

Knowledge of Breastfeeding among Mothers in Hodeidah City, Yemen

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Abstract

Background: Breast milk is the natural first food for infants and should be fed alone for 6 months of life.

Aim: to assess the level of breastfeeding knowledge among mothers in hodeidah city.

Methods: A descriptive cross-sectional study was used to assessment approach and applied on mothers in hodeidah city from 15 January to 25 July 2015. A convenience sample of 72 mothers attending to Al-Thowrah general hospital in hodeidah city for following up the health status of their children was selected for the purpose of the study. A questionnaire was developed for the purpose of the study. It was consisted of two parts; the first part includes demographic characteristics of the study participants and the second part assessed the knowledge of breastfeeding. A pilot study was carried out and modified was applied accordingly. A panel of 2 experts was involved in the determination of the questionnaire content validity. Data were analyzed through the application of descriptive statistical (frequency and percentage), and inferential data analysis approach (chi-square test).

Results: The study findings revealed that more than half (58.3%) of the mothers were young, (45.8%) of them had completed primary school, more than two-third (84.7%) of them were housewife- mothers, (61.1%) of them have lived inside hodeidah city, also (61.1%) of mothers have more than one children, (63.9%) of them were regularly visited primary health care center during antenatal period and only (40.3%) of them have received antenatal orientation about breastfeeding. According to the level of knowledge of breastfeeding, (66.2%) of the mothers answered correctly all questions about breastfeeding, and there was a highly significant relationship between health education during the antenatal period and mothers' knowledge of breastfeeding.

Conclusion: The study findings demonstrated a moderate knowledge toward breastfeeding. Health education on breastfeeding should be made.

Keywords: Breast milk; breastfeeding; knowledge; hodeidah city; Yemen.

Introduction:

Breastfeeding is the feeding of an infant or young child with breast milk directly from female human breasts rather than from a baby bottle or other container¹. Breastfeeding by the mother to her newborn infant is mandatory in the Holly Quran. ALLAH ordered the mother to breastfeed her child for two full years². The World Health Organization (WHO) recommends breastfeeding with complementary feeding up to 2 years of age or beyond, and it should be on demand, as often as the child wants³. Exclusive breastfeeding means that an

infant receives breast milk from his or her mother, and no other liquids or solids, not even water, with the exception of oral rehydration solution, drops or syrups consisting of vitamins, minerals supplements or medicines^{4,5}. Breast milk is the healthiest form of milk for infants. It has just the right amount of fat, sugar, water, and protein that is needed for a baby's growth and development^{6,7}. Artificial feeding is associated with more deaths from diarrhea in infants in both developing and developed countries⁸. Reviews of studies from developing countries show that infants who are not breastfed are 6 to

10 times more likely to die in the first months of life than infants who are breastfed⁹. Diarrhea and pneumonia are more common and more severe in children who are artificially fed and are responsible for many of this deaths¹⁰. Regarding intelligence, a meta-analysis of 20 studies showed scores of cognitive functions on average 3.2 points higher among children who were breastfed compared with those who were formula fed¹¹.

Worldwide, it is estimated that only 34.8% of infants are exclusively breastfed for the first 6 months of life, the majority receiving some other food or fluid in the early months¹².

A downward trend in breastfeeding has been noted widely in different countries of the Middle East, especially in urban areas where mothers with raised socioeconomic status resort to bottle-feeding quite early¹³. Some mothers have not practiced breastfeeding for their own personal reasons.

These mothers may have inadequate knowledge regarding benefits and importance of breastfeeding, and by not practicing it, they can debar their babies and themselves from the benefits of breastfeeding because almost all mothers think that breastfeeding has only benefits for the baby, while in fact there are also benefits for them¹⁴.

Furthermore, and because of lacking of knowledge about breastfeeding, a new mother who is discharged early from the hospital may find it challenging to initiate breastfeeding for her healthy newborn infant¹⁵.

