

Original Article

Determination of Knowledge and Correct Breastfeeding Practices of Mothers in Early Postpartum Period

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Abstract

Background: It is important to increase the awareness and knowledge of mothers about the right breastfeeding practices and to be discharged from hospital by acquiring the right breastfeeding habits.

Objective: This study was aimed to examine the knowledge and correct breastfeeding practices of mothers in early postpartum period.

Material and Methods: This crosssectional study carried out among 183 mothers who stayed in postpartum unit between the months of April and July in 2016. Demographic data survey instrument and a structured questionnaire were used to collect data.

Results: It was found that 47.5% of the participants was at or above the age of 31, 57.4% were graduates of high school and 60.7% did not work. Mean score of the mothers obtained from knowledge score about breastfeeding, breast milk and usefulnesses of breastfeeding was $6.377(\pm 2.222)$; mean score of them obtained from the correct breastfeeding practices was $9.016(\pm 2.786)$. The fifty-six point three percentage of the participants for the statement of “the mother should not force the infant and retry later if the infant refuses to take supplementary food after six months” in breastfeeding knowledge questionnaire were correctly answered; 90.2% of the participants “evaluated the success of breastfeeding” correctly.

Conclusion: Although we found that most of the participants employed proper breastfeeding practices, their knowledge on several aspects of breastfeeding was poor. By the help of nurses and midwives, it is important to ensure that mothers demonstrate the correct and effective breastfeeding behaviors by having correct knowledge of breastfeeding in early postpartum period.

Keywords: breastfeeding; knowledge; practice; mother; early postpartum

Introduction

Breastfeeding is a basic human activity that is essential to infant and maternal health and has immense economic value for every society (Guyer and Millward, 2012; Vijayalakshmi and Susheela,D., 2015). The World Health Organization (WHO) and the United Nations

Children's Fund (UNICEF) recommend that the early initiation of breastfeeding should be initiated as early as possible, and infants should be exclusively breastfed to achieve optimal growth and health. Thereafter, infants should receive nutritionally adequate and safe complementary foods, while continuing to breastfeed for up to two

years or more (UNICEF, 2020; WHO, 2020a) Breastfeeding during the early postpartum period is beneficial for the health of both infants and their mothers (WHO, 2020b). Turkish Ministry of Health launched the “Breastfeeding Promotion and Baby-Friendly Health Facilities Program” in 1991 in order to maintain successful breastfeeding throughout the country (Calik, Cosar Cetin and Erkaya, 2017). However, despite the attempts to promote exclusive breastfeeding in the first six months of life, in Turkey and around the world, a study conducted by the Turkish Population and Health Research (TPHR) found that 57.9% of the Turkish mothers breastfed for two months in 2013 (TNSA, 2013). Breastfeeding during the first two hours after birth is 60%-80% in developed countries and 39% in developing countries, including 31% in Central East Asia and Northern African countries and 27% in Southern Asian countries. However, the percentages for exclusive breastfeeding during the first six months are lower (8-10). Furthermore, exclusive breastfeeding in Turkey decreased from 9.5% for 4-5 months infants to 2.4% for 6-9 month infants (TNSA, 2013). Existing studies found that although breastfeeding was widespread in Turkey, Turkish mothers initiated breastfeeding at a latter phase, did not know the correct breastfeeding practices, and were unaware of the practices to maintain effective breastfeeding (Balci, 2011; Ata Yuzugullu, Aytac and Akbaba, 2018; Cakmak and Demirel Dengi, 2019). Women need access to skilled support and counseling for a successful breastfeeding. Healthcare professionals should help mothers and their babies establish and maintain to continue breastfeeding for 2 years or beyond, particularly, exclusive breastfeeding (Johnson *et al.*, 2016). Infants may not get enough breast milk and face with health problems due to concerns of mothers about low breast milk supply, unprepared birth and wrong practices and beliefs about breastfeeding. It is important to promote early initiation of breastfeeding after birth, increase the awarenesses and knowledges of mothers about the right breastfeeding practices and to be discharged from hospital by acquiring the right breastfeeding habits (Bostancı and Inal, 2015). Therefore, this study aims to examine the knowledge and correct breastfeeding practices of a group of Turkish mothers in early postpartum period.

