

Access this article online
Quick Response Code:

Website: www.jehp.net
DOI: 10.4103/jehp.jehp_1467_20

The relationship between maternal perception of social support and breastfeeding patterns

Elham Alidadi-Shamsabadi, Mitra Savabi-Esfahani¹

Abstract:

BACKGROUND: Breastfeeding is beneficial for the health of infants and mothers. It is a complex social behavior that may be influenced by social support. The study aimed to determine the relationship between perceived social support of breastfeeding women and their breastfeeding patterns.

MATERIALS AND METHODS: The research was a cross-sectional study on 300 mothers with 6-month infants or younger who were selected randomly. The data collection tool consisted standard social support and breastfeeding patterns questionnaires. We analyzed data using descriptive and analytical tests and SPSS 18 at a significance level of < 0.05 .

RESULTS: The results indicated that 85%, 82.2%, and 38% of the infants were exclusively breastfed at 1 week, 4, and 6 months after delivery, respectively. The result of *post hoc* LSD test indicated that the mean number of supporters for mothers, who were in the 6th month of delivery, was significantly lower than other times ($P = 0.001$). The one-way analysis of variance indicated no significant difference between perceived satisfaction of social support at different periods after delivery ($P = 0.92$). Despite the present results, which indicated that the number of supporters and scores of satisfaction with support in exclusive breastfeeding were higher than other groups, the differences were not statistically significant.

CONCLUSIONS: The mean number of supporters was less in women, who had 6-month-old infants, than mothers who had just given birth. It seems mothers with supplements and formula feeding patterns, such as breastfeeding mothers, may be supported to use these methods. Therefore, more studies are suggested on this field.

Keywords:

Breastfeeding, maternal, patterns, perception of social support

Student Research Committee, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran, ¹Department of Midwifery and Reproductive Health, Nursing and Midwifery Care Research Center, Faculty of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran

Address for correspondence:

Assis Prof. Mitra Savabi-Esfahani, Department of Midwifery and Reproductive Health, Nursing and Midwifery Care Research Center, Faculty of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran.
E-mail: m_savabi@nm.mui.ac.ir

Received: 31-10-2020
Accepted: 11-05-2021
Published: 31-01-2022

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

Introduction

Breastfeeding is beneficial for the health of babies and their mothers. The risk of gastroenteritis, respiratory infections, allergies, obesity, cancer, and diabetes increases in formula-fed infants.^[1,2] On the other hand, mothers with formula-fed infants are more likely to develop reproductive cancers, cardiovascular diseases, and type-2 diabetes.^[3-5] According to the American Academy of Pediatrics, human milk is a gold standard for infant nutrition.^[6] On the other hand, the World

Health Organization (WHO) recommends that children be exclusively breastfed for the 6 months and its continuation with food supplements until 2 years old.^[7] However, the rate of exclusive breastfeeding is reported to be 41% in the world.^[8] Some studies in Iran have reported a decrease in breastfeeding rate in the 6th month after delivery compared to immediately after delivery.^[9,10] According to a study in Iran in 2016, the rate of exclusive breastfeeding was 47.79% in urban areas and 43.07 for Isfahan province as a large province of Iran.^[11]

How to cite this article: Alidadi-Shamsabadi E, Savabi-Esfahani M. The relationship between maternal perception of social support and breastfeeding patterns. *J Edu Health Promot* 2022;11:30.

Despite the numerous studies on personal factors affecting breastfeeding and their provision of valuable knowledge and information about this issue,^[12] the researchers have found that more attention should be paid to the impact of psychosocial factors on breastfeeding behaviors.^[13] So that Tarkka, Hauck, and Dimmock stated that breastfeeding was a complex social behavior and the mother's perception of successful breastfeeding is not fully explained despite the presence or absence of breastfeeding problems.^[14,15]

The social support may influence health via several pathways, for example, social influence, social engagement, and person-to-person contact.^[16] Results of studies indicate that a lack of social support of mothers during pregnancy is an important risk factor affecting the mothers' well-being.^[17] According to the results of studies the lack of social support was associated with low birth weights,^[18,19] the poor labor progress,^[20] premature labor,^[21] neural tube defects,^[22] depression, and anxiety.^[22] Regarding the breastfeeding, Asiodu (2017) stated that social support played an important role in continuing or early cessation of breastfeeding, so that the mother's decision for breastfeeding or formula feeding is influenced by views of individuals who are on their social networks, e.g. family members, friends, colleagues, public health nurses, and church members.^[23] Furthermore, Boccolini *et al.* reported that social support could be effective in increasing the rate of exclusive breastfeeding.^[24] However, some other studies have not reported any significant relationship between social support and exclusive breastfeeding.^[25]