Aim of the study:

The aim of the study was to assess the level of breastfeeding knowledge among mothers in hodeidah city.

Subjects and Methods

The present study was carried out through the application of cross-sectional design of a descriptive study which uses the assessment approach and it was conducted on mothers in hodeidah city from 15 January 2015 to 25 July 2015. A random sample of 90 mothers who attending Al-Thowra hospital in hodeidah city was selected for the purpose of the study. Of 90 mothers, 18 of them were not included in

the study because 8 did not reply the questionnaires and 10 mothers did not complete all items of the questionnaires so that they excluded. The study was conducted with the remaining 72 mothers. A questionnaire was developed for the purpose of the study. It was comprised of two parts; the first part includes the mothers' demographic attributes and the second part assessed the knowledge of breastfeeding with 20 true or false questions.

A pilot study was carried out for the period of 15 January to 30 January 2015 to determine the questionnaire reliability through the use of (Test – Retest). A panel of 2 experts was involved in the determination of the questionnaire content validity. Mothers' knowledge level was described as high if they scored more than 75% correct answers, moderate if 50%–75% correct answers or low if less than 50% correct answers.

The obtained data of the respondent's responses to the questionnaire were entered into the computer and analyzed through SPSS used descriptive statistics (frequency and percentage). Chi-square test was used for categorical variables to find an association between overall knowledge of breastfeeding among mothers and their demographic characteristics. P-value ≤ 0.05 was considered significant.

Results

The results of the study revealed that more than half (58.3%) of mother belong to (18-25) years of age group, (45.8%) of them had completed primary school. More than two-third (84.7%) of them were housewife-mothers (61.1%) of them have lived inside hodeidah city, also (61.1%) of mothers have more than one child. Although (63.9%) of the mothers were regularly visited primary health care center (PHCC) during their antenatal period. While only (40.3%) of them have received an antenatal orientation about breastfeeding. Table1.

Table 2 shows the distribution of knowledge of mothers about breastfeeding. The finding of the study showed that the overall correct answers about breastfeeding knowledge were 66.2% compared to 33.8% was incorrect answers.

The results of the study regarding the association between overall knowledge of breastfeeding among mothers and their demographic characteristics showed that there was an association between overall knowledge of breastfeeding among mothers and their demographic characteristics ($P < 0.05$). More details presenting in Table 3.

Table 1: Demographic characteristics among study participants (N=72)

Demographic characteristics	N	%
Age (Year)		
• 18-25	42	58.3
• 26-30	12	16.7
• 31-35	8	11.1
• ≥ 36	10	13.9
Educational level		
• Illiterate	16	22.2
• Read and write	4	5.6
• Primary school	33	45.8
• Secondary school	8	11.1
• Diploma degree	6	8.3
• Bachelor degree	5	6.9
Occupational status		
• Housewife	61	84.7
• Employee	11	15.3
Residential area		
• Rural	28	38.9
• Urban	44	61.1
Parity		
• Primiparity	28	38.9
• Multiparity	44	61.1
Visiting primary health centers		
• Regular	46	63.9
• Irregular	26	36.1
Health education regarding breastfeeding		
• Available	29	40.3
• Unavailable	43	59.7

Table 2: Knowledge of mothers about breastfeeding (N=72)