Material and Methods: This was a cross sectional study carried out among the mothers who stayed in postpartum unit of Obstetrics & Gynecology clinic at a research and training hospital between the months of April and July in 2016. Study participants were selected through a random sampling method of the database of mothers staying in postpartum unit of Obstetrics & Gynecology clinic. Those who met the inclusion criteria were interviewed. The study criteria were; a) mothers of healthy infants born between 37 and 42 gestation weeks, b) without major birth defects such as congenital heart disease, cleft lip/cleft palate and Down syndrome and c) who volunteered to participate. Mothers of preterm babies, and multiple gestations were excluded. One hundred and eighty three mothers were enrolled into the present study. In addition, few of the participants (n=21) refused to participate due to lack of interest and lack of time.

Data collection instruments

Demographic data survey instrument: The demographic form elicited information on participants' background: age, marital status, place of residence, employment, education, family's monthly income, obstetrics history (type of delivery, number of deliveries etc.); past and current breastfeeding practices, and initiation of breastfeeding within an hour.

Structured Questionnaire: It has been used to assess knowledge and right behaviours/habits towards breastfeeding among postnatal mothers. This questionnaire has two sections;

Section A: This part of questionnaire was developed by the researchers based on the review of literature. There were 28 statements to evaluate the knowledge of the participants towards breastfeeding practice and breast milk in the postpartum period. Each statement in the knowledge section of this questionnaire had 3 possible responses, namely “True, False, and Not Sure”. One mark was awarded for every correct response, zero otherwise. 1,3,9,10,14,15,16,18,19,20,21,23,28 statements shown in Table 2 were coded reversely. Hence, the total number of marks in the knowledge section ranged from 0 to 28. Every statements of this section was controlled to validate by five nursing and obstetrics experts.

Section B: Correct Breastfeeding Practice Observation Checklist. This part of questionnaire was developed by the researchers based on the review of literature. There were 13 statements in this checklist. The statements were observed, checked and marked as “√” by the researchers when the mothers did right behaviors during breastfeeding. This checklist were useful to be able to observe the mothers’ behaviours properly by the researchers. Each statement in this checklist had 2 possible marks, namely “Yes, she did” or “No, she didn’t”. One mark was awarded for every correct response, zero otherwise. Hence, the total number of marks in the knowledge section ranged from 0 to 13. Every statements of this section was controlled to validate by five nursing and obstetrics experts.

Data collection procedure: After obtaining the permission from all mothers were given an explanation of purpose of the study. Written informed consent was obtained from the mothers who were willing to participate in the study. Data were collected by the researchers through face-to-face interview, in a private room at the treatment facilities where the participants were recruited. It took approximately 40 minutes to complete the structured questionnaire. Though, it was not part of the study, researchers answered the mothers’ questions about the importance of continuing breastfeeding up to 2 years.

Ethical consideration: The study was begun after obtaining approval from the Institutional Ethics Committee (decision no: 50687469-1491-152-16/1648-442, date: February 17th, 2016). Confidentiality was assured, and the data were rendered anonymous. Participation in the study was voluntary. After they received explanation on the aim of the study, their voluntary participation was requested and written informed consent was obtained before the data collection tools were used.

Statistical analysis: The data were analyzed using statistical software and results were presented in findings section of the this study. Responses of the negatively worded items in Table 2 were reversed before data analysis. The relationship between Breastfeeding Knowledge Score, Correct Breastfeeding Practice Observation Score and socio-demographic variables was analysed by using Spearman correlation, t-tests, or a one-way analysis of variance. The significance level for all statistical analysis was set at 0.05.

