



Qualitative Study of Factors Affecting Non-Exclusive Breastfeeding in the First 6-Month Life of Infants and Discontinuation of Breastfeeding in Women Admitted to Iranshahr Health Centers 2018

Fatemeh Kordsalarzahi¹, Ali Mirbaloochzahi^{2*}, Mahnaz Didevar³, Neda Kordsalarzahi¹ and Zahra Rahdar³

¹Student, Department of Nursing, Student Research Committee, Iranshahr University of Medical Sciences, Iranshahr, Iran

²Master of Health Education, faculty member, Iranshahr University of Medical Sciences, Iranshahr, Iran

³Lecturer, Department of Public Health, Iranshahr University of Medical Sciences, Iranshahr, Iran

⁴Student Research Committee, Faculty of Nursing and Midwifery, Zabol University of Medical Sciences, Zabol, Iran

*Corresponding author: Ali Mirbaloochzahi, Master of Health Education, faculty member, Iranshahr University of Medical Sciences, Iranshahr, Iran, E-mail: mirbaloochzahi57@gmail.com

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Abstract

Background and objective: Feeding the infant after birth and in the first years of his or her life is one of the most important factors involved in the growth and development of infant. It is recommend that exclusive breastfeeding to continue for 6 months and the breastfeeding to continue for 2 years after the birth due to benefits of breastfeeding for mothers and infants. Given the importance of the mothers in this regard, this research was conducted to evaluate the factors affecting exclusive breastfeeding in the first 6-month life of the infants and discontinuation of breastfeeding from the viewpoint of mothers.

Methodology: This qualitative study was conducted using phenomenological method. It was conducted on sample of 40 women, who had breastfeeding experience. Based on purposeful sampling, research sample was selected among the women, admitted to health centers of Iranshahr and data were collected by focus group discussion method until data saturation. Then, the obtained data were analyzed.

Results: Results showed that the participants in all groups considered the factors of mother's perception of inadequate or lack of breast milk, mother's perception of inappropriate weight gain of infant, and impairment in growth of infant, use of infant formula, maternal comfort, high education and employment of mother outside of home, specific disease of mother and the use of certain drugs such as psychiatric pills, re-pregnancy, loss of physical fitness, breast sagging as the important factors affecting the non-breastfeeding and discontinued breastfeeding. They also stated that Islam and religious teachings, husband's support, health centers staff support, and

support of relatives and adults and mother's knowledge are the most important factors involved in promoting exclusive breastfeeding and continued breastfeeding.

Conclusion: Based on the statements of the groups, the use of supportive resources and enhancing the knowledge of mothers by holding educational classes in health centers before delivery and during breastfeeding, the presence of breast milk counselor in health centers and advertising through mass media on the complications of the artificial milk (infant formula) and benefits of breastfeeding can play key role in promoting exclusive breastfeeding and continued breastfeeding.

Keywords: Exclusive breastfeeding; Breastfeeding; Continued breastfeeding; Focus group discussion

Introduction

Infants are the most precious human wealth, while they are the most vulnerable population. Various factors disrupt their developmental and growth. Some of these factors include mothers' unawareness and their inappropriate behaviors on breastfeeding in terms of time, value and practice of supplementary nutrition [1]. One of the most important methods for promoting the health of infants in different communities is breastfeeding [2]. The breastfeeding has short-term and long-term health benefits and plays key role in health of the infant [3]. Moreover, based on the World Health Organization report, a few women cannot breastfeed their infants, while about 98% of mothers can exclusively breastfeed for 6 months [4]. In this regard, the breastfeeding of infants prevents more than 7 million deaths caused by gastrointestinal and respiratory infections in the world annually, so that the likelihood of death due to gastrointestinal and diarrheal diseases among the infants breastfed, is 25 times less than that in infants who use infant formula [5]. In addition, this type of nutrition reduces the incidence of diseases such as otitis and allergies, and improves vision and speech. It also leads to cognitive development for infants [6].

It also has other benefits for mother, such as weight loss and protection against breast cancer and ovarian cancer [7], while the early discontinuation of exclusive breastfeeding has adverse effects on the health and socioeconomic functions of mother, infant, and the community, leading to high costs for health system [8]. WHO argues that desired growth and health of infant depend on breastfeeding [9]. Despite the benefits of this type of nutrition and WHO recommendations, most mothers discontinue breastfeeding before the appropriate time, or they use supplements and other liquids. Unfortunately, only 36% of infants enjoy exclusive breastfeeding in world, while this figure is 23.1% in Iran [10]. In the study conducted by Morovati Sharif Abad et al. it was reported that the infant's restlessness, the suggestion of others and the mother's perception on inadequate milk were the reasons for discontinued breastfeeding [11]. Given reduced exclusive breastfeeding in recent years, researchers decided to evaluate the viewpoint of the mothers on the factors affecting exclusive breastfeeding in a qualitative study, so that they can use its results for identifying the problems associated with non-breastfeeding and the factors related to authorities, health staff, mothers and their families to design strategies for improving maternal and infant health.