Questions	Correct answers		Incorrect answers	
	N	%	N	%
Best food for newborn baby	71	98.6	1	1.4
Starting breastfeeding for the baby	20	27.8	52	72.2
Concept of colostrum	71	98.6	1	1.4
Benefits of colostrum	50	69.4	22	30.6
Best method of infant feeding	69	95.8	3	4.2
Complications of malnourished infants	69	95.8	3	4.2
The best position for mother while feeding	69	95.8	3	4.2
Infants need during first six months	47	65.3	25	34.7
What will be done after feeding the baby?	54	75	18	25
Benefits of breastfeeding for baby and mother	19	26.4	53	73.6
Duration of breastfeeding	26	36.1	46	63.9
Breastfeeding of infant with diarrhea	39	54.2	33	45.8
Smoking during breastfeeding	21	29.2	51	70.8
Frequency of breastfeeding during day time	29	40.3	43	59.7
Prevention of sore and cracked nipples	55	76.4	17	23.6
Breastfeeding develops a strong bond between mother and baby	67	93.1	5	6.9
Breastfeeding during pregnancy	60	83	12	17
Breastfeeding during tuberculosis	42	58.3	30	41.7
Preparations before breastfeeding	49	68.1	23	31.9
Methods to improve secretion of breast milk	27	37.5	45	62.5

Table 3: Association between overall knowledge of breastfeeding of mothers and their demographic characteristics (N=72)

Demographic characteristics	Knowledge of breastfeeding				
	Correct answer		Incorrect answer		P-value
	N	%	N	%	
Age (Years)					
• 18-25	28	66.7	14	33.3	P < 0.05
• 26-30	8	66.7	4	33.3	
• 31-35	5	63	3	37	
• ≥36	7	70	3	30	
Educational level					
• Illiterate	10	62.5	6	37.5	P < 0.05
• Read and Write	3	75	1	25	
• Primary school	22	66.7	11	33.3	
• Secondary school	5	62.5	3	37.5	
• Diploma degree	4	66.7	2	33.3	
• Bachelor degree	4	80	1	20	
Occupational status					
• Housewife	40	65.7	21	40	P < 0.05
• Employee	8	72.8	3	8	
Residential area					
• Rural	18	64	10	18	P < 0.05
• Urban	30	68	14	30	
Parity					
• Primiparity	18	64	10	36	P < 0.05
• Multi parity	30	68	14	32	
Health education regarding breastfeeding					P < 0.05
• Available	27	93	2	7	
• Unavailable	21	48.8	22	51.2	

Discussion

The results of the study showed that more than half of the mother belongs to (18-25) years of age group, (45.8%) of them had completed primary school. More than two-third of them were housewife-mothers, (61.1%) of them have lived inside hodeidah city, also (61.1%) of mothers have more than one child. Although (63.9%) of the mothers were regularly visited PHCC during their antenatal period. While only (40.3%) of them have received an antenatal orientation about breastfeeding. Breastfeeding education during pregnancy is often offered in PHCC. Classes are

typically offered by a professional trained in breastfeeding or lactation management who is an effective teacher with groups of adults. Antenatal curricula most often provide guidance for mothers about anticipated situations and signs of effective breastfeeding or breastfeeding problems, the benefits of breastfeeding to the mother, baby, and society¹⁶.

The level of mother's knowledge regarding breastfeeding was measured through (20) questions, marking true or false for each question. When they asked which food is best for newborn baby, fortunately, all of them unless one (98.6%) knew that breast milk is the best one, because breast milk contains all the nutrients that an infant needs in the first 6 months of life, including fat, carbohydrates, proteins, vitamins, minerals and water¹⁷. Breastfeeding for the baby should be started after 30 minutes of delivery³, because in the half hour after birth, the baby's suckling reflex is strongest, and the baby is more alert so that it is the ideal time to start breastfeeding¹⁸. Unfortunately, in the current study more than two-third (72.2%) of mothers did not identify that; these mothers should be more educated and more aware about early starting of breastfeeding.

Colostrum is the special milk that is secreted in the first 2–3 days after delivery. It is produced in small amounts, about 40–50 ml on the first day¹⁹, fortunately, all of them unless one (98.6%) knew that in the present study. Nevertheless, (69.4%) of participants identified the benefit of colostrum as the first immunization for the baby¹⁷. Respectively (95.8%) of mothers had mentioned that breastfeeding is the best method for baby's feeding; a malnourished infant and young child has more episodes of diarrhea²⁰ and sitting position is the best position for the mother while feeding their baby³, these suggest high knowledge of mothers.