Results

Results of the study were given under three headings:

1. Sociodemographic and obstetric characteristics of the women
2. Breastfeeding knowledge scores and correct breastfeeding practices scores of the women
3. Comparison of the breastfeeding knowledge and correct breastfeeding practices scores of the participants according to some variables

Sociodemographic and obstetric characteristics of the women: Forty-seven point five percentage of the participants (n=87) was at or above the age of 31, 57.4% (n=105) were graduates of high school and 60.7% (n=111) did not work. Forty-nine point two percentage of the participants (n=90) had the second birth and 24.6% (n=45) had a miscarriage experience. One hundred seventeen participants had cesarean section, 161 participants desired this pregnancy, and 176 participants had regular antenatal care. Forty seven point five percentage of the participants (n=87) stated that they did not receive information on breastfeeding during the antenatal visits. Seventy-three mothers initiated their breastfeeding within the first half an hour after delivery (Table 1).

Breastfeeding knowledge scores and correct breastfeeding practices scores of the women: Table 2 shows the breastfeeding knowledge scores of the participants. One hundred eighty one participants did not know that colostrum must be given to infants, 92.9% (n=170) were not sure about the statement “newborns should receive water at first”, and, 91.3% (n=167) did not have any idea about the statement “newborns should be breastfed when the infant cries or in at least every two hours”. The percentage of correct responses to the statements of “the mother should not force the infant and retry later if the infant refuses to take supplementary food after six months”, “psychological status of the mother is effective on breast feeding”, and, “sufficient liquid intake and a balanced diet increases the amount of breast milk” were 56.3% (n=103), 34.4% (n=63), and 33.9% (n=63), respectively. On the other hand, the percentage of wrong responses to the statements of “formula feeding is better than breast milk”,

“avoid breastfeeding when the infant gets ill”, and, “pumped breast milk should be heated after taking out from the refrigerator” were 78.8% (n=145), 49.7% (n=91), and, 32,8% (n=60), respectively. Mean score obtained from knowledge score about breastfeeding, breast milk and usefulnesses of breastfeeding was 6.377 ± 2.222 (Min: 2.0 - Max: 16.0). Table 3 shows the findings on the observations of the researchers on the correct breastfeeding practices of the participants. Accordingly, correct breastfeeding practices that were employed by the participants were “evaluating the success of breastfeeding”, “employing correct ways to deal with gas discomfort”, and, “establishing eye contact during breastfeeding”, with the percentages of 90.2% (n=165), 86.9% (n=159), and, 86.9% (n=159), respectively. Mean score obtained from the correct breastfeeding practices was 9.016 ± 2.786 (Min: 0.0-Max: 14.0).

Comparison of the breastfeeding knowledge and correct breastfeeding practices scores of the participants according to some variables:

Comparison of the breastfeeding knowledge and the correct breastfeeding practices of the participants with their sociodemographic and obstetric characteristics in Table 4 reveals a statistically meaningful relationship between the correct breastfeeding practices and the age ($z^a = 11.52$; $p < 0.001$); education ($z^a = 0.94$; $p < 0.05$); and the desire for pregnancy ($z^b = 2.54$; $p < 0.05$). Besides, we found a statistically significant relationship between the breastfeeding knowledge scores of the participants and their employment ($z^b = 2.27$; $p < 0.05$); and having regular antenatal care ($z^b = 0.91$; $p < 0.05$). The correlation between breastfeeding knowledge score and correct breastfeeding practice score of the participants was also analyzed, but this result wasn't pointed in any table. It was found a statistically significant relationship between their knowledge scores and correct breastfeeding practices scores ($r = 0.525$; $p < 0.05$).

