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The Knowledge and Attitudes towards Breastfeeding of Iranian Mothers during the First Year after Delivery in 2013

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Abstract

OBJECTIVE: Globally less than 40% of infants less than six months of age are exclusively breastfed. Adequate breastfeeding support for mothers and families could save many young lives. This study aimed to determine knowledge and attitudes of mothers toward breastfeeding in Tonekabon, Iran.

METHODS: This study was a descriptive-analytical cross sectional study with convenience sampling. The sample consisted of 200 nursing mothers who have including criteria of the study. Data was collected by a questionnaire including demographic data and questions about knowledge and attitude toward breastfeeding. Data analysis performed by using of SPSS (11.5) and appropriate statistical tests.

RESULTS: Most of them (73.5%) were 21-30 age group. 50.5% of them had a diploma education. 46% of them reported the essential information about breastfeeding obtained from medical- health centers. 5% of them had poor and 42% had a medium knowledge about breastfeeding while 53% of them had good knowledge about it. Most of the mothers (79.5%) had positive attitude regarding breast feeding.

CONCLUSION: According to most of the mothers had good knowledge and positive attitude about breastfeeding, with proper planning to increase awareness and promote a positive attitude towards breastfeeding can be tried for child survival.

Introduction

What passes in the first hour of life is very effective on survival and growth of the infant and future relationship with the child's parents. For mother and infant health promotion and creation and strengthening maternal attachment status in infants with established status, the skin to skin touch and look crosses upon birth to enable start breastfeeding during the first hour of life, are very effective [1]. Skin touch accelerates the process of physical growth and development not only in infancy, but also in other age groups has an important role. The other hand, breastfeeding during the first hour of life is caused 22% prevention of neonatal deaths [2].

There is no doubt that breastfeeding is the best method for infant feeding because it is associated with numerous benefits. Health benefits to mother and baby are well known and widespread efforts to promote breastfeeding has been done in many countries. Breastfeeding has nutritional and growth benefits and enhances immune system and resistance to diseases [3]. The benefits of breastfeeding will be continued to childhood, so that breast milk reduces risk of childhood obesity [4] and may be reduced chronic childhood diseases, including asthma/allergy [5], some cancers, diabetes and colic disease [6].

The positive effects of breastfeeding on maternal health, including reduce postpartum bleeding, expedite uterine involution and facilitate weight back. In addition, women will enjoy health benefits later in life. Breastfeeding prevents of osteoporosis, reduces risk of breast cancer and possibly ovarian cancer and endometrial cancer. Psychological benefits of breastfeeding include increased confidence and facilitate links with the baby [7, 8]. It's social-economic and health benefits include savings to reduce the cost of buying artificial milk,

reduce absenteeism at work for patient care and reduce medical costs. Network support appears to be essential to adolescents' breastfeeding experiences and needs to be included with informational, instrumental, emotional, and esteem/appraisal support when investigating support for this population [9]. The most cerebral and physical growth and mental development of children occurs in the first two years of life and the process of this development, especially occurs faster in the first six months of life [10].

The World Health Organization has announced that breast milk can be prevented 1.5 million deaths each year [11]. Research has shown that only 35% of newborns have exclusive breastfeeding to 4 months even this rate in practice is less than this amount. Thus the importance of breast milk is considered [12]. Although breast milk as the ideal food for newborn babies, the start time and the continuity between different countries and also between different people in one country is different [13].

In America in 2001, 69.5% of women began breastfeeding but beginning in the southern U.S. states were lower, and among women of African - Americans, the young ones were not more than high school educated and those registered for supplementary feeding programs for women, infants and children [14].

Although the average duration of breastfeeding in Brazil was 10 months but it showed that the average exclusive breastfeeding, only 23 days [15]. Although the 68 breastfeeding rates are low in many Western countries [16], the prevalence of breastfeeding 69 among developed countries from 50 percent to 85 percent is different.

Initiation and duration of breastfeeding in Italy increased during the 1995–1999 period. The rate 72 of breastfeeding at discharge and when the infants were 3 months of age was 83% and 42% in 73 1995, and 89% and 66% in 1999. The rate of exclusive/predominant breastfeeding at discharge 74 was higher in 1999 than 1995 (78% vs 72%) [17]. In contrast, a study in Hong Kong showed that the prevalence of breastfeeding is 26 percent [18]. Another study that was conducted in Malaysia showed that 4% of Chinese mothers have exclusive breastfeeding until 4 months of age [19].

