Doğum Sonrası İlk 6 Ay Sadece Anne Sütü Verme Ve Emzirme Öz-Yeterlik İlişkisi: Longitudinal Çalışma

The Relationship Between Exclusive Breastfeeding And Breastfeeding Self-Efficacy İn The First 6 Months Postpartum: Longitudinal Study

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Amaç:
Bebeğin sadece anne sütü alması oral rehidrasyon çözeltisi, vitamin, mineral ve ilaç damla/şurupları haricinde su bile dahil başka hiçbir sıvı veya katı verilmemesidir. Bu çalışmanın amacı sadece anne sütü verme ile emzirme öz-yeterlilik düzeyinin ilişkisini araştırmaktır.
Yöntem: Araştırmada prospektif, longitudinal ve karşılaştırmalı bir tasarım kullanıldı. Çalışma Şubat-Mayıs 2018 arasında bir kamu hastanesinin çocuk polikliniklerine başvuran 128 ile yürütüldü. 1. Haftada, 128; 1. ayda, 118; 2. ayda, 113; 3.ayda, 70; 4. ayda, 69; 5.ayda, 68; 6. ayda, 51 anneye ulaşıldı. Veriler anne-bebek bilgi formu ve Emzirme Öz-yeterlik Ölçeği (EÖYÖ) ile toplandı. Veriler sayı, yüzde, ortalama ve standart sapma olarak tanımlandı. Ayrıca verilerin analizinde t testi ve Mann Whitney U testi analizi kullanıldı.
Bulgular: Çalışmaya katılan annelerin yaş ortalamalarının 28,39±5,70, ortalama 1,94±0,95 çocuğa sahip olduğu, %53,9'ünün ilkokul veya ortaokul mezunu, %65,6'sının çalışmadığı, %61,7'sinin gelir durumunun iyi olduğu, %78,9'unun gebeliğinin planlı olmadığı, %57,8'inin sezeryan yöntemi ile doğum yaptığıi %60,2'sinin emzirme deneyiminin olmadığı, %78,9'unun bebeğini ilk 30 dk içinde emzirdiği ve günlük emzirme süresi ise 8,29±1,55 bulunmuştur. Bebeklerin %53,9'unun erkek olduğu ve ortalama 38,03±1,06 gestasyon haftasında doğduğu bulunmuştur. Annelerin sadece anne sütü verme oranları 1.haftada %54,7, 1.ayda %55,1, 2.ayda %57,5, 3.ayda %62,9, 4.ayda %65,2, 5.ayda %60,3, 6.ayda %52,9 ve ilk 6 ay sadece anne sütü verme oranı ise %57,9'dur. Annelerin EÖYÖ puanları ise 1.hafta 52.26±8.07, 1.ay 53,75±6,27, 2.ay 56,99±4,53, 3.ay 60,17±4,29, 4.ay 62,73±3,45, 5.ay 57,75±6,58, 6.ay 50,68±7,09 ve ilk 6 ay ortalaması ise 55,95±7,10'dur. Sadece anne sütü veren annelerin EÖYÖ puanları 1.ay, 2.ay, 3.ay, 4.ay, 5.ayda ve 6.ayda yüksek ve anlamlı olarak bulundu ($p<0,05$).
Sonuç: Annelerin anne sütü verme oranları ile EÖYÖ puanlarının zamana göre değişimi birbirine paralel şekilde değişmektedir. 1.ay, 2.ay, 3.ay, 4.ay, 5.ayda ve 6.ayda sadece anne sütü veren annelerin EÖYÖ puanlarının yüksek ve anlamlı olduğu bulunmuştur.
Anahtar kelimeler: *emzirme öz-yeterlilik, longitudinal, sadece anne sütü*

Abstract
Aim:
Exclusive breastfeeding is defined as feeding infants only breast milk, be it directly from breast or expressed, except drops or syrups consisting of vitamins, mineral supplements or medicine. The aim of this study was to investigate the relationship between exclusive breastfeeding and breastfeeding self-efficacy.

Method:
A prospective, longitudinal, and comparative design was used in the study. The study was conducted between February and May 2018 with 128 patients who applied to the children's polyclinics of a public hospital. Week 1th 128; 1th month 118; 2th months 113; 3th month 70; 4th months 69; 5th month 68; 6th months 51 mothers were reached. Data were collected using mother-infant information form and Breastfeeding Self-Efficacy Scale (BSES-SF). Data were defined as number, percentage, mean and standard deviation. In addition, t test and Mann Whitney U test were used for data analysis.