Discussion

In this section, it was discussed the factors that influenced knowledge and correct breastfeeding practice of mothers in early postpartum period. The literature suggests that breastfeeding is an important concept for health of the mother and the newborn, especially in less developed and

developing countries. Approximately 40% of the participants of our study stated that they started breastfeeding within the first half an hour after delivery. The findings of Turkey Demographic and Health Survey in 2013 reveal that 50% of the mothers start breastfeeding within the first hour after delivery (TNSA, 2013). According to the WHO (17) rating on early initiation of breastfeeding, 0-29% is poor, 30-49% is fair, 50-89% is good and 90-100% is very good. The WHO determined factors that may reinforce the bond between the mother and the newborn and contribute to the feeding of the newborn. Breastfeeding initiation time of the participants of our study is at medium levels according to the WHO criteria. On the other hand, studies that compared the effects of vaginal delivery and caesarian section on the timing of early initiation of breastfeeding shows that caesarian section delays early initiation breastfeeding (Alus Tokat *et al.*, 2015; Tewabe, 2016; Karacam and Saglık, 2018) Almost sixty-four percentage of the participants in our study delivered caesarian section and nearly 15.1 % participants who had cesarean delivery breastfed during the first hour after delivery. This result was found similar to the literature. Health professionals especially the nurses and midwives should take care to increase mother-baby attachment after caesarian section in operation room.

The literature suggests that not only the breastfeeding education, but also the age of mother and planned pregnancy are crucial for a healthy and effective breastfeeding (UNICEF, 2020). Similarly, it was found a statistically significant relationship between correct breastfeeding practices and the age, educational status and the desire of the participants for pregnancy in this study. We also found a statistically significant relationship between the knowledge levels of the participants, their working status and their participation in regular antenatal care. Recent studies revealed positive impact of having regular antenatal care on effective breastfeeding during postpartum period (Chan, Ip and Choi, 2016; Calik, Cosar Cetin and Erkaya, 2017; Karacam and Saglık, 2018; Nukpezah, Nuvor and Ninnoni, 2018). Literature emphasized that mothers need counseling programs and special regulations from the health specialists due to the difficulties regards to

breastfeeding in postpartum period brought by their working conditions although education and knowledge levels of the working mothers are sufficient (Mekuria and Edris, 2015; Tewabe, 2016). Despite the increasing awareness of the

importance of breastfeeding and the number of baby-friendly hospitals in Turkey and around the world, the awareness of the mothers on breastfeeding is not at adequate levels (Irmak, 2016; Sharma and Byrne, 2016; UNICEF, 2020)..

Table-1 Sociodemographic and obstetric characteristics of the participants (n=183)

Sociodemographic and Obstetric Characteristics	Group	n (%)
Age (in years)	Between 21-25 years	36(19.7)
	Between 26-30 years	60(33.8)
	31 and above years	87(47.5)
Educational Background	Primary School (5 years of attained education level)	17(9.3)
	High School (6 years of attained education level)	105(57.4)
	University	61(33.3)
Working Status	Employed	72(39.3)
	Unemployed	111(60.7)
Gender of Infant	Female	86(47.0)
	Male	97(53.0)
Parity status	First birth	8(4.4)
	Second birth	90(49.2)
	Third birth and above	85(46.5)
Having miscarriage experience	Yes	45(24.6)
	No	138(75.4)
Type of delivery	Cesarean section	117(63.9)
	Vaginal delivery	54(29.5)
	Vaginal cesarean	12(6.6)
Breast feeding initiation within the first half an hour according to types of delivery (n=73)	Cesarean section	11 (15.1)
	Vaginal delivery	54 (73.8)
	Vaginal cesarean	8 (12.1)
Desire for pregnancy	Yes	161(88.0)
	No	22(12.0)
Regular antenatal care	Yes	176(96.2)
	No	7(3.8)
Receiving information on breastfeeding from health professionals during antenatal visits	Yes	96(52.5)
	No	87(47.5)
Breast feeding initiation within the first half an hour after delivery	Yes	73(39.9)
	No	110(60.1)

Table-2 Breastfeeding knowledge scores of the participants

	True n (%)	False n (%)	Not sure n (%)
1. Newborns should receive water at first*	1 (0.5)	12 (6.6)	170 (92.9)