Procedure

This research is a qualitative research carried out using the phenomenological method and focus group discussion group was used to collect the data. The purposeful sampling method was used in this research. Research sample was selected among the women admitted to Iranshahr Health Centers. Research participants included 40 women aged between 15 and 39 years and had the experience of breastfeeding in their own or one of their relatives. The selection of mothers to participate in a group interview was performed without considering the age and education level through referring to Iranshahr health centers. Before the interview, the objective of the study and the method of interview were explained for participants and the participants were ensured that their information would remain confidential and have freedom to leave the study. Written consent was also taken from them to record the interview (note was taken from the interviews, if they were dissatisfied with recording the interview). Group discussion was formed with 6 to 8 people and each session lasted 45-60 min. The interview was conducted with the focus on open questions and using FGD method. The research environment was in accordance with the

principles of qualitative research, and the interviews were held in a suitable and relaxed environment. Participants sat in the determined place in circular and each interview was conducted with presence of researchers (one person as interviewer and one person as facilitator and two persons took notes and recorded the interviews). To conduct the interview, guiding questions (Table 1), designed and confirmed by several experts, were used. In several interviews as pre-test, the reliability of questions and the time required to conduct it were examined and its problems were resolved so that they can be comprehensible for the participants and they can receive the adequate information. In addition, explorative questions, such as "What this means, please give more examples and ..." were used to extend and generalize the findings. Data collection continued until the full saturation, so that no new codes were added to the previous codes in the last interviews. The participants' interview texts were transcribed immediately after the interview. The analysis of the questions was done manually so that the frequency of the given answers was classified based on the similarity of the answer and the key sentences of each answer were noted as control of that answer.

SL. No.	Questions
1	If mothers breastfeed their infants up to 6 months at present time?
2	If mothers breastfeed their infants up to 2 years at present time
3	What are the causes of discontinued exclusive breastfeeding?
4	Which group of people plays role in supporting the mother to breastfeed up to 2 years
5	If the health systems is adequate to promote the breastfeeding?
6	To what extent the Islam and religious teachings can be effective in continued breastfeeding?
7	What is the best solution to increase the continued breastfeeding?
8	If the laws of nutrition with infant formula are appropriate? If not, how they should be?

Table 1: Key questions of focus group discussion to determine the factors affecting non-exclusive breastfeeding in the first 6-month life of infants and discontinued breastfeeding.

Results

This research evaluated the factors affecting the non-exclusive breastfeeding and discontinued breastfeeding from participants' point of view. The key sentences of the results with regard to 8 sub-themes included factors affecting exclusive breastfeeding until 6 months, factors affecting exclusive breastfeeding until 2 years, the reasons for discontinued breastfeeding, the support of others, the performance of health centers in promoting breastfeeding, the role of Islam, the best solution to promote breastfeeding, the laws related to nutrition with infant formula. To make some themes of this research tangible, it was required that participants to have breastfeeding experience or see in other people. For example, some statements of the participants have been presented.

Factors affecting the exclusive breastfeeding until 6 months

The majority of participants in the groups stated that mothers who have high knowledge observe the exclusive breastfeeding until the 6 months. The main causes for lack of exclusive breastfeeding in the groups included inadequacy of the mother's milk, mother's perception of the low weight gain, impairment in growth of infant, the specific

disease of mother or taking special pills, an interest in early weight gain, and consuming infant formula. These factors cause mothers to use infant formula or supplement nutrition before 6 months.

Participant (No 33): As mother's breast milk is low and infant is not satisfied, Participant (No 6): as mother gets sick and takes pills, Participant (No 13): The infant does not take the breast, the infant has trouble in sucking.

Factors affecting breastfeeding until age 2

The majority of mothers in the groups emphasized that women in Iranshahr city do not observe breastfeeding until age of 2 and breastfeed their infants up to 18 months at maximum, and the participants stated that they breastfeed the female infants more than male infants. In general, the reasons for lack of breastfeeding until 2 years were included comfort of the mother, infant dependency on tablecloth food, and re-pregnancy. Participant (No 9): Mothers discontinue breastfeeding for convenience of their sleep at night and getting rid of their breast sucking by the infant and reducing the dependency of the infant, Participant (No 34): Mother discontinues

breastfeeding before the age of 2 years in order to make the infant dependent on tablecloth food.