Social support has been less taken into consideration.^[26] In this regard, Salarkia *et al.* conducted a qualitative study in 2011 and stated that the majority of participants reported the mental, spiritual, and physical care for mothers and creating the peace of mind in the family, especially the spouse's support.^[27] Elahidoust *et al.* conducted a qualitative analysis of the social support ties and breastfeeding among the working mothers and reported that emotional, information, and instrumental support were effective factors in breastfeeding.^[26] However, such studies have been usually conducted qualitatively, but the quantitative studies have just pointed out the size of social support networks, so that the sizes of social support networks have affected the relationship between individuals.^[28] The satisfaction with social support depends on the recipients' perception and determines the relationships.^[28] Furthermore, perceptions of availability and type of social support may strengthen or weaken relationships.^[28] Therefore, the present study aimed to determine the relationship between the perceived social support in breastfeeding women with breastfeeding patterns.

Materials and Methods

Study design and setting

The present cross-sectional study was conducted on mothers who visited the comprehensive health centers of Isfahan, Iran, from November to February in 2019.

Study participants and sampling

Participants were mothers who visited the comprehensive health centers for receiving their own and infant care. Inclusion criteria: mothers aged 18–45 years with 6 months and younger infants, singleton infants, birth term and weight of 2500–4000 g, no infant adoption, and no prohibition of breastfeeding due to the mother or infant diseases.

In the study, we measured the sample size using the $n = z^2 \cdot p(1-p) / d^2$ formula. In the study, we assumed that $Z^2 = 1.96$, $P = 25\%$, and $d = 0.05$. Furthermore, the non-response rate was considered to be 10%. Finally, the sample size was considered to be 300.

For sampling, eight centers from all comprehensive health centers of Isfahan were selected using a random number table, and then a random method was used to visit each center on a weekly basis. The units were selected as samples in equal numbers according to their children's age (1st week, 4th month, and 6th month after delivery). In each center, the questionnaires were completed by the research units. Participation in the study was based on the written informed consent. Sampling continued until the number of samples was completed.

Data collection tool and technique

Data collection tools were a standard social support questionnaire and a questionnaire about the breastfeeding pattern information and demographic characteristics. The breastfeeding patterns including exclusive breastfeeding, formula feeding, and combination feeding and demographic characteristics (mother's age, education, number of children, employment status, and economic status) were examined by the questionnaires. The standard social support questionnaire included two dimensions, namely, the social support questionnaire-network (SSQN) and social support questionnaire-satisfaction (SSQS). The first dimension measured the number of individuals who were present for support, and the second dimension measured the individual satisfaction with the social support. The questionnaire consisted of 27 sections each with 2 questions ($n = 54$). At the beginning of each section, the mothers were asked the names of those who could help them in those special conditions. Then, their perceived satisfaction with social support in those conditions were examined using a 6-point Likert scale from very dissatisfied to very satisfied.^[1,6]

The social support questionnaire was designed by Sarason *et al.* in 1983.^[29] Naseh *et al.* also examined its validity and reliability. The reliability values were 95% and 96% in two dimensions, SSQN and SSQS, respectively.^[30]

Data analysis

We analyzed data using the descriptive and analytical tests and SPSS software version 19 (SPSS Inc., Chicago, IL, USA) software considering the significance level <0.05.

Frequency distribution, mean, Chi-square, one-way analysis of variance, and *post hoc* LSD test were considered for the analysis. The one-way analysis of variance also examined the relationship between the independent variable (social support) and dependent variables (breastfeeding patterns).

Ethical consideration

The present study was approved by the Ethics Committee of Isfahan University of Medical Sciences with a code of ethics (IR.MUI.RESEARCH.REDC.1389.259). Participants were assured of the confidentiality of their information. Their participation was also voluntary and according to the written informed consent.

Results

The mean age of mothers was 31.09. Most of them had academic education (62.3%) and were homemakers (85.2%). Furthermore, 48.5% of mothers had two children and 75.1% had average income [Table 1]. The results of Chi-square test indicated that a combination feeding pattern in the 6th month after delivery was significantly higher than the 1st week and 4th month after delivery [Table 2].