Results:
Mothers who participated in the study the average age was 28.39±5.70, average 1.94±0.95 children, 53.9% primary or secondary school graduates, 65.6% did not work, 61.7% of the income status is good 78.2% had no pregnancy planned, 57.8% delivered by caesarean section, 60.2% had no breastfeeding experience, 78.9% had breastfeeded their baby in the first 30 minutes and the duration of daily breastfeeding 8.29±1.55 were found. It was found that 53.9% of the babies were male and were born at the mean gestation week of 38.03±1.06. Exclusive breastfeeding of rates 54.7% in the 1th week, 55.1% in the 1th month, 57.5% in 2th month, 62.9% in the 3th month, 65.2% in the 4th month,% 65 in the 5th month 60.3%, 52.9% in the 6th month and 57.9% in the first 6 months of exlusive breastfeeding. BSES-SF scores of mothers 1th week 52.26±8.07, 1th month 53.75±6.27, 2th month 56.99±4.53, 3th month 60.17±4.29, 4th month 62.73±3.45, 5th month 57.75±6.58, 6th month 50.68±7.09 and the average of the first 6 months is 55.95±7.10. Exclusive breastfeeding were significantly higher in the 1th month, 2th month, 3th month, 4th month, 5th month and 6th month ($p<0.05$).

Conclusion:
1th month, 2th month, 3th month, 4th month, 5th month and 6th month ıt was found that BSES-SF scores of the exclusive breastfeeding mothers were high and significant.

Key words: *breastfeeding self-efficacy, exclusive breastfeeding, longitudinal*

Introduction

Breast milk is the first natural food for the babies and provides all the energy and nutrients the infant needs during the first months of life (1). Breastfeeding provides infant and mother numerous benefits in both short and long term (2,3,4). Breast milk is best provided by breastfeeding. The benefits of breast milk and breastfeeding also affect maternal and community health (5,6). Over the past years, evidence on the health advantages of breastfeeding and recommendations for administration continued to increase (1).

Exclusive breastfeeding (EBF) means that the newborn infant is fed only breast milk. no other liquids (not even water) or solids are given, with the exception of oral rehydration salt solution, vitamins, mineral supplements or medicines. WHO and UNICEF recommend that breastfeeding begin within the first hour after birth, only breastfeeding during the first six months, and that breastfeeding should continue for two years or longer with age-appropriate complementary nutrition starting from the sixth month (7,8). Until the first 6 months, EBF is among the most important public health recommendations for improving the health of children around the world (9). Breastfeeding has many benefits such as strengthening the immune system, reducing morbidity related to infectious diseases, improving bone density, providing mental development and reducing the risk of overweight and obesity in adulthood (10).

Starting and continuing breastfeeding, breast milk in the first month is still not at the desired level in the world and in our country. In the world, only 40% of infants younger than 6 months are fed with breast milk (1). Therefore, one of the strategies of Sustainable Development Goals

is to increase the exclusive breastfeeding rate to 50% in children under the age of five (11). Breastfeeding is preferred in our country and supported by the environment, however, exclusive breastfeeding is not at the desired level (12). 57.9% of babies in 0-2 months period, 35.4% in 4-5 months, 4-5. 9.5% receive only EBF per month (13). Turkey Health Statistics feeding rate according to the 2016 report by the mothers milk; It is observed that 30.8% of babies between 0-6 months are fed with breast milk and this rate is quite low (14).

There are effective factors for the initiation of breastfeeding after birth and the continuation of the first six months. One of these is mothers' perception of breastfeeding self-efficacy. In studies, it was found that breastfeeding self-efficacy perception was effective on breastfeeding behavior (15,16,17,18,19). The perception of breastfeeding self-efficacy is defined as ‘‘self-efficacy that the mother feels about breastfeeding” (20). The mother's willingness to breastfeeding may be an important factor in increasing breastfeeding success. Breastfeeding success and breastfeeding self-efficacy perception are reported to have a positive relationship with each other (21).

Promoting and supporting exclusive breastfeeding is very important in this context. The reasons such as lack of knowledge of mothers about breast milk and breastfeeding, insufficient personnel providing education in health institutions, and lack of follow-up of breastfeeding in health institutions reduce the number of infants receiving breast milk. On the other hand, there may be a relationship between breastfeeding self-efficacy perception and exclusive breastfeeding. The feature of this relationship may arise in longitudinal follow-up studies. What is the change in the perception of breastfeeding self-efficacy of a breastfeeding mother in the first six months, and how does this affect the exclusive breastfeeding situations? Evaluating this result may be an important clue for professionals working in this field. Where breastfeeding and exclusive breastfeeding change and longitudinal relationship is important in terms of providing opportunity for intervention studies.

Aim

The aim of this study was to investigate the relationship between EBF and breastfeeding self-efficacy level in the first six months.