Causes of discontinued breastfeeding

The majority of participants stated that loss of physical fitness and breast sagging, re-pregnancy, high levels of literacy and mother's employment were the factors affecting discontinuation of breastfeeding. Participant (No 27): Mother's employment and her returning to work. Participant (No 34): Mother's comfort and infant dependency to mother, Participant (No 6): re-pregnancy, participant (No 33): breast sagging.

People who can play supporting role in continued breastfeeding

The majority of the participants stated that support for the spouse, health center staff, and other people play supporting role in continued breastfeeding. Participant (No 33): by training the mothers on the foods increase their breast milk and giving a nutrition subsidiary to mothers who are financially poor by health center staff. Participant (No 6): The advice of elderly and experienced people and expressing their experiences on the benefits of breastfeeding, participant (No 24): providing appropriate nutrition for mother by her spouse and helping her in home works.

Performance of health care centers in promoting breastfeeding

Most participants stated that the performance of health centers was appropriate and most mothers referred to appropriate trainings of the hospital after delivery. Participant (No 8): Health centers staff is always busy and does not provide any training on this. It is better to spend time for the mothers. Participant (No 44): It is not important for health center staff that whether mothers breastfeed or give infant formula for their infants and provide no training for mother in this regard and it is better that educational classes to be held for mothers. Participant (No 28): health center staff does not care the mother at all and does not convince the mother with regard to cause of the breastfeeding. It is better to give educational booklets on breastfeeding along with picture for the mothers, since most of the mothers are illiterate.

The effect of Islam and religious teachings on continued breastfeeding

Majority of participants argued that the role of Islam and religious teachings is effective in breastfeeding. Participant (No 32): Quran and religious leaders recommend for mothers to breastfeed for full two years. Participant (No 7): Islam can be very effective, as narrations and hadiths state that breastfeeding prevents breast cancer in mother. Participant (No 9): Islam has not forced a mother to breastfeed and it cannot be so effective, but I think that breastfeeding is right of the infant.

The best solution to increase continued breastfeeding

Most participants argued that holding training classes in health centers, explaining the benefits of breastfeeding in their classes, teaching the husbands during breastfeeding, and increasing the media and press advertising on the benefits of breastfeeding are the best solutions to increase continued breastfeeding.

Laws of feeding with artificial milk (Infant formula)

The majority of participants did not agree to rules of feeding with artificial milk. They suggested: Participant (No 12): is not suitable and it is better for the health center to state the complications of infant formula for the mother. Participant (No 27): It is not right at all, and health center staff should train the mothers that they are allowed to use it, when necessary and prescribed by physician. Participant (No 22): health centers staff should train the mothers and state that infant formula [12] has many complications and they should justify the mothers to breastfeed in order to increase their milk rather than using infant formula or eat the foods, which increase the milk.

Discussion and Conclusion

Breastfeeding is one of the priorities of public health in the world [13]. In spite of benefits of breastfeeding in the prevention of childhood allergic and infectious diseases [14], and maternal protection against ovarian and breast cancers [7], unfortunately, some mothers do not act successfully in breastfeeding their infants. The results of this study and other studies such as the studies conducted by Khabbazkhoob et al. [15] show that exclusive breastfeeding is decreasing. Moreover, Mir Ahmadzadeh et al. in their study in Fars province showed that the mean exclusive breastfeeding was 121 days [16]. However, studies conducted in the years 2007-2011 in other cities of Iran, the exclusive breastfeeding does not have uniform trend [8].

The difference in the prevalence of exclusive breastfeeding in various studies suggests the cultural, economic, and social differences of individuals, and enjoyment or non-enjoyment of supportive system [17]. The most important factors affecting lack of exclusive breastfeeding and discontinued breastfeeding in the present study include mother's perception of inadequate breast milk, the mother's perception of inappropriate weight gain of infant, and impairment in infant growth and development, use of infant formula, mother's comfort, high education level of mother, mother's employment outside the home, infant's attention to tablecloth, the specific disease in the mother, and the use of certain drugs, re-pregnancy, loss of physical fitness, and breast sagging. The most common factors affecting the promotion of exclusive breastfeeding and continued breastfeeding in this research included Islam and religious teachings, spouse support, support of health center staff, support of others, and knowledge of mother. The mother's level of knowledge of the benefits of breastfeeding and disadvantages of infant formula is one of the factors affecting the breastfeeding of infant, and as this knowledge level is high, the mother would try to breastfeed the infant.

