeding

were multiparous as in Table 2, and normal spontaneous vaginal birth was the most common mode of delivery (84.44% of mothers who only breastfed & 77.53% of mothers who did not only breastfeed) as in Table 3.

The gender of the baby did not differ significantly between the both groups as shown in Table 4 where females predominate in those who are only breastfed (53.34%) while males predominate in the other group (56.16%)

Solids were not added to the feeding of most of infants in both groups as in Table 5.

**Table 1** Age of mothers

Age of mother	Exclusive breastfeeding	Formula and mixed feeding
<20 yr	3 (6.66%)	20 (3.68%)
20- 29 yr	24 (53.34%)	320 (58.94%)
30-39 yr	16 (35.56%)	193 (35.54%)
=>40 yr	2 (4.44%)	10 (1.84%)

$X^2 = 2.55$ , p-value= 0.46 not significant

**Table 2** Maternal characters

	Exclusive breast feeding	Formula and mixed feeding	P value
<b>Education</b>			<b>0.43</b>
Uneducated	17 (37.78%)	187 (34.44%)	
Primary school	17 (37.78%)	160 (29.46%)	
Secondary school	8 (17.77%)	133 (24.49%)	
university	3 (6.67%)	63 (11.7%)	
<b>employment</b>			<b>0.64</b>
Employed	5 (11.12%)	43 (7.91%)	
Not employed	40 (88.88%)	500 (92.09%)	
<b>Parity</b>			<b>0.45</b>
Primigravida	15 (33.34%)	116 (21.36%)	
multiparous	30 (66.66%)	427 (78.64%)	

**Table 3** Mode of delivery

Mode of delivery	Only breast feeding	Not only breast feeding
vaginal	38 (84.44%)	421 (77.53%)
Caesarian section	7 (15.56%)	196 (22.47%)

$X^2 = 4.45$ , p-value=0.035 significant

**Table 4** gender of the baby

Sex of baby	Only breast feeding	Not only breast feeding
Male	21 (46.66%)	305 (56.16%)
female	24 (53.34%)	238 (43.84%)

$X^2 = 3.75$ , p-value=0.053 not significant

**Table 5** Adding solids to the feeding

Giving solids	Only Breast feeding	Not only breast feeding
yes	21 (46.66%)	234 (43.09%)
no	22 (53.34%)	309 (56.91%)

$X^2 = 0.33$ , p-value= 0.57 not significant

The most common reasons for not only breastfeeding in the first 6 months were as in Table 6

**Table 6** Causes of not exclusively breast feeding

Cause	Number	Percentage
Illness of the baby	90	16.57%
Breast milk is not enough	280	51.56%
Illness of the mother	68	12.52%
Formula is better	8	1.47%
Breast feeding didn't work	54	9.94%
Mother is unable because of duty	20	3.68%
Unusual belief	2	0.36%
The baby didn't tolerate breast milk	5	0.92%
Twins	3	0.55%
Pregnancy of the mother	5	0.92%
Prematurity	8	1.47%
Total	543	100%

### **Discussion**

Most mothers in our study did not exclusively breastfeed in the first 6 months. The majority of them used formula feeding instead of breast feeding and this is comparable with similar results in a study that was carried out in India and showed that 30% and 10% of exclusively breastfed their babies until 4 and 6 months of age [17]. In Turkey, a study reported that 43.7% of women commenced breastfeeding within the first 30 minutes of giving birth [2]. Most mothers supplemented milk formula (83.4%) during the first 6 months [18].

Most of the mothers in both groups were aged 20-29 years with no significant differences in the age of mothers and similar results were also found in a Saudi study where 87.4% of mothers were less than 35 years [6]. In the current study most mothers who didn't exclusively breastfeed in the first 6 months were uneducated in contrast to a study in Qatar where 56.5% of mothers were graduates of universities [19] and a Saudi study where 52% were graduates of universities [6].

In the current study, most mothers who only breastfed in the first 6 months were not employed and were housewives but this applies also to those who did not only breastfeed and no significant association was found.

This is in contrast to other studies where exclusive breastfeeding was higher among housewives in comparison with employed mothers, as the unemployed mothers have enough time to practice on demand breastfeeding as recommended by the WHO [19,20]. Also in another study in Saudi Arabia, most women (73.7%) were unemployed or were housewives and this was found significant [6]. Studies of breastfeeding women in Turkey however have reported that women are ceasing breastfeeding earlier due to little support for breastfeeding in the work place [16,21]. Most mothers who only breastfed their babies in the first 6 months delivered through spontaneous vaginal delivery and this was found significant. This is similar to other studies where Shawky et al mentioned that women who delivered by cesarean section were at higher risk of stopping breastfeeding [22]. Also other studies showed the same results since mothers who delivered vaginally had a higher rate of early initiation of breastfeeding than those who delivered by cesarean section, and this is attributed to the pain after surgery, infant separation from the mother, and inability of the mothers to sit in the appropriate position for breastfeeding [6,19,20]. Giving solids to babies in the first six months was present in our study but

not found statistically significant. Li *et al* showed that weaning foods were added from the third month with the most common reason being baby's loss of interest in breast milk [23].

In a Saudi study, it was found that the majority of women (25.2%) would start weaning their babies at 5-6 months of age while others would wean their babies at a period close to the latter one [6].

Most mothers in our study were multiparous but nevertheless not found to be a significant factor affecting breastfeeding practice contrary to other studies where this factor was found significant. In Qatar, 61.6% were multiparous and in Saudi 68.7% were multiparous [19] and this is because of the experience the mother gains when having fed babies before by comparison with primiparous mothers. In the current study, the main reason for not only breastfeeding in the first 6 months is the mother's thinking that breast milk is not enough. It was reported in the western countries that the most common reason for discontinuation of breastfeeding is insufficient milk [24]. Far less commonly, illness of the baby and illness of the mother are reasons for not only breastfeeding. Agreeing with this, a Saudi study also revealed similar results [6].

### Conclusion

Most Kurdish mothers in Duhok do not exclusively breastfeed their babies in the first 6 months. The main reason is thinking that breast milk is not enough while the state of health of the mother and the baby are less common causes. Most mothers who did not only breastfeed in the first 6 months were aged 20-29 years, had male babies, were uneducated, were unemployed and fed their babies solids but none of these was found significant. Spontaneous vaginal delivery was

significantly associated with exclusive breastfeeding.

Formula feeding was the most frequent method of feeding reported, which highlights the need for breastfeeding education.

### Recommendations

Health care providers should be encouraged to educate pregnant women and mothers of young infants on the benefits of breastfeeding. Most importantly, mothers should be given the necessary support and motivate them to continue with breastfeeding for at least 6 months.

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