

Knowledge, Attitudes, Practices, and the Factors that Influence Breastfeeding among Mothers attending a Primary Health Center in Sulaimani City

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Abstract

This study was performed to assess knowledge, attitudes, and practices towards breastfeeding and identify factors impacting this practice among mothers. A descriptive case-series study was carried out among 220 mothers who had a child less than 2 years, in Ibrahim Pasha Health Center in Sulaimani city, between the 9th of August 2018 and 20th of November 2018. The convenience sampling method was used to select the subjects. Mean age of the mothers was 29.37 years. More than half (56.8%) of the mothers were encouraged for breastfeeding, the main encouragement factors were husbands, medical staff, and other families (45%, 22%, and 15% respectively). More than one third (37.7%) of the mothers ceased breastfeeding, the main motives were producing insufficient milk, child refusal and child's disease (31%, 25%, and 17% respectively). The association between mode of delivery and types of feeding was statistically significant ($P=0.028$); exclusive breastfeeding was high in the normal delivery group. Overall, the mothers had a good knowledge and a positive attitude toward breastfeeding. Only 30.5% of the mothers started breastfeeding within the first hour after labour. An extreme number (95%) of the mothers fed colostrum to their baby. Merely 30.5% of the participants fed their babies exclusively.

Keywords: Breastfeeding, Knowledge, Attitudes, Practices, Factors, Primary health center.

Introduction

Breastfeeding is an essential public health approach for improving infant and child morbidity and mortality, reducing maternal morbidity, and supporting to control health care costs⁽¹⁾. Breast milk is a complex, living ideal nutritional fluid that contains antibodies, enzymes, hormones, and perfect nutrients for healthy growth and development⁽²⁾. In newborns, it promotes the growth, development of cognitive skills and the immune system. Furthermore, it diminishes the risk of sudden infant death syndrome (SIDS), type I diabetes, and many other diseases. Besides, it decreases the mother's risk

of developing breast cancer⁽³⁾. Studies have revealed that breastfeeding during the initial stages of a child's development, motivates the immune system and enhances the child's responses to vaccination. Reduction in the incidence of respiratory infections, gastrointestinal diseases, ear infections and improvements in teething have been noticed in children who have been breastfed exclusively for six months or more⁽⁴⁾.

Breastfeeding should be begun within the first hour after birth, and it contains the feeding of colostrum that is recommended by world health organization (WHO) as the ideal food for the newborn⁽⁵⁾. Breastfeeding should be introduced exclusively in the first 6 months, and to be prolonged for 2 years and beyond with other sufficient sources of nutrition. However, the practice of breastfeeding, particularly exclusive breastfeeding in the first 6 months, stays very low in most countries⁽³⁾.

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In the western countries, there have been risen trends of breastfeeding in the last few years. On the other hand, there has been a drop in breastfeeding in the developing countries (5). Additionally, little is known about breastfeeding and obstacles women experience in the Middle East (6) This study was conducted to assess knowledge, attitudes, and practices of the respondent mothers as well as to identify the factors that influence women’s decision and ability toward breastfeeding.

Subjects and Method

Subjects and study design

A descriptive case-series study was undertaken from the 9th of August 2018 to 20th of November 2018 in Ibrahim Pasha Health Centre in Sulaimani city which was highly visited by mothers. The convenience sampling method was used for the selection of the subjects. The current study involved 220 mothers. The sample size was dictated by depending on the obtainable time for conducting the study, and the number of eligible cases who visited the set of the study. Mothers who had children less than 24 months of age and visited the Ibrahim Pasha Primary Health Centre/Sulaimani were eligible to participate in this study, except the conditions which breastfeeding is contraindicated; like mother suffering from cancer, galactosemia, active tuberculosis, and psychoses.

Statistical Analysis

Data were analyzed using the Statistical Package for the Social Science (SPSS version 22, IBM Statistics. inc) with consideration procedures to confirm the high quality of data and minimizing error. These included testing questionnaires, data entry, regularity checked all data collection and entry. The Chi-square (χ^2) test was used for comparisons among subgroups. P-value ≤ 0.05 was used to prove a level of significance. Quantitative and qualitative variables were respectively expressed as mean \pm 95% confidence intervals (CI) and percentage. Texts, Tables, and Figures, were used for describing the results.