In the current research, a high level of knowledge of mother was one of the effective factors in the promotion of exclusive breastfeeding, which this result is consistent with results of the studies [18]. However, in the research conducted by Khayazkhoob et al. a significant relationship was found between mother's knowledge and the continued exclusive breastfeeding [15]. Rahmatnejad et al. [19] in their studies reported that inadequacy of breast milk was one of the factors for discontinued breastfeeding. These mothers stated that crying and restlessness of their infants was sign of their breast milk inadequacy. Their results are in line with those of our study. It also seems that inexperience, the worry, and false compassion of some mothers make mothers misinterpret the infant's gestures and imagine that their infants' crying and restlessness means the inadequacy of their breast milk, and this mental conception of inadequacy of their breast milk make them discontinue breastfeeding and use infant formula.

Akaberian et al. also reported that employment, inadequate breast milk, and maternal comfort were some of the factors affecting the lack of breastfeeding, which this result is consistent with that of our study [20]. Results also revealed that mothers considered inappropriate weight gain and impairment in infant's growth as the factors affecting the discontinued exclusive breastfeeding, which this result is consistent with that of the study conducted by Zare et al. [21]. However, various factors are involved in reduced growth of infants and it can be due to childhood diseases, infections, anemia and unawareness of mothers on the natural growth of infants and the comparison of appearance of their infants with that of other infants and wrong practice of breastfeeding by mothers.

With regard to discontinued breastfeeding for two years, the mothers participating in this study agreed to breastfeed for 18 months, which this result is consistent with that of the study conducted by Rakhshani et al. in Zahedan [22]. In addition, a correlation was found between the gender of the infant and exclusive breastfeeding in this study, so that the rate of exclusive breastfeeding in female infants was higher than that of male infants. This result is in line with the result of study conducted by Nejad et al. [23]. However, in the study conducted by Sapna et al. males enjoyed more exclusive breastfeeding [24]. This inconsistency may be due to differences in the culture of the various communities or mental beliefs of mothers on gender superiority. Mohammadi et al. in a study entitled "factors associated with the continuation or discontinuation of breastfeeding of infants aged below one year showed significant relationship between mother employment out of home and duration of breastfeeding [12], which it is in line with result of our study. As many mothers discontinue breastfeeding early due to returning to workplace, health center staff should advise mothers to breastfeed their infants in addition to maintaining their job, since breastfeeding can have high value for those working outside of home and their infants are less affected by diseases. Another result of this study suggest the effect of mother's education level on continued exclusive breastfeeding, so that the reason for discontinued breastfeeding in mothers with high education level was their employment status, which this result is in line with that of study conducted by Mohsenzadeh et al. [25].

However some studies in Iran such as Imani et al. showed no significant relationship between the level of education and breastfeeding [26]. This difference among the findings can be due to differences in various occupations throughout the world and not providing adequate education for mothers due to lack of time to attend in educational classes and health centers compared to non-working mothers. In this study, mothers considered Islam and religious teachings as a very important factor in promoting exclusive breastfeeding, so that when mothers were asked what the role of religious teachings is in promoting breastfeeding, most mothers stated that Quran has ordered the mothers to breastfeed their infants for two years. The results of the study conducted by Pasha et al. in this regard are consistent with those of our research [27].

As the view of most mothers on breastfeeding originates from Islam teachings and religious leaders, we should enhance the knowledge of the mothers on breastfeeding by educating religious leaders of each community. Moreover, the majority of participants in all groups considered support of spouse, support of health center staff, and support of adults and others as effective factors in promoting the breastfeeding, which it is in line with the result of the study conducted by Abdollahi et al. [8], in which the role of the spouse was considered important in initiation and continuation of breastfeeding. It is also in

line with the result of the study conducted by Akaberian et al. in which the supportive role of health center staff, their relatives and adults were considered as effective factors in continued breastfeeding [20]. The results of this study also showed that educating the mothers on the breastfeeding by health centers was not satisfactory, and participants stated that the role of the health education system in promoting the exclusive breastfeeding was unsatisfactory and inadequate. They stated that providing education on the benefits and right practice of breastfeeding by health centers during pregnancy and after delivery is important factor in promoting breastfeeding. This result is in line with that of study conducted by Akram et al. in Karachi, in which participants considered prenatal health education programs effective in promoting breastfeeding [28]. This study suffers from some limitations, such as low number of mothers participating in the study [29]. Finally, given the statements of groups and the results obtained in this study, the following recommendations are presented to promote breastfeeding:

- Advertising through more effective methods, such as interesting programs broadcasted through TV and radio, and showing the complications of infant formula in educational videos.
- Increasing the knowledge of mothers on the benefits of breastfeeding for mother and infant through holding educational classes during pregnancy and after delivery in health centers.
- Presence of breast milk counselor in health centers
- Developing programs to enhance the knowledge of fathers on exclusive breastfeeding and advising them to support their wives during breastfeeding.

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