Research Questions

1) How does EBF rates change over time?
2) How does the level of breastfeeding self-efficacy change over time?
3) How does the level of breastfeeding self-efficacy relate to EBF over time?

Method

Design

A prospective, longitudinal, and comparative design was used in the study.

Setting

We conducted the study in in the pediatric outpatient clinics of a public hospital in a province located in the inner regions of Turkey from February through August 2018.

Samples

For the primary endpoint of the study, Breastfeeding Self-Efficacy variable was statistically significant than the value of 56.19, which was the result of a previous study in our country, in order to demonstrate a two-unit difference in the patient group, 117 mothers with 80% power and 5% type 1 error level were planned to be included in the study, assuming that the standard deviation would be approximately 8.62 as given in the same literature. 128 mothers were included in both groups considering the 10% loss that may occur during the evaluations.

Participation criteria; The mother is 18 years of age and older, the lack of a chronic disease that prevents the breastfeeding, birth is the only and healthy infant. The baby is born 37 weeks and over, having been born over 2500 gr,, there is no situation that will affect oral nutrition.
Mothers of infants with premature, congenital anomalies were excluded from the study.

Measurement

Data were collected by mother-infant information form and BSES-SF. The mother-infant information form consists of 4 episode and was prepared by the researchers in accordance with the literature. It consists of 12 questions: socio-demographic characteristics (4 questions), fertility characteristics (3 questions), breastfeeding characteristics (2 questions), and infant characteristics (3 questions). Data were collected from the mothers in the breastfeeding room in the pediatric clinic.

Breastfeeding Self-Efficacy Scale–Short Form (BSES-SF)

BSES, a 33-item scale, was developed by Dennis and Faux (1999) in 1999 (16). Later, Dennis (2003) generated the short form of the scale with 14 items (23). Turkish validity of the scale was undertaken by Aluş Tokat et al.,. BSES short form is a Likert type scale and all items are positive. Dennis suggests using the short form since it is easier to implement, and it provides accurate assessment regarding breastfeeding self-efficacy. The minimum score that can be obtained from the scale is 14 and the maximum score is 70. Higher scores point to higher breastfeeding self-efficacy. The Cronbach alpha coefficient of the original scale was found to be 0.94 and the Cronbach alpha coefficient of the study conducted by Aluş Tokat et al., (2010) was found to be 0.86 (24).

Data Collection

Appropriate mothers who had given birth were contacted to the pediatric policlinic when they brought their infant to routine control in the first week. Information was given about the study and signed consent was obtained from the mothers who agreed to participate in the study and the mother-infant information form and BSES-SF were completed. Then, BSES-SF was filled and exclusive breastfeeding status was questioned to the same mothers who came to 1th month, 2th month, 3th month, 4th month, 5th month and 6th month controls. Week 1th 128; 1th month 118; 2th months 113; 3th month 70; 4th months 69; 5th month 68; 6th months 51 mothers were reached.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) version 22 was used to analyze the data. Data were collected using mother-infant information form and Breastfeeding Self-Efficacy Scale (BSES-SF). Data were defined as number, percentage, mean and standard deviation. In addition, t test and Mann Whitney U test were used for data analysis. Level of significance was accepted as $p < 0.05$.

Ethical Considerations

Ethical permission for the study was obtained from a University's Non-invasive Clinical Research Ethics Committee by the decision no. 2017/61. Written permission was obtained from the relevant institution where the research was carried out. The purpose of the study was explained to participating patients who signed informed consent forms.