Ethical considerations

Ethical clearance was obtained from both Sulaimani Technical Institute and General Directorate of Health in Sulaimani city for carrying out this study. The mothers were recruited for this study informed in detail about the objective of the study and they were free to participate in the study also participation was voluntary. Verbal consent was taken from the mothers. The confidentiality of the collected data was guaranteed.

Results

Factors influencing breastfeeding

Roughly three fifths (56.8%) of mothers were encouraged for breastfeeding, while (43.2%) of the mothers were not encouraged. Several factors had a role in encouraging breastfeeding; the figure demonstrates the main factors in this study were husbands, followed by medical staff, and other families (45%, 22%, and 15% respectively) (Figure 1)

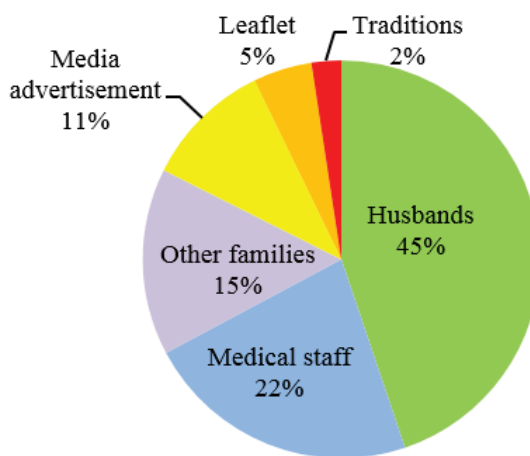


Figure 1: Relative frequency of the factors encouraging breastfeeding

Among mothers nearly two fifths (37.7%) stopped breastfeeding, several factors influenced on stopping breastfeeding; the figure illustrates that the main reasons in the current study were producing insufficient milk, the child refused, and child’s disease (31%, 25%, and 17% respectively) (Figure 2).

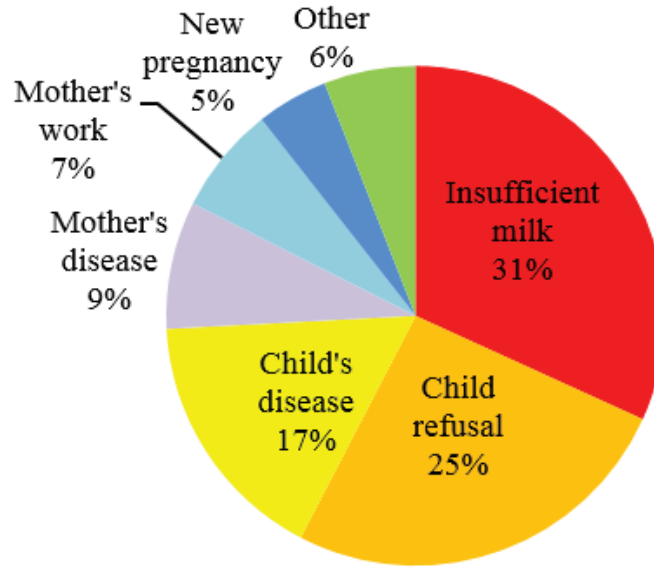


Figure 2: Relative frequency of factors discouraging breastfeeding

Association between mothers’ background and types of feeding

The result revealed that there was no statistically significant association between mothers’ background characteristics and types of children feeding ($P > 0.05$), except modes of delivery of the child, which was statistically significant ($P = 0.028$) (Table 1).

Table 1: Association between mothers’ background and type of feeding for the last child

Characteristics	Type of feeding for the last child			P value (χ^2 test)
	Exclusive	Mix	Formula	
	Number (%)	Number (%)	Number (%)	
Mothers age (years)				
<25	9 (21.4)	29 (69.1)	4 (9.5)	0.532
25-30	26 (33.8)	48 (62.3)	3 (3.9)	
30-35	16 (27.6)	39 (67.2)	3 (5.2)	
≥ 35	16 (37.2)	26 (60.5)	1 (2.3)	
Education				
Illiterate	1 (14.3)	6 (85.7)	0 (0.0)	0.088
Primary	21 (39.6)	32 (60.4)	0 (0.0)	
Secondary	12 (21.4)	38 (67.9)	6 (10.7)	
Higher education	33 (31.7)	66 (63.5)	5 (4.8)	
Employment status				
Employed	15 (28.8)	33 (63.5%)	4 (7.7%)	0.589
Unemployed	52 (30.9)	109 (64.9%)	7 (4.2%)	

Cont.... Table 1: Association between mothers' background and type of feeding for the last child

Number of children				
≤ 2	40 (28.6)	92 (65.7)	8 (5.7)	0.630
> 2	27 (33.7)	50 (62.5)	3 (3.8)	
Mode of delivery of last child				
Vaginal birth	35 (40.2)	47 (54.0)	5 (5.8)	0.028
Caesarean section	32 (24.1)	95 (71.4)	6 (4.5)	
Total	67	142	11	

Mother's knowledge regarding breastfeeding

A vast majority of the study participants were aware of breastfeeding and their advantages for both babies and mothers (Table 2).