Table 1: Background characteristics of the participants

Variables	n (%)
Education	
Primary	5 (1.6)
High school	110 (36.1)
University	190 (62.3)
Number of children	
1	125 (41)
2	148 (48.5)
3	31 (10.2)
4	4 (1)
Employment	
Yes	44 (14.4)
No	261 (85.2)
Economic status	
Low	63 (20.7)
Medium	229 (75.1)
Good	5 (1.6)

The results of the one-way analysis of variance indicated that the mean number of supporters was significantly different at different time periods after delivery. However, the research results indicated that there was no statistically significant difference between the mean score of satisfaction with support at different time periods after delivery [Table 3]. The result of *post hoc* LSD test indicated that the mean number of supporters in mothers, who were in the 6th month after delivery, was significantly lower than other mothers at other times [Table 4]. Furthermore, the results of the one-way analysis of variance indicated that despite the greater number of supporters and the score of satisfaction with support in exclusive breastfeeding than other groups, the differences were not statistically significant [Table 5].

Discussion

The findings of the present study indicated that 85%, 82.2%, and 38% of infants were exclusively breastfed after a week, 4 months, and 6 months of delivery, respectively. The results of a study in Italy during 2008-2011 also indicated that 57.2% of mothers had the exclusive breastfeeding at the time of discharge, while the values were 48.6% and 5.5% in the third and 6th month after delivery, respectively.^[31] On the other hand, Cooke *et al.* reported that the exclusive breastfeeding rate was 80% in Australia immediately after delivery and in hospital, reaching 72%, 56%, and 46% in the 2nd week and 6th and 3rd month after delivery, respectively.^[32] Furthermore, the findings of a study in the Netherlands indicated that 51% and 25% of mothers were exclusively breastfeeding in 1 and 6 months after delivery, respectively.^[33]

The results of the present study indicated that a significant percentage of mothers, who visited the comprehensive health centers, had exclusive breastfeeding compared to some countries. The findings may be due to measures such as the provision of breastfeeding promotion programs in Iran, mother and child friendly hospitals, incentive and supportive programs for exclusive breastfeeding for working mothers,^[34] and frequent recommendations for breastfeeding in the Iranian culture,^[9] but it should be noted that despite training and measures to promote the exclusive breastfeeding until the end of 6 months, the percentage of breastfeeding has not reached the recommendation of the WHO.

The research results also indicated that there was a significant difference between the mean numbers of supporters at different time periods after delivery. The mean number of supporters of mothers, who were in the 6th month after delivery, was significantly lower than other mothers. Therefore, it seems necessary to consider this issue in counseling and training the breastfeeding mothers. In this regard, the results of a study by Semenic

Table 2: Frequency distribution of breastfeeding pattern

Nutritional pattern	The first week, n (%)	Fourth month, n (%)	Sixth month, n (%)	Chi-square test	
				χ^2	P
Exclusive breastfeeding	85 (85)	87 (82.2)	38 (38)	393.97 ^a	>0.0001
Formula feeding	1 (1)	3 (2.8)	0		
Combined nutrition	14 (14)	15 (14.2)	62 (62)		

Table 3: Mean and standard deviation social support questionnaire-network and social support questionnaire-satisfaction among mothers at different time points after delivery

Variable	The first week		Fourth month		Sixth month		One-way analysis of variance	
	Mean	SD	Mean	SD	Mean	SD	F	P
SSQN	2.5	0.93	2.75	1.22	2.18	0.95	7.74	0.001
SSQS	5.33	0.57	5.35	0.58	5.36	0.67	0.08	0.92

SSQN=Social support questionnaire-network, SSQS=Social support questionnaire-satisfaction, SD=Standard deviation

Table 4: Comparison of the average number of sponsors between different periods after delivery

Time	P
The first week and fourth month	0.08
The first week and sixth month	0.03
Fourth month and sixth month	<0.001

Table 5: Mean and standard deviation social support questionnaire-network and social support questionnaire-satisfaction between mothers with different patterns of breastfeeding

Variable	Exclusive breastfeeding		Formula feeding		Combined nutrition		One-way analysis of variance	
	Mean	SD	Mean	SD	Mean	SD	F	P
SSQN	2.6	1.001	2.09	1.21	2.22	1.16	3.45	0.12
SSQS	5.4	0.55	5.36	1.08	5.31	0.71	0.19	0.83

