

The Study of Breastfeeding Knowledge among Northern Iranian Teachers

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Abstract

Introduction: Breastfeeding provides all essential nutrients for the first 6 months of life and plays an important role in ensuring health in neonates and mothers. This study was carried out among northern Iranian primary school teachers to determine the knowledge about breastfeeding. **Materials and Methods:** This is a descriptive- crosssectional study and where 745 subjects were chosen by random and cluster sampling. Data was collected by questionnaire about social-demographic and the optimal food awareness at first 6 months of age. Data was analyzed by SPSS win soft-war. Chi-2 test was used to compare groups. **Results:** Teacher's knowledge about exclusive breastfeeding and breastfeeding with breast milk substitutes as the best diet was 81.6% and 17.6%, respectively. There was no statistical difference between the teachers who were non-university graduates (78.0%) or those who were university graduates (83.3%). The knowledge of breastfeeding among Turkman and Non-Turkman was 85.1% and 80.2% and male to female was 80.6% and 82.6%, respectively. There were no statistical differences between these variables. **Conclusion:** The teacher's knowledge about advantages of breastfeeding was low and that it was influenced by social-economic factors. Further studies need to be carried out in this area for determining the difficulties of breastfeeding.

Keyword: Breastfeeding, Teacher, Knowledge, Ethnicity, Iran

Introduction

The main food of most infants is breast milk in the form of nature's gift. Breastfeeding is well established in Iran, and the history of it can be traced back to the fourth century in the Canon Medicine Text book which was written by Avicenna¹. Iran is a Muslim country and Islam emphasis the feeding of human milk instead of animal milk². For the first 6 months, breastfeeding meets the requirement of the child in full³. Polyunsaturated fatty acids secreted in the milk are required for nerve cell and brain development⁴. Breastfeeding makes an emotional connection between mother and baby which is followed till adulthood⁵. Infectious disease and mortality rate are low among children that have been breastfeed for more than 12 months⁶. Variables that may influence breast feeding includes: race, maternal age, maternal work, level of education of parents, social-economic status, insufficient milk supply, infant health problem, maternal

obesity, smoking, parity, method of delivery, maternal interest and other related factors⁷.

Based on the Health and Disease study in Iran in 2000 AD, nearly 90% of children received breast milk and subsequent studies showed that exclusive breastfeeding reduced from 44% in 2000 to 27% in 2004⁸. Literacy has played a main role for promotion and expansion of health program and influence of education on nutritional program has been approved by some studies but the influence of education on the nutritional status can be different different. For example, in spite of Dyson's study¹⁰ which reported that the teaching mothers who had premature infants were affected on the early breastfeeding but Gill's study¹¹ didn't show similar results. Other studies^{12,13,14} showed that duration of breast feeding was more

in educated women. Huus and et al¹⁵ in their study showed that exclusive breastfeeding (under 4 months) in parents who had had college education was still low. Teachers from each community are educated and aware of their good nutritional practices and can directly or indirectly change the social attitudes in the community. Golestan province is located in northern Iran which has a population of 1,600,000. This area is located within the hill side of Alborze mountains¹⁸ and has 159442 school children at the primary level in 2149 schools and 15000 primary school teachers. In this province various people residing from different ethnic groups, predominantly, Fars (native), Turkman, Sistani and Bluch.

Due to the restriction in executing epidemiological projects in many of those areas, there has not been any study on the teacher's knowledge and attitude in this area up till now; therefore it was necessary to design a study about the same. The aims of this study were to examine the knowledge and attitude of primary school teachers about breastfeeding with the variables of educational level, age, sex, ethnicity, economic status and marital status in the north of Iran in 2008.

Methods

This was a descriptive and cross-sectional research study, and carried out amongst 745 primary school teachers (399 male and 346 female) from 112 schools of villages in northern Iran. The schools and teachers were chosen by cluster and stratified sampling. For all teachers a questionnaire was filled which contained questions on the knowledge about breastfeeding. Sociodemographic criteria such as gender, ethnicity, economical condition and marital status were also recorded.

The ethnic groups in this study were divided into two groups:

- 1) Turkman: The inter marriage of this ethnic group with other ethnic groups were rare, therefore called as a pure race.
- 2) Non Turkman: The native residents of this area who are called the same name in this society

Educational level: The educational level of teachers based on Iranian categorization was divided into 2 groups

- 1) Low Educated: Teachers who educated for 12 years schooling.

- 2) High Educated: > 12 years of education including those teachers who were educated in college.

Age divided into 4 groups:

≤30 years, 31-40 years, 41-50 years and 51≥.

Marital status divided two groups

Married and Unmarried. Divorcees were included into the married group.

Economic status

The economic ranking of the families in this study, were assessed on the base of 12 items and principles. On the bases of those 12 items the family was divided two groups.

Owner more than 9 items as good economic and Owner less than 9 items as intermediate economic.