Two researches separately in the years 1991 and 1994 in the provinces of the our country, Iran, were determined at the beginning of the program to promote breastfeeding in 1991, 72 percent of rural children and 62 percent of children in urban until one year were fed by breastfeeding alone or with milk assistive whereas this amount reach to 78.7 percent in rural areas and 81.8 percent in the city in 1994 [20].

Also, it is reported in 1991 that 99 percent of urban and rural mothers, considered breast milk as the best and most appropriate milk to feed the child until the age of two years, but only 56.5 percent of them fed their children by own milk.

Since the most important principle in the planning required for children's health is promotion of breastfeeding, therefore determine to mother’s knowledge and attitude regarding breastfeeding during the first year after delivery and the promotion of breastfeeding behaviour plays an important role. According to the WHO studies only 35 percent of newborns until to 4 months 90 have exclusive breastfeeding and even this rate or less than this amount of practice and given the 91 limited training programs in hospitals and clinics conducting further studies to determine knowledge and attitudes in mothers about breastfeeding is necessary.

This study aimed to determine Iranian mother’s knowledge and attitude about breastfeeding within a year after birth.

Methods

Descriptive and analytical study was aimed for evaluation of mother’s knowledge and attitude about breastfeeding within a year after birth in Tonekabon with convenience sampling in health centers of Tonekabon 2013. 200 subjects of nursing mothers were determined. An inclusion criterion included lactating mothers with children less than one year and was willing to participate in the study. Data collection was conducted by questionnaire.

The questionnaire contained three parts: The first part included questions about demographic information, the second part includes 16 questions of knowledge and the third section contained questions of attitude about breast feeding that after explanations and obtain consent orally, by nursing mothers have been completed. About questions related to knowledge, one score was given the correct answer and a zero score was given the wrong answer. Maximum scores of knowledge were 16. The knowledge of mothers in three levels low, medium and high was assigned. Total raw scores based on 0 to 100 percent. Accordingly, scores of 0 to 33 percent in a poor knowledge group, scores 34 to 66 percent in the average knowledge group and 67 to 100 percent in the high knowledge group was placed. Attitude questions based on Likert rating (completely agree, agree, no comment, disagree, totally disagree), respectively. Questions that show a positive attitude, was given 5 scores to completely agree, 4 score to agree, 3 score to no comment, 2 score to disagree and 1 score to totally disagree. And questions that show negative attitude, was given a 1 score to completely agree, 2 score to agree, 3 score to no comment, 4 score to disagree and 5 scores to totally disagree. Minimum raw score in the attitude assessment, scoring 0 and maximum score was 50. The attitude assessment scores based on percentage

as either positive and negative attitude was divided. Thus, a score below 70 percent in negative attitudes and score higher than 70 percent in positive attitude was placed. The validity of the questionnaire by content validity and consulting with specialist people and its reliability by test- retest (*Cronbach's alpha)* r = 0.80 was determined. After data collection, data analysis with SPSS 11.5 software and with descriptive statistics and chi-square test and Pearson correlation was performed. The significance level was 5 percent.

Results

The finding showed that, the mean age of subjects was 25.66 ± 4.38 years, 10.5 percent of subjects were in the age group 16-20 years, and 73.5 percent of subjects were in the age group 21 to 30 years and 11 percent of subjects were in the age group 31 to 50 years. The majority of subjects (96.5%) lived with the baby's father. The majority of women (50.5%) were high school graduate. The highest percentages of women (91.5%) were housewives. The majority of women had obtained the benefits of breastfeeding and necessary information through health centers (46%). Most subjects (88.5%) had Persian ethnicity. 43 percent of subjects had cesarean delivery and 57 percent of them had a normal delivery. 86 percent of subjects reported sufficient amount of their household income. The majority of subjects (60.5%) had one child. 90 percent of subjects expressed pregnancy their wishes. The majority of subjects (54.5%) had a baby girl.

Most subjects (93%) tend to breastfeed by their own. The majority of subjects (74.5%) reported breastfeeding for two years. Most subjects (86.5%) in his childhood had been breast fed. Findings about the assessment of knowledge showed that 5 percent of mothers had poor knowledge and 42 percent of mothers had medium knowledge, while 53 percent of them had higher knowledge regarding breastfeeding and its benefits. Findings related to the assessment of attitude showed that the highest percentage of mothers (79.5%) had positive attitudes regarding breastfeeding and its benefits (Table 1).