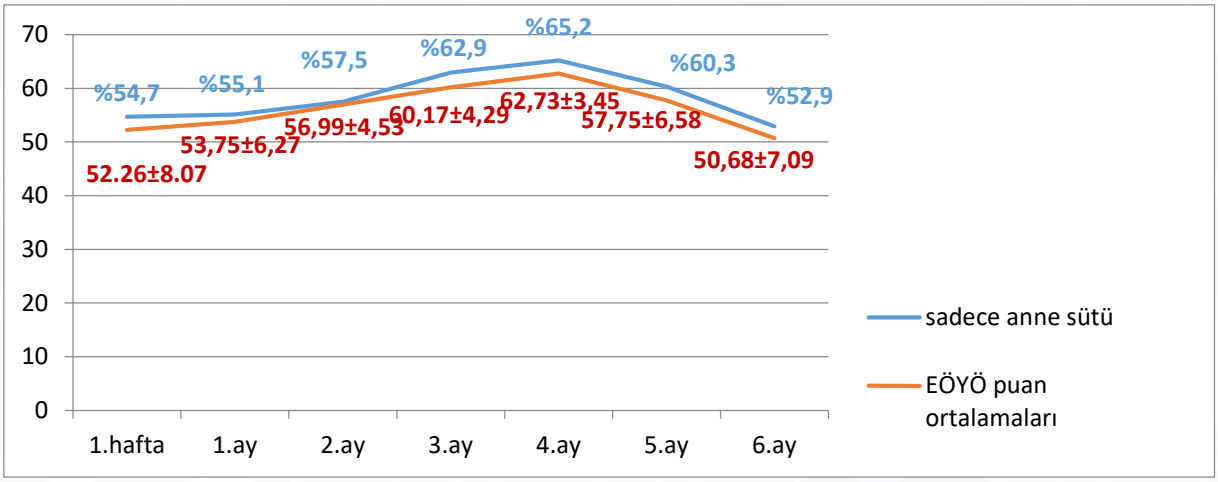
Results

Mothers who participated in the study the average age was 28.39±5.70, average 1.94±0.95 children, 53.9% primary or secondary school graduates, 65.6% did not work, 61.7% of the income status is good 78.2% had no pregnancy planned, 57.8% delivered by caesarean section, 60.2% had no breastfeeding experience, 78.9% had breastfeeded their baby in the first 30 minutes and the duration of daily breastfeeding 8.29±1.55 were found. It was found that 53.9% of the babies were male and were born at the mean gestation week of 38.03±1.06 (Table 1).

Table 1. The Mothers' and the infants' characteristics (N=128)

Variables	N	%
Educational status		
Primary and Secondary school	69	53,9
High school and University	59	46,1
Employment status		
Employed	44	34,4
Unemployed	84	65,6
Income status		
High	79	61,7
Middle	49	38,3
Planned status of pregnancy		
Yes	27	21,1
No	101	78,9
Mode of delivery		
Vaginal	54	42,2
Caesarean section	74	57,8
Breastfeeding experience		
Yes	77	60,2
No	51	39,8
First time to breastfeed your baby after birth		
Within the first 30 min	101	78,9
Within 1-2 hours	27	21,1
Gender of Baby		
Famale	59	46,1
Male	69	53,9
	Mean	**SS**
Age	28,39	5,70
Number of children	1,94	0,95
Gestation week	38,03	1,06
Dairy breastfeeding time (hour)	8,29	1,55

EBF of rates 54.7% in the 1th week, 55.1% in the 1th month, 57.5% in 2th month, 62.9% in the 3th month, 65.2% in the 4th month,% 65 in the 5th month 60.3%, 52.9% in the 6th month and 57.9% in the first 6 months of exlusive breastfeeding. BSES-SF scores of mothers 1th week 52.26±8.07, 1th month 53.75±6.27, 2th month 56.99±4.53, 3th month 60.17±4.29, 4th month 62.73±3.45, 5th month 57.75±6.58, 6th month 50.68±7.09 and the average of the first 6 months is 55.95±7.10 (Graph 1).



Graph 1. EBF rates and BSES-SF mean scores by groups

Only EBF mothers' scores of the 1th month (55.27 ± 6.46), 2th month (57.90 ± 4.68), 3th month (61.43 ± 4.53), 4th month (63, 31 ± 3,15), 5th months (58,00 ± 4,78) and 6th months (52,62 ± 7,62) were found to be high and significant ($p < 0.05$) (Table 2).

Table 2. Variance of BSES-SF mean scores over time according to groups with and without EBF

	Exclusive breastfeeding for six months postpartum					
		N	**Yes Mean ±SD**	**n**	**No Mean ±SD**	**Test Value/p**
BSES-SF	1th week	70	51,77±8,49	58	52,86±7,55	t=-1,840 p=0,207
	1. mounth	65	55,27±6,46	53	51,88±5,53	Z=1.115,500 **p=0,001**
	2. mounth	65	57,90±4,68	48	55,77±3,81	Z=1,029,500 **p=0,002**
	3. mounth	44	61,43±4,53	26	58,03±2,82	Z=316,500 **p=0,002**
	4. mounth	45	63,31±3,15	24	61,72±3,78	Z=229,500 **p<0,001**
	5. mounth	41	58,00±4,78	27	57,37±8,72	Z=349,500 **P=0,009**
	6. mounth	27	52,62±7,62	24	48,50±5,86	Z=-199,500 **p=0,018**

SD: Standard deviation t: t test, Z: Mann Whitney U test

Conclusion

In the first 6 months after birth, EBF is supported and desirable throughout the world. Although many factors are effective in maintaining EBF and its continuity, breastfeeding self-efficacy perception is the most effective factor. Other factors affecting mothers' breastfeeding self-efficacy levels should be identified and strategies to increase breastfeeding self-efficacy should be supported. EBF behavior should also be supported. In this respect health institutions are of great importance. It will be beneficial to follow the breastfeeding after the birth and to repeat the trainings given to the mothers.

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