Data were analyzed using SPSS version 16.0 and statistical significance was defined as *p*-value <0.05. Chi-2 test was used to compare group frequencies.

Results

Questionnaires were completed for all of cases. There were 11.1% and 5.2% in under 30 years and over 50 years age groups, respectively out of which 7% were unmarried. Mean ± SD of age in women were 37.52±7.53 years and in men 42.15± 6.77 years age. Also, 61.7% and 38.3% of teachers were living in urban and rural areas respectively and 10 women were pregnant.

The relationship between socio-demographic factors and teacher's knowledge is presented as in Table 1. The rate of knowledge about benefits of breastfeeding in the first 6 months of life was 81.6%. Breastfeeding beside other milk or milk substitutes were considered appropriate by 17.6% of them. Knowledge about exclusive breast feeding was found in 2.2% in women more than men.. Turkman ethnic group were 4.9% more than other ethnic groups. College educated group were 2.7% more than low educated group and good economic status group were 2.7% more than intermediate economic status group. Also, knowledge about breastfeeding was found more in 31-40 years aged group as compared to other age groups. There was no statistically significant difference between the above mentioned groups.

Table 1: The relationship between socio-demographic factors and advantage of breastfeeding knowledge in primary school teachers.

Characteristics		n=745	Breast milk	Breast Milk & others milk substitutes	Unknown	p-value
Gender	Male	399	320(80.6)	75(18.9)	4(1.1)	0.258
	Female	346	288(82.8)	56(16.1)	2(0.5)	
Ethnicity	Turkman	215	183(85.1)	31(14.4)	1(0.5)	0.115
	Non-Turkman	530	425(80.2)	100(18.9)	5(0.9)	
Age(year)	≤30	83	67(80.7)	16(19.3)	0(0)	0.378
	31-40	310	262(84.5)	46(14.8)	2(0.6)	
	41-50	313	248(79.2)	61(19.5)	4(1.3)	
	≥51	39	31(79.5)	8(20.5)	0(0)	
Educational Level	Low	263	184(78.0)	50(21.2)	2(0.8)	0.080
	High	509	424(83.3)	81(15.9)	4(0.8)	
Economic Status	Intermediate	458	369(80.6)	85(18.6)	4(0.9)	0.353
	Good	287	239(83.3)	46(16.0)	2(0.7)	
Marital Status	Single	52	42(80.8)	9(17.3)	1(1.9)	0.870
	Married	693	566(81.7)	122(17.6)	5(0.7)	
Total		745	131(81.6)	608(17.6)	6(0.8)	

Discussion

In this study, one to five of the teachers did not have enough knowledge about advantages of breastfeeding and 17.6% of them preferred that children consumed breast milk with cow's milk or powder milk. Breast feeding has an important role on the physical and mental growth of infants^{3,4,19,20}. Gill's study has showed¹¹ that family members can impose a positive influence during the breast feeding period. Pisacane's study¹⁶ showed that training of parents about advantages of breastfeeding and their obstacles can enhance the duration of exclusive breastfeeding. A study²¹ showed that Women with high education level, married, not experiencing financial stress and who attended prenatal classes were more likely to initiate breastfeeding. Teachers in developing and Islamic countries are respectable; thereby the positive impact of this group on the change of social behavior is undeniable.

In the present study, knowledge about advantages of breastfeeding in high educated teachers was more. Others studies^{12,13,14} showed that the duration of breastfeeding in high educated women was more but Huus¹⁵ showed that exclusive breastfeeding in college educated mothers is shorter as compared to low educated mothers.

It is notable, if the knowledge in high educated mothers is more, but the outdoor social activity in this group is more. The limitations of this study were that we only assessed the knowledge of primary school teachers

regarding breast feeding practices but not the obstacles to breastfeeding. In this study, knowledge about breast feeding advantages among Turkman ethnic group was higher than non-Turkmen ethnic group. Researchers approve the influence of ethnicity on breastfeeding promotion. Lesser tendency of breastfeeding was shown by Forste²² and Liu²³ in their studies. Also, Jevitt²⁴ showed that breastfeeding duration in obese black women was shorter than US and Spanish immigrant women. Some studies^{25,26} carried out in this area of Iran showed that nutritional status in Turkman ethnic group was different as compared to other ethnic groups.

In our study, knowledge in high economic group was higher than intermediate economic group. Other studies^{27,28} showed that the breastfeeding duration was low in low income families. Evers et al²¹ in their study showed that low-income households, who had good awareness, had more tendency to breastfeed their children.

Conclusion

Contrary to what we thought, only one-fifth of teachers were aware about the advantages of breast feeding. Unlike other studies we didn't have any significant relationship between socio-demographic factors and knowledge about advantages of breastfeeding. With regard to the influence of teachers in changing the social behavior, a training program for improving knowledge of breastfeeding is suggested

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