2. Exclusive breastfeeding during the first six months of life is the best nutrition to maintain healthy development of the infants	22 (12.0)	0(0)	161 (88.0)
3. Mother should not breastfeed in case of nipple retraction.*	40 (21.9)	39 (21.3)	104 (56.8)
4. Colostrum must be given to the infant	1 (0.5)	1 (0.5)	181 (99.0)
5. Sufficient liquid intake and a balanced diet increases the amount of breastmilk	62 (33.9)	29 (15.8)	92 (50.3)
6. Breastfeeding helps to establish an emotional link between the mother and the infant	35 (19.1)	8 (4.4)	140 (76.5)
7. Amount of breastmilk increases as the infant is breastfed.	21 (11.5)	4 (2.2)	158 (86.3)
8. Breastfeeding mothers should not use medications without consulting the physician	39 (21.3)	21 (11.5)	123 (67.2)
9. Breastmilk cannot be stored in refrigerator.*	25 (14.7)	24 (13.1)	134 (75.2)
10. Pumped breast milk that is not used by the infant is wasted.*	38(20.8)	37(20.2)	108(59.0)
11. Breastfeeding should start within the first half an hour after delivery.	45(24.6)	17(9.3)	121(66.1)
12. Breast milk that is pumped out should be given by using a spoon	59(32.2)	12(6.6)	112(61.2)
13. Breastfeeding should start from the breast that was last used at prior feeding.	21(11.4)	25(13.7)	137(74.9)
14. Mother should wait for the infant to wake up for breastfeeding.*	38(20.8)	6(3.3)	139(75.9)
15. Supplementary food may be used just after the delivery.*	20(10.9)	5(2.7)	158(86.4)
16. Breast milk does not meet the water demand of the infant in the first six months after delivery.*	14(7.7)	13(7.1)	156(85.2)
17. If the infant suckles the nipple and the surrounding areola, nipple retraction may be prevented	45(24.4)	20(10.7)	118(64.9)
18. Pumped breast milk should be heated after taking out from the refrigerator.*	60(32.8)	60(32.8)	63(34.4)
19. Small breasts produce less breastmilk*	23(12.6)	22(12.0)	138(75.4)
20. Formula feeding is better than breast milk.*	-	145(69.1)	38(30.9)
21. A bra that fits too tightly should be used during breastfeeding.*	22(12.0)	19(10.4)	142(77.6)
22. Newborn should be breastfed when the infant cries or in at least every two hours.	10(5.5)	6(3.3)	167(91.2)
23. Avoid breastfeeding when the infant gets ill*	10(5.5)	91(49.7)	82(44.8)
24. Psychological status of the mother is effective on breastfeeding.	63(34.4)	0(0)	120(65.6)
25. Breastfeeding should continue until the infant reaches to the age of two	37(20.2)	12(6.6)	134(73.2)
26. Breastfeeding at night increases breast milk supply	49 (26.8)	60(32.8)	74(40.4)
27. If the infant refuses to take supplementary food after six months of life, the mother should not force the infant and retry later	103(56.3)	10(5.5)	70(38.2)
28. Formula feeding should start instantly when the infant refuses breastfeeding after delivery.*	27(14.8)	27(14.8)	129(70.4)

Mean Score	6.377±2.222 (Min: 2.0 - Max: 16.0)
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*: Statements are coded reversely.