SSQN=Social support questionnaire-network, SSQS=Social support questionnaire-satisfaction, SD=Standard deviation

et al. indicated that the mean score of support, which women received immediately after delivery, was higher than the 4th month after delivery.^[35] In this regard, it seems that the mothers' physical problems with taking care of their babies decrease as their infants grow, and mothers may be less supported by their acquaintances over time. In this regard, Cooke *et al.* reported that the breastfeeding problems, which were effective factors in reducing the rate of exclusive breastfeeding in the 3rd month, decreased in the 3rd month compared to the 2nd week after birth.^[32]

On the other hand, as infants grow, the mothers' ability to care for them may increase, thereby reducing the mothers' lower need to receive support from acquaintances. In this regard, the results of a study by Joshi *et al.* indicated that the self-efficacy scores of breastfeeding women increased in the 6th month compared to the beginning of

breastfeeding.^[36] Furthermore, Marshall *et al.* found that many breastfeeding women felt insecure. In addition, the actuality did not match to their prospects.^[37]

The results of the present study also indicated that there was no significant difference between the mean scores of satisfaction with support at different time periods after delivery. In this regard, the mothers needed less support and were still satisfied with even less support or fewer supporters in the 4th and 6th month compared to the 1st week. Therefore, the difference in satisfaction was not different in various months.

The results also indicated that despite the higher number of supporters and the score of satisfaction with support in the exclusive breastfeeding pattern than other patterns, the difference was not statistically significant. The results were consistent with a study by Tracey *et al.* who found that the breastfeeding mothers had more supporters and higher satisfaction with support than those who were fed with formula.^[38] Furthermore, Cinar *et al.* reported that the adequate family support was significantly associated with higher rates of exclusive breastfeeding.^[39]

In this regard, Meedy *et al.* indicated that the social support was an important and modifiable factor in breastfeeding mothers' decisions.^[40] In the present study, the lack of a significant relationship between the variables was due to the large number of samples with an exclusive breastfeeding pattern compared to other groups. On the other hand, mothers with supplement and formula feeding patterns, such as breastfeeding mothers, might be supported by individuals to use these methods, so that there was social support for mothers in using formula or early use of supplements before 6 months in mothers with supplement and formula feeding patterns.

In this regard, Leahy-Warren *et al.* reported that a husband's positive or negative attitude toward breastfeeding might affect breastfeeding, so that positive attitudes among husbands might be influenced by economic benefits of breastfeeding over formula feeding. Furthermore, their negative attitudes might be influenced by sexual preferences and fear of breast deformity due to breastfeeding, thereby leading husbands to the refusal of breastfeeding.^[41]

Hawley *et al.* concluded that the beliefs such as the safety of formula, insufficiency of breast milk, ease of

use of formula, insufficient milk production by mothers, pain during breastfeeding, and the role of family support were effective factors in the non-exclusive breastfeeding.^[42] Moreover, Susin *et al.* examined the grandmothers' roles in breastfeeding and reported that the grandmothers' recommendations for adding water, tea, or other foods to a baby's feeding significantly reduced exclusive breastfeeding to a month after delivery and the complete cessation of breastfeeding after 6 months.^[43]

The WHO also reports that the social views and health-care providers about the inadequacy of exclusive breastfeeding for infants under 6 months of age are an important reason for reducing the rate of exclusive breastfeeding. It causes the use of other breastfeeding patterns such as formula or combination feeding in mothers.^[44] Therefore, it is suggested conducting further studies by identifying the individuals, who support mothers, and also examining the type of their support in using different breastfeeding patterns.

Limitation and suggestion

The study showed that there was a few of mothers who fed their infants with formula alone in the non-exclusive breastfeeding group. As participants in the cross-sectional study were mothers who visited the comprehensive health centers for receiving their own and infant care, they might receive more counseling for human milk. Therefore, it is suggested that a case-control study be performed by considering the two groups of exclusive breastfeeding and formula feeding.

Conclusions

The results of the present study indicated that a significant percentage of mothers, who visited the comprehensive health centers, had exclusive breastfeeding. However, despite the numerous benefits of exclusive breastfeeding, its percentage has not yet reached the levels recommended by the WHO. Furthermore, the average number of supporters of women, who had 6-month-old infants, was less than mothers who had just given birth. The results of our study indicated that the number of supporters and the satisfaction scores of support in the exclusive breastfeeding pattern were higher than other patterns, but the differences were not statistically significant. It seems that mothers with supplement and formula feeding patterns were supported for using those patterns as much as mothers with breastfeeding; hence, more studies seem necessary on this issue.

Acknowledgments

We are grateful to Isfahan University of Medical Sciences and the cooperation of the staff of comprehensive health centers and all of the women who participated in this study.