Table1: Distribution of subjects according to variables of Knowledge levels and attitude state about breastfeeding.

Knowledge levels	Percent	Number
Knowledge levels		
Poor levels (<34%)	5.0	10
Moderate levels (34%-67%)	42.0	84
High levels (>67%)	53.0	106
Attitude state		
Negative attitude (<70%)	20.5	41
Positive attitude (>70%)	79.5	159

Information derived from responses related to assessment of knowledge shows that the lowest percentage of correct answers (41.5%) related to the question "maternal milk of the low birth weight or preterm baby have enough strength for infant growth" and the highest percentage of correct responses (94.5%) related to the question "to prevent the sick of child should wash hands before breastfeeding".

Information extracted from the responses of subjects to measure attitudes shows that the lowest percentage of correct answers (20.5%) related to the question "I thought was given milk to the baby at the same time with special interval" and the highest percentage of correct answers (64%) related to the question "What is your opinion about breastfeeding?". To evaluate the relationship between knowledge levels with an attitude of the samples Pearson test was used. This test indicated that there was a significant difference between knowledge and attitude levels (p = 0.001). To determine the relationship between education levels of mothers with their knowledge levels was used chi-square test. This test indicated that there was no significant difference between knowledge levels and their educational levels (p = 0.834). And there was no significant difference between attitude and educational levels of subjects (p=0. 13) (Table 2).

Table 2: Distribution of levels of knowledge and attitude status according to educational grade levels.

	Diploma or less Grade		More than Diploma		P
	Percent	Number	Percent	Number	
Knowledge levels					
High	51.9	40	52.8	56	
Moderate	44.2	34	41.5	44	0.834
Poor	3.9	3	5.7	6	
Attitude state					
Negative	26.0	20	17.0	18	0. 13
Positive	74.0	57	83.0	88	

To investigate the relationship between knowledge of nursing mothers with their jobs, chi-square test was used. This test indicated that there was no significant difference between knowledge and occupation of the subjects (p = 0.61). This test showed that there was no significant difference between attitude and job status of subjects (p = 0.84).

To investigate the relationship between levels of knowledge and attitude with location of gathering information regarding the benefits of breastfeeding chi-square test was used. The test showed a significant relationship between levels of knowledge and location of gathering information (p = 0.05) mean that the highest percentage of high awareness about breastfeeding information was obtained from health centers (physicians, midwives, health center personnel).

This test indicated that there was a significant difference about the attitude position based on location of gathering information about the benefits of breastfeeding (p = 0.04) (Table 3).

To investigate the relationship between knowledge of nursing mothers with mode of delivery chi-square test was used. This test indicated that there was no significant correlation between knowledge levels and mode of delivery (p = 0.97). This test showed there was no significant correlation

Table 3: Knowledge level and attitudes status of subjects depending on the sources of information on the benefits of breastfeeding.

	Health Centers		Mass Media		Family Members		P
	%	Number	%	Number	%	Number	
Knowledge levels							
High	50.0	56	73.7	28	42.0	18	
Moderate	44.7	50	23.7	9	51.0	22	0.05
Poor	5.3	6	2.6	1	7.0	3	
Attitude state							
Negative	26.8	30	10.50	4	14.0	6	0.04
Positive	73.2	82	89.50	34	86.0	37	

between attitude position and mode of delivery (p = 0.89) (Table 4).

To investigate the relationship between age with attitude and knowledge levels the Pearson correlation test was used, this test showed that there was no significant correlation between age and knowledge levels (p = 0.15) and between age and attitude of subjects (p = 0.16).

Table 4: Knowledge of subjects based on delivery.

	Cesarean		Vaginal Delivery		P
	%	Number	%	Number	
Knowledge levels					
High	53.5	46	52.7	60	
Moderate	42.0	36	42.0	48	0.97
Poor	4.50	4	5.30	6	
Attitude state					
Negative	21.0	18	20.2	23	0. 89
Positive	79.0	68	79.8	91	

Discussion

During previous years, exclusive breastfeeding was one of priorities in Iran and extensive studies in this direction has been done by the Ministry of Health [21]. However, the few studies done years ago shows that exclusive breastfeeding to be forgotten. Thus studies regarding to knowledge and attitudes of nursing mothers have special importance because the basis of lactation behaviour requires having high knowledge and attitude in this regard.