Table-3 Correct breastfeeding practices observed by the researchers

Correct Breastfeeding Practices	Observed	Not Observed
1. Washing hands	83(45.3)	100(54.7)
2. Cleaning the nipples	54(29.5)	129(70.5)
3. Stimulating the nipples to induce by massage	92(50.2)	91(49.8)
4. Stimulating the suckling reflex of the infant	141(77.0)	42(23.0)
5. Starting from the breast that was last used at prior feeding	66(36.1)	117(63.9)
6. Inserting the areola into the mouth of the infant	127(69.4)	56(30.6)
7. Breastfeeding by using the same breast at least 15-20 minutes	157(85.8)	26(14.2)
8. Making breast rotation during breastfeeding	139(76.0)	44(24.0)
9. Evaluating the success of breastfeeding	165(90.2)	18(9.8)
10. Supporting the breast with four fingers underneath	73(39.9)	110(60.1)
11. Establishing eye contact during breastfeeding	159(86.9)	24(13.1)
12. Breastfeeding by using correct position	135(73.8)	48(26.2)
13. Employing correct ways to deal with gas discomfort	162(88.5)	21(11.5)
Mean Score	9.016±2.786 (Min: 0.0 - Max: 14.0)	

Table-4 Comparison of the breastfeeding knowledge and correct breastfeeding practices scores of the participants according to different variables

Sociodemographic and obstetric characteristics	Breastfeeding Knowledge Scores			Correct Breastfeeding Practices Scores		
	Mean	SD	Median (min-max)	Mean	SD	Median (min-max)
Age (in years)						
21-25 years	6.42	2.31	6.00 (3-11)	8.88	2.69	8.50 (3-14)
26-30 years	6.75	1.91	7.00 (3-12)	8.93	2.78	9.00 (5-14)
31 and above years	6.10	2.37	6.00 (3-11)	9.44	2.99	10.00 (0-14)
z^a	3.52			11.52		
p	0.17			$p<0.001$		
Educational Background						
Primary School	6.29	2.23	6.00 (3-11)	8.74	1.92	8.00 (0-14)
High School	6.371	2.41	6.00 (3-11)	8.76	3.04	9.00 (5-12)
University and above	6.41	1.88	6.00 (2-16)	9.22	2.52	10.00 (5-14)
z^a	0.33			0.94		
p	0.94			0.01		
Employment Status						
Employed	6.68	2.21	7.00 (3-16)	9.05	2.69	9.00 (0-14)
Unemployed	5.90	2.18	6.00 (3-14)	8.96	2.93	9.00 (2-12)
z^b	2.27			0.03		
p	0.02			0.98		
Desired pregnancy						
Yes	6.50	2.27	7.00 (2-16)	9.09	2.82	9.00 (0-14)

No	5.45	1.92	5.00 (3-12)	8.50	2.52	8.50 (5-13)
z^b	0.04			2.54		
p	0.61			0.01		
Having regular antenatal follow						
Yes	6.57	2.88	6.00 (2-16)	10.00	3.41	12.00 (0-14)
No	6.36	2.20	6.00 (3-11)	8.97	2.76	9.00 (3-12)
z^b	0.91			0.15		
p	0.01			2.04		

z^a = K Independent Sample Tests (Kruskal Wallis Tests). z^b = Mann Whitney U Tests. M=Arithmetic Means. SD=Standard Deviation. *Significance at $p<0.05$

In this study findings showed that mothers didn't have enough information about breastfeeding and breastmilk although correct breastfeeding practice scores of the participants is a bit above the average scores. In addition, one of our findings was related to this issue that half of the participants received prenatal education on breastfeeding from the health professionals. The percentage of mothers that received education of breastfeeding from health professionals in the studies of Calik et al., Elkin et al., and Ihudiebube-Splendor et al. were 66.1%, 63.9%, and, 86% respectively (Elkin *et al.*, 2015; Calik, Cosar Cetin and Erkaya, 2017; Ihudiebube-Splendor *et al.*, 2019). The literature reveals the important role played by prenatal breastfeeding education to promote postnatal breastfeeding (Chan, Ip and Choi, 2016; Tewabe, 2016) Various studies stated that postnatal educational programs for breastfeeding mothers contributed to an increase in breastfeeding not only in Turkey but also abroad (Serçekuş and Mete, 2010; Aliogullari, A., Esencan, Y. T., Unal, A., & Simsek, 2016; Chan, Ip and Choi, 2016; Swerts *et al.*, 2016; Nukpezah, Nuvor and Ninnoni, 2018). Imdad et al. found that counseling or educational interventions increased exclusive breastfeeding by 43% at day 1, by 30% till 1 month, and by 90% from 1–5 months (Imdad, Yakooob and Bhutta, 2011). Other studies found that women, who received prenatal breastfeeding education had better breastfeeding performance (Chan, Ip and Choi, 2016; Swerts *et al.*, 2016; Calik, Cosar Cetin and Erkaya, 2017; Karacam and Saglık, 2018; Nukpezah, Nuvor and Ninnoni, 2018). The findings of our study are similar to the literature. Therefore, we recommend establishing counseling centers to raise awareness on breastfeeding in order to promote breastfeeding. Our findings also imply that public health