Table 2: Mother's knowledge regarding breastfeeding (Number = 220)

Mother's knowledge items	Number	Percent
Colostrum is important for the baby to maintain immunity (True)		
True	215	97.7
False	1	0.5
Unsure	4	1.8
Breastfeeding should be continued Up to 2 years (True)		
True	212	96.4
False	6	2.7
Unsure	2	0.9
Exclusive breast milk can be given during the first 6 months (True)		
True	198	90.0
False	14	6.4
Unsure	8	3.6
Exclusive breastfeeding protects a child from diarrhea (True)		
True	173	78.6
False	30	13.7
Unsure	17	7.7
Exclusive breastfeeding prevent further conception (True)		
True	82	37.3
False	84	38.2
Unsure	54	24.5
A lactating mother should take healthy food to improve the secretion of milk (True)		
True	219	99.5
False	1	0.5
Unsure	0	0.0
Wash each breast with warm water before breastfeeding (True)		
True	203	92.3

Cont... Table 3: Maternal attitudes towards breastfeeding (Number = 220)

False	9	4.1
Unsure	8	3.6
Awakening the baby while breastfeeding (True)		
True	163	74.1
False	42	19.1
Unsure	15	6.8
Stop breastfeeding when you start weaning (False)		
True	28	12.7
False	186	84.6
Unsure	6	2.7
Breastfeeding can prevent diseases affecting the breast (True)		
True	200	90.9
False	17	7.7
Unsure	3	1.4
Breastfeeding helps the uterus to return to its pre-pregnancy state more quickly (True)		
True	176	80.0
False	6	2.7
Unsure	38	17.3
Breastfeeding helps mothers to lose weight after pregnancy (True)		
True	188	85.5
False	22	10.0
Unsure	10	4.5

Maternal attitudes toward breastfeeding

Overall, the study respondents had a positive attitude toward breastfeeding, while only 46.8% of mothers believed that breastfeeding had no impact on going to work and breast shape (Table 3).

Table 3: Maternal attitudes towards breastfeeding (Number = 220)

Mothers' attitudes items	Number	Percent
The benefits of breastfeeding last only as long as the baby is breastfed (Disagree)		
Agree	73	33.2
Disagree	126	57.3
Unsure	21	9.5
Breastfeeding prevent going to work (Disagree)		
Agree	111	50.5
Disagree	103	46.8
Unsure	6	2.7
Breastfeeding can enhance intimacy between mother and child (agree)		
Agree	213	96.8
Disagree	7	3.2
Unsure	0	0.0
Women should not breastfeed in public places such as restaurants (Disagree)		

Cont... Table 3: Maternal attitudes towards breastfeeding (Number = 220)

Agree	43	19.5
Disagree	173	78.6
Unsure	4	1.8
Breastfeeding has an effect on the care of other family members and marital relationship (Disagree)		
Agree	61	27.7
Disagree	155	70.5
Unsure	4	1.8
Breast milk is the ideal food for babies (agree)		
Agree	217	98.6
Disagree	2	0.9
Unsure	1	0.5
Formula milk is more easily digested than breast milk (Disagree)		
Agree	14	6.4
Disagree	193	87.7
Unsure	13	5.9
Formula milk is as healthy for an infant as breast milk (Disagree)		
Agree	15	6.8
Disagree	202	91.8
Unsure	3	1.4
Formula feeding is more convenient than breastfeeding (Disagree)		
Agree	83	37.7
Disagree	135	61.4
Unsure	2	0.9
Breastfeeding will make mother's breast sag (Disagree)		
Agree	82	37.3
Disagree	103	46.8
Unsure	35	15.9
Formula feeding is a symbol of wealth (Disagree)		
Agree	33	15.0
Disagree	181	82.3
Unsure	6	2.7
Breastfeeding is old fashioned (Disagree)		
Agree	38	17.3
Disagree	180	81.8
Unsure	2	0.9

Maternal practices towards breastfeeding

The result reported that 32.5% of the mothers started breastfeeding within the first hour after birth. Maximum number (95%) of mothers fed colostrum to their baby. Only 30.5% of the participants fed their

babies exclusively in first six months. The range of breastfeeding frequency was between 3-26 times per day, half (50.2%) of mothers fed breast milk to their baby 8-12 times per day. Minority (12.3%) of the respondents consumed drugs for improving breast milk production (Table 4).