Financial support and sponsorship

This study was financially supported by the Deputy of Research of Isfahan University of Medical Sciences.

Conflicts of interest

There are no conflicts of interest.

References

1. Horta BL, Loret de Mola C, Victora CG. Long-term consequences of breastfeeding on cholesterol, obesity, systolic blood pressure and type 2 diabetes: A systematic review and meta-analysis. *Acta Paediatr* 2015;104:30-7.
2. Victora CG, Horta BL, Loret de Mola C, Quevedo L, Pinheiro RT, Gigante DP, *et al.* Association between breastfeeding and intelligence, educational attainment, and income at 30 years of age: A prospective birth cohort study from Brazil. *Lancet Glob Health* 2015;3:e199-205.
3. Gunderson EP, Lewis CE, Lin Y, Sorel M, Gross M, Sidney S, *et al.* Lactation duration and progression to diabetes in women across the childbearing years: The 30-year CARDIA study. *JAMA Intern Med* 2018;178:328-37.
4. Borra C, Iacovou M, Sevilla A. New evidence on breastfeeding and postpartum depression: The importance of understanding women's intentions. *Matern Child Health J* 2015;19:897-907.
5. Figueiredo B, Canário C, Field T. Breastfeeding is negatively affected by prenatal depression and reduces postpartum depression. *Psychol Med* 2014;44:927-36.
6. Section on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics* 2012;129:827-41.
7. World Health Organization. *Health Topics: Breastfeeding*. Geneva, Switzerland: WHO; 2018. Available from: <http://www.who.int/topics/breastfeeding/en/>. [Last accessed on 2018 Mar 26].
8. UNICEF and Global Databases; 2018. Available from: <https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding/>. [Last accessed on 2019 Apr 14].
9. Esfahani MS, Fathizadeh N. Continuous exclusive breastfeeding and some related factors in the selected hospitals of Isfahan. *Iran J Nurs Midwifery Res* 2011;16:207-11.
10. Olang B, Farivar K, Heidarzadeh A, Strandvik B, Yngve A. Breastfeeding in Iran: Prevalence, duration and current recommendations. *Int Breastfeed J* 2009;4:8.
11. Kelishadi R, Rashidian A, Jari M, Khosravi A, Khabiri R, Elahi E, *et al.* national survey on the pattern of breastfeeding in Iranian infants: The IrMIDHS study. *Med J Islam Repub Iran* 2016;30:425.
12. Bernard JY, Cohen E, Kramer MS. Breast feeding initiation rate across Western countries: Does religion matter? An ecological study. *BMJ Glob Health* 2016;1:e000151.
13. Kornides M, Kitsantas P. Evaluation of breastfeeding promotion, support, and knowledge of benefits on breastfeeding outcomes. *J Child Health Care* 2013;17:264-73.
14. Hauck YL, Dimmock JE. Evaluation of an information booklet on breastfeeding duration: a clinical trial. *J Adv Nurs* 1994;20:836-43.
15. Tarkka MT, Paunonen M, Laippala P. Factors related to successful breast feeding by first-time mothers when the child is 3 months old. *J Adv Nurs* 1999;29:113-8.
16. Berkman LF, Glass T, Brissette I, Seeman TE. From social