education campaigns may be conducted to increase the awareness on the importance of prenatal breastfeeding education and counseling.

Knowledge scores of the participants on breastfeeding and breast milk is relatively low. Our study found that the participants had less knowledge on how to store and prepare pumped breast milk, when to start and how long to keep on breastfeeding, the factors to increase breast milk supply and the connection between the mothers, their new born and the period to use supplementary food. Studies in Turkey revealed that despite prenatal care, knowledge levels of the Turkish mothers on breastfeeding were not sufficient during the postnatal period (Calik, Cosar Cetin and Erkaya, 2017). This may be related with the inadequacy of the content of the prenatal education, the use of social media for breastfeeding education, and the negative experiences with the health professionals during breastfeeding education (Demirtas and Celik, 2017). The findings of our study can imply that the content of prenatal and postnatal breastfeeding education may be revised according to the statements in Table 2. Effective and qualified role of health professionals especially the midwives and nurses is crucial for a successful breastfeeding practice and education (Swerts *et al.*, 2016).

Although the knowledge scores of the participants on the importance of breastfeeding in our study were low, the observed breastfeeding practices were relatively high. We considered this finding was impressive. It is known that practice-based knowledge may be easily transformed into attitudes and skills in the education of the adults. In our study, we determined that mothers were successful to behave correctly especially on these issues: “stimulating the suckling reflex of infants”,

“establishing eye contact with the infant during breastfeeding” and “employing the correct ways to deal with gas discomfort”. The mothers in this study knew the correct breastfeeding practices but were not sure if their knowledge or breastfeeding behaviors were correct. Due to this reason, we suggest that healthcare professionals should provide counseling service on the importance of breastfeeding and the preservation of breast milk during the prenatal period. It is highly important to prepare the mothers to the postpartum period in a conscious way. Mothers with correct breastfeeding knowledge should receive additional support both at hospital and at home during the postpartum period (Orsdemir and Koc, 2019).

Limitations: The present study has certain limitations. Firstly, the study has a cross sectional design and all the participants were at postpartum unit of Obstetrics & Gynecology clinic. The small sample size, consequently, makes it difficult to generalize the findings. Future research on a larger sample and further qualitative studies to identify barriers to promote breastfeeding among Turkish mothers may be conducted. Despite of these limitations, the findings of the present study may be helpful to the nurses and midwives in designing the interventions to promote breastfeeding practices.

Conclusion: Although we found that most of the participants employed proper breastfeeding practices, their knowledge on several aspects of breastfeeding was poor or not sure. There was a significant association between the knowledge scores of the participant mothers, employment status and their participation in regular antenatal care visits in this study. It concludes that working status and mothers that regularly participated in antenatal care visits had higher knowledge score. We also found a positive correlation between the knowledge scores of the participants and their correct breastfeeding practices, implying that knowledge on breastfeeding reinforces correct breastfeeding practices. Based on these findings, we may conclude that nurses and other health professionals should support by the educational programs to improve the knowledge levels of the pregnant during the prenatal and postnatal period. It is important to ensure that mothers demonstrate self-confident and correct breastfeeding behavior by relying on their knowledge of breastfeeding to

ensure effective and correct postpartum breastfeeding.

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