The results of this study suggest that, 53 percent of subjects had high awareness, 42 percent of them had moderate knowledge and 5 percent of them had poor knowledge. Considering the high percentage of moderate knowledge group still more education are needed. One study which has assessed knowledge and attitudes of mothers about breastfeeding during the first year after childbirth reported that most people (50.8%) had poor knowledge [22]. In Ghaffari et al study about breastfeeding 36.7 percent of mothers had good knowledge, 57.2 percent had moderate knowledge and remaining had poor knowledge. Also the results showed that 79.5 percent of subjects had a positive attitude and 20.5 percent of subjects had negative attitude towards breastfeeding benefits [23]. In the Mosaffay Khomamy study, more people had a negative attitude about breastfeeding (57.5%) [22]. In Ghaffari et al study about breastfeeding, 7.1 percent of mothers had negative attitudes, and 68.6 percent of mothers had relatively positive attitude and the remaining had completely positive attitude [23].

High attitude of nursing mothers in this study indicate a positive view of mothers about breastfeeding. The results showed that there was a positive and a straight correlation between the attitude of subjects and knowledge levels and with higher levels of knowledge, their attitude levels increases. The Mosaffa Khomamy study showed that there was a significant difference between attitude positions and knowledge levels about breastfeeding (P = 0.001) [22].

The results of this study indicated that there was no significant difference between education levels and occupation with the subject's knowledge and attitudes. In Ghaffari, et al study also there was no significant difference between education and socioeconomic levels with subject's knowledge and attitude [23]. In a study that about breastfeeding was done in Canada, education levels was as an important factor in the knowledge of mothers [24]. In a Griffith et al study that regarding to mother's knowledge and attitudes about breastfeeding was conducted in England, low education and low socioeconomic level was associated with poor knowledge and negative attitude [25].

The difference between the results of this study with other studies regarding the effect of education on knowledge and attitudes could be due to that most nursing mothers had a higher awareness. Often this awareness was obtained through health centers and mass media. In academic levels about breastfeeding and its benefits has not provided necessary education, so education levels of people have no effect on their knowledge. Thus, the importance of providing educational materials about breastfeeding and its benefits by experts in university courses is raised. Also findings showed that there was no significant difference between occupation with knowledge and attitude levels, which could be due to that the training of health centers that the major source of breastfeeding information for nursing mothers, were presented for all employed women and housewives and all persons covered by health centers were entitled from the training.

The results of this study indicated that there was no significant difference between age with knowledge and attitude levels of subjects. In Ghaffari, et al study there was no significant difference between age and knowledge and attitude levels of subjects [23]. Jannesari, et al study showed that there was a significant difference between age and knowledge levels [10].

The result of the study indicated that there was a significant difference between knowledge levels and information sources of breast feeding. The majority of subjects reported health centers as sources of breastfeeding information, and the majority

of them had a high awareness about breastfeeding. Result of one study regarding to knowledge and attitudes of mothers about breastfeeding was conducted in Bolivia is accordance with the present study [26]. In the Mosaffa Khomamy study was conducted in Lahijan, the source of information for most people (62.9%) reported a set of resources [22]. In Ghaffari, et al study, the mothers who were under health centers care compared with mothers who were under specialist care had better knowledge and more positive attitudes [23].

This study showed that there was no significant difference between knowledge and attitude levels with education and occupation, thus the importance of providing educational courses about breast feeding in academic levels in order to enhance knowledge and attitude levels of people is raised. This study assessed knowledge and attitudes regarding breastfeeding and recommended in future studies the effect of the factors affecting knowledge, attitude and practice of mothers regarding breastfeeding and the role of confounding factors in order to improve knowledge and attitudes of mothers about breast feeding must be examined. A number of limitations were noted in the current study including lack of enough motivation in some of the subjects in responding to the questionnaire and not following up the mothers' practice towards breastfeeding. Current study population, consisting of only mothers during the first year after delivery in Tonekabon (Iran), may have limitations in not being applicable to other mothers in other parts of Iran.

The study showed high knowledge levels and positive attitudes of mothers about breastfeeding and could be shown that efforts during the past years by competent persons regarding to emphasis on breastfeeding and therefore providing necessary training in this regard and also can be concluded that Tonekabon health centers provide training in breastfeeding with proper way.

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