- integration to health: Durkheim in the new millennium. *Soc Sci Med* 2000;51:843-57.
17. Elsenbruch S, Benson S, Rütcke M, Rose M, Dudenhausen J, Pincus-Knackstedt MK, *et al.* Social support during pregnancy: Effects on maternal depressive symptoms, smoking and pregnancy outcome. *Hum Reprod* 2007;22:869-77.
 18. Da Costa D, Dritsa M, Larouche J, Brender W. Psychosocial predictors of labor/delivery complications and infant birth weight: A prospective multivariate study. *J Psychosom Obstet Gynaecol* 2000;21:137-48.
 19. Feldman PJ, Dunkel-Schetter C, Sandman CA, Wadhwa PD. Maternal social support predicts birth weight and fetal growth in human pregnancy. *Psychosom Med* 2000;62:715-25.
 20. Collins NL, Dunkel-Schetter C, Lobel M, Scrimshaw SC. Social support in pregnancy: psychosocial correlates of birth outcomes and postpartum depression. *Journal of Personality and Social Psychology* 1993;65(6):1243
 21. Hodnett ED, Fredericks S. Support during pregnancy for women at increased risk of low birthweight babies. *Cochrane Database Syst Rev* 2003;CD000198.
 22. Suarez L, Cardarelli K, Hendricks K. Maternal stress, social support, and risk of neural tube defects among Mexican Americans. *Epidemiology* 2003;14:612-6.
 23. Asiodu IV, Waters CM, Dailey DE, Lyndon A. Infant feeding decision-making and the influences of social support persons among first-time African American mothers. *Matern Child Health J* 2017;21:863-72.
 24. Boccolini CS, Carvalho ML, Oliveira MI. Factors associated with exclusive breastfeeding in the first six months of life in Brazil: A systematic review. *Rev Saude Publica* 2015;49:91.
 25. Jalal M, Dolatian M, Mahmoodi Z, Aliyari R. The relationship between psychological factors and maternal social support to breastfeeding process. *Electron Physician* 2017;9:3561-9.
 26. Elahidoust S, Rabbani A, Shams B. Women, motherhood and lactation. *Res J Women* 2013;4:1-38.
 27. Salarkia N, Amini M, Abdollahi M, Eshtrati B. Socio-economic and cultural factors affecting child feeding practices: An exploratory qualitative study in Damavand. *Iran J Nutr Sci Food Technol* 2011;5:75-86.
 28. Ford ME, Tilley BC, McDonald PE. Social support among African-American adults with diabetes. Part 1: Theoretical framework. *J Natl Med Assoc* 1998;90:361-5.
 29. Sarason IG, Levine HM, Basham RB, Sarason BR. Assessing social support: The social support questionnaire. *J Pers Soc Psychol* 1983;44:127.
 30. Nasseh M, Ghazinour M, Joghataei M, Nojomi M, Richter J. A Persian version of the social support questionnaire (SSQ). *Soc Welf Q* 2011;11:251-66.
 31. Lauria L, Spinelli A, Grandolfo M. Prevalence of breastfeeding in Italy: A population based follow-up study. *Ann Ist Super Sanita* 2016;52:457-61.
 32. Cooke M, Sheehan A, Schmied V. A description of the relationship between breastfeeding experiences, breastfeeding satisfaction, and weaning in the first 3 months after birth. *J Hum Lact* 2003;19:145-56.
 33. Lanting CI, Van Wouwe JP, Reijneveld SA. Infant milk feeding practices in the Netherlands and associated factors. *Acta Paediatr* 2005;94:935-42.
 34. Zareai M, O'Brien ML, Fallon AB. Creating a breastfeeding culture: A comparison of breastfeeding practises in Australia and Iran. *Breastfeed Rev* 2007;15:15-20.
 35. Semenic S, Loiselle C, Gottlieb L. Predictors of the duration of exclusive breastfeeding among first-time mothers. *Res Nurs Health* 2008;31:428-41.
 36. Joshi A, Amadi C, Meza J, Aguire T, Wilhelm S. Evaluation of a computer-based bilingual breastfeeding educational program on breastfeeding knowledge, self-efficacy and intent to breastfeed among rural Hispanic women. *Int J Med Inform* 2016;91:10-9.
 37. Marshall JL, Godfrey M, Renfrew MJ. Being a 'good mother': Managing breastfeeding and merging identities. *Soc Sci Med* 2007;65:2147-59.
 38. Tracey L. Cultural Influences on Irish Attitudes towards Infant Feeding. [dissertation]. [Dublin]: department of psychology (DBS School of arts); 2012 .53p.
 39. Cinar N, Köse D, Altinkaynak S. The relationship between maternal attachment, perceived social support and breast-feeding sufficiency. *J Coll Physicians Surg Pak* 2015;25:271-5.
 40. Meedy S, Fahy K, Kable A. Factors that positively influence breastfeeding duration to 6 months: A literature review. *Women Birth* 2010;23:135-45.
 41. Leahy-Warren P, McCarthy G, Corcoran P. First-time mothers: social support, maternal parental self-efficacy and postnatal depression. *J Clin Nurs* 2012;21:388-97.
 42. Hawley NL, Rosen RK, Strait EA, Raffucci G, Holmdahl I, Freeman JR, *et al.* Mothers' attitudes and beliefs about infant feeding highlight barriers to exclusive breastfeeding in American Samoa. *Women Birth* 2015;28:e80-6.
 43. Susin LR, Giugliani ER, Kummer SC. Influence of grandmothers on breastfeeding practices. *Rev Saude Publica* 2005;39:141-7.
 44. World Health Organization. Global nutrition targets 2025: Policy brief series. World Health Organization; 2014