Table 4: Maternal practices towards breastfeeding

Practices	Number	%
Initiation of breastfeeding within the first hour (number 209)		
Yes	68	32.5
No	141	67.5
Colostrum feeding (number 220)		
Yes	209	95.0
No	11	5.0
Type of feeding within the first six months of the last child (number 220)		
Exclusive	67	30.5
Mix	142	64.5
Formula milk	11	5.0
The frequency of breastfeeding per day (number 209)		
< 8	76	36.4
8 – 12	105	50.2
≥12	28	13.4
Maternal lactation period among those stopped breastfeeding before 24 months (number 82)		
1-6 months	64	77.1
6-12 months	13	15.7
12-18 months	6	7.2
Consume drugs for improving milk production (number 220)		
Yes	27	12.3
No	193	87.7

Discussion

Factors influencing breastfeeding

Approximately three fifths (56.8%) of mothers were encouraged for breastfeeding. Likewise, another study was indicated that the majority of the mothers were

encouraged for this practice (7). Furthermore, another study demonstrated that nearly three-quarters of mothers received health education on breastfeeding benefits (3). In the present study, several factors had affected in encouraging breastfeeding; main factors were husbands, medical staff, and other families, while a study showed the main sources of health education on breastfeeding were physicians and nurses (3). Similarly, a result of a study revealed that mothers were encouraged for breastfeeding by medical staff, another family, and husbands (7). Moreover, a result of a study revealed that the main source of information was health institution, friends and mass media (8).

Association between mothers’ background and type of children feeding

The present study showed that there was no statistically significant association between age of mothers and methods of children feeding, this finding is consistent with the results of two other studies were conducted in Nigeria, and Morocco (9, 10). However, the frequency of exclusive breastfeeding higher among mothers with high education level in comparing with other education levels, but this relationship was not statistically significant. Conversely, two studies found a significant association between exclusive breastfeeding and the mother’s education (9, 10).

Mother’s knowledge regarding breastfeeding

The bulk of the study participants were aware of breastfeeding and their benefits for both children and their mothers, our finding is in agreement with the results of two former studies were conducted in Saudi Arabia, and India (3, 11).

Maternal attitudes towards breastfeeding

Totally, the mothers had a positive attitude toward breastfeeding; this result is consistent with the result of a study was conducted in Saudi Arabia (1). While more than half of the mothers believed that breastfeeding prevents going to work. Likewise, a study found that roughly two-fifths of mothers believed that formula feeding is the better choice than breastfeeding if the mother plans to return to work (11). Approximately two-fifths of the respondents believed that breastfeeding will make mother’s breast sag. Similarly, two prior studies

reported that more than half of mothers believed that breastfeeding cause breast sag^(4, 12).

Maternal practices towards breastfeeding

The result reported that merely 32.5% of the participants initiated breastfeeding within the first hour after birth. Likewise, a study indicated that 28.7% of mothers started breastfeeding immediately after delivery⁽⁸⁾. While another study reported that 71.2% of mothers initiated breastfeeding within the first hour after delivery⁽¹³⁾. Our result could be explained from the fact that more than three fifths of mothers delivered their baby through caesarean section. A study revealed that mothers delivering their infants through caesarean section run a 1.38 times greater risk of having difficulties with breastfeeding in comparison to mothers delivering their neonates vaginally⁽¹⁴⁾.

Conclusions

The main encouragement factors for breastfeeding in this study were husbands, medical staff, and other families, while the main discouraging factors were producing inadequate milk, child refusal, and the child's disease. The minority of the respondents used drugs for improving their breast milk production. Caesarean delivery negatively affected breastfeeding practices. Nevertheless, the majority of the mothers had a good level of knowledge and positive attitude toward breastfeeding, but they were not translated into practices, less than one third of the participants fed their babies exclusively.

Ethical Clearance: Obtained from both Sulaimani Technical Institute and General Directorate of Health in Sulaimani city.

Financial Disclosure: Self

Conflict of Interest: Nil

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