Regarding mother understands on Infants needs during first six months, (65.3%) of them understood that exclusive breastfeeding should be giving during first six months; it is moderate knowledge that had shown among

mothers, these mothers should be well educated and informed about Infants needs during first six months, because World Health Organization recommend that all infants be breastfed exclusively for the first six months of life²¹. When the mothers asking what they will do after feeding their babies, three-quarter of them described burping the baby as the correct answer²² because babies are particularly subject to accumulation of gas in the stomach while feeding, and this can cause considerable agitation and/or discomfort unless the child is burped.

Breastfeeding is an important component in the lives of both mother and child²³. In our study only (26.4%) of mothers knew that and more than two-third of them could not identify that; this may be attributed to their disorientation about breastfeeding benefits. The WHO recommends breastfeeding for up to two years³. While in the present study (63.9%) of the mothers did not know that. According to breastfeeding of babies with diarrhea, (54.2%) of mothers said that they would breastfeed their child if they involved with diarrhea. Although the rate is better than a study conducted in Australia (45.4%).²⁴ It is still a matter of concern that dietary patterns during acute diarrheal illness are not known to many mothers in the present study, as it has a major influence on recovery from diarrhea²⁵. Mothers of infants and young children had low knowledge regarding breastfeeding during smoking because only (29.2%) of them knew that they would continue to breastfeed their babies even if they smoke. Mothers who smoke are encouraged to quit, however, breast feeding remains the recommended food for infants even if the mother smokes. Although nicotine may be present in the milk of a mother who smokes, there are no reports of adverse effects on the infant due to breastfeeding²⁶.

However, low knowledge about the frequency of breastfeeding during day time was seen among the mothers of infants and young children in the present study. Taking into account the absence of breastfeeding orientation for most mothers during the antenatal period. It

is a very an essential element, which needs to be taught to the mothers by health care workers. A mother can prevent sore and cracked nipples by correctly positioning and attaching her baby at the breast²⁰, it is cited by (76.4%) of mothers in the present study because suckling with poor attachment may be uncomfortable or painful for the mother, and may damage the skin of the nipple and areola, causing sore nipples and cracks³. The majority of the mothers (93.1%) knew that breastfeeding develops a strong bond between mother and baby, nearly the same rate (89%) was reported by Amal et al²⁷. Most of the mothers (83%) mentioned that breastfeeding should be continued during pregnancy. Indeed, Breastfeeding is possible throughout pregnancy, but generally, milk production will be reduced at some point²⁸. Mothers with active tuberculosis should not breastfeed their infants²³, in the present study only (58.3%) of the mothers knew that; it is low knowledge compared to the severity of the problem (68.1%) of the mothers gave the correct answer as washing the breast with water before giving breastfeeding. To improve secretion of breast milk, one cup of milk or juice or any liquid food should be taken before breastfeeding²⁹, it is identified only by (37.5%) of the mother. Overall (66.7%) of the mothers correctly answered all questions; the same finding was reported in Najaf by Kafi³⁰.

The study findings had depicted no significant relationship between mother's knowledge of breastfeeding with age group, educational level, occupational status, residential area, and parity respectively. While highly positive relationship had depicted between mother's knowledge of breastfeeding with health education on breastfeeding during the antenatal period. The Similar finding has been reported in many other studies³¹ in which they found that instructions and number of prenatal consultations influence the knowledge level on breastfeeding.

Conclusion

We conclude that, the study findings demonstrated a moderate knowledge level about breastfeeding among

mothers of infant and young children. It is attributed to inadequate prenatal health education on breastfeeding because of mothers who have received antenatal education about breastfeeding were more knowledgeable than who have not.

Recommendations

Reinforces the need for antenatal period promotion and educative approaches throughout appropriate intervention program regarding breastfeeding.

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