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ARAŞTIRMA / RESEARCH

The effect of postpartum afterpain on breastfeeding self-efficacy

Postpartum ağrının emzirme öz-yeterliliğine etkisi

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Abstract

Purpose: This study was carried out to identify the effect of postpartum afterpain on breastfeeding self-efficacy.
Materials and Methods: This was a descriptive study. The sample consisted of 376 postnatal women who met the criteria for participation in the study. The participants were administered the Personal Information Form, The Short-Form McGill Pain Questionnaire, The Short-Form Breastfeeding Self-Efficacy Scale.
Results: The mean total score received from the breastfeeding self-efficacy by the postpartum women was found to be 36.88±8.54 (min:14, max:70). The mean scores of the sensory and affective pain, total pain intensity, and visual analoque scale were found to be 33.53±4.18 (min:0, max:45), 2.60±1.39 (min:0, max:5), 6.23±1.91 (min:0, max:10), respectively. In this study, the breastfeeding self-efficacy was found to be higher in the women who were 35 years and over, found their social support adequate, planned their current pregnancy, received prenatal care, expressed their willingness to breastfeed, had no breastfeeding problem. The self-efficacy of breastfeeding is low for women who experienced postpartum abdominal pain, who described the frequency of pain as 'continuous, continuous and constant', and who stated that they needed analgesia. A statistically significant negative correlation was determined between the postpartum women's breastfeeding self-efficacy scores and their postpartum afterpain scores. The postpartum women with afterpain were found to have low levels of breastfeeding self-efficacy.
Conclusion: Postpartum pain negatively affects breastfeeding self-efficacy. Controlling pain contributes to the effective implementation of the breastfeeding process.
Keywords: Postpartum, afterpain, breastfeeding, self-efficacy

Öz

Amaç: Bu çalışma, postpartum ağrının emzirme öz-yeterliliği üzerine etkisini belirlemek amacıyla yapılmıştır.
Gereç ve Yöntem: Bu tanımlayıcı bir çalışmadır. Örnekleme, araştırmaya katılım kriterlerini karşılayan 376 postpartum kadın alınmıştır. Veriler, Kişisel Bilgi Formu, McGill Ağrı Anketi, Emzirme Öz-Yeterlilik Ölçeği ile toplanmıştır.
Bulgular: Doğum sonrası kadınların emzirmenin öz yeterliliği toplam puan ortalaması 36.88 ± 8.54 olarak bulunmuştur (min: 14, max: 70). Kadınların duyusal ve afektif ağrı, toplam ağrı şiddeti ve görsel analog ölçek puan ortalamaları sırasıyla 33.53 ± 4.18 (min:0, max:45), 2.60 ± 1.39 (min: 0, max: 5), 6.23 ± 1.91 (min: 0, max: 10)'dir. 35 yaş ve üzerinde olan, sosyal desteklerini yeterli bulan, mevcut gebeliği planlı, prenatal bakım alan, emzirme konusunda "istekli" olduğunu ifade eden, anne sütü ve emzirme ile ilişkili kendi bilgi düzeyini "yeterli" bulan, emzirme problemi yaşamayan kadınların emzirme özyeterliliği yüksekti. Ağrı yerini "abdominal bölge" olarak tanımlayan, ağrı sıklığını "devamlı, sürekli, sabit" olarak tanımlayan, analjezi uygulamasına gereksinim duyduğunu ifade eden kadınların emzirme özyeterliliği düşük bulunmuştur. Postpartum kadınların emzirme özyeterliliği ile postpartum ağrı yaşama durumları arasında negatif bir korelasyon olduğu, ağrı şiddeti arttıkça emzirme özyeterliliğinin azaldığı belirlenmiştir.
Sonuç: Postpartum ağrı, emzirme özyeterliliğini negatif yönde etkilemektedir. Ağrının kontrol altına alınması, emzirme sürecinin etkili şekilde gerçekleştirilmesine katkı sağlar.

Anahtar kelimeler: Postpartum, ağrı, emzirme, özyeterlilik

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INTRODUCTION

Within the first 6-8 weeks after birth, the process of becoming undone of physiological changes occurring during pregnancy is called involution. The most important involution occurs in the reproductive organs and uterus[1,2]. The uterus needs to undergo a rapid involution process to return to normal functions and measures prior to the pregnancy. Immediately after birth, the length of the uterus is 14 cm, its width is 12 cm, the thickness is 10 cm, and it weighs approximately 1000 g, one week after birth, the size of the uterus decreases by about 50% and reaches a weight of 500 g. At the end of the postpartum week 6, the uterus reaches its pre-pregnancy size and weighs about 60 g. Immediately after the separation of the placenta, between the uncompleted pubis and the umbilicus, the fundus of the uterus becomes palpable in the size of a grapefruit, increasing to umbilicus level 6-12 hours after the birth. It shrinks approximately in the size of a finger each day and goes down to the disinfected pubis and cannot be palpated from the abdominal wall after the postpartum 10th day[3-4]. The contractions felt in the uterus following birth are an important precursor of involution. The contractions occur parallel to the release of the oxytocin hormone and are of vital significance in preventing postpartum hemorrhage. Postpartum uterine contractions are perceived as cramp-type pain (afterpain) in the abdomen. The pain can be quite severe within the first 12-24 hours and is noticeably felt by the woman during the first four days[5-8]. Afterpain is closely associated with several factors. These factors include multiparity, overly tensed uterus due to macrosomic baby, multiple pregnancy, polyhydramnios, attempts to facilitate delivery (vacuum, forceps, etc.), uterotonic drugs applied to prevent postpartum hemorrhage, analgesia applied at delivery, manual removal of the placenta, physiological and psychological disorders of the mother, application of magnesium sulfate during labor, use of narcotic medication, full bladder, birth position and cultural attributes. Another factor that causes afterpain is breastfeeding[8,9]. Hormonal secretion is necessary for milk production and for the initiation of secretion immediately after birth. During lactation, after the release of the oxytocin hormone from the posterior pituitary, the soft areola muscles contract and this enables milk production accordingly. In addition, the released oxytocin stimulates uterine contractions, causing the mother to feel the severity of uterine contractions even more[1]. Afterpain causes psychological problems (such as depression, anxiety, anorexia, insomnia) and keeps the mother from performing her daily routines. During the breastfeeding period, the pain-induced neuro-hormonal stress reduces the mother's willingness to breastfeed, reduce her interest in the newborn, weaken the process of attachment and bonding, and adversely affect milk secretion. For a mother who cannot breastfeed her baby, the possibility of mood changes such as guilt, anxiety and sadness increase[1,4,7,10].

Breast milk plays an important role in the health and development of the baby. If the mother does not trust herself about breastfeeding and thinks that her milk is inadequate, she may turn to alternative feeding models in order to feed her baby. This affects the ability to breastfeed, success to breastfeed and the baby's breastfeeding time. Identify factors that prevent breastfeeding and seek solutions; breast milk will give the baby a longer and more effective time. Self-efficacy perception is one of the most important factors affecting the mother's breastfeeding success. Mother's self-esteem in breastfeeding is called 'breastfeeding self-efficacy'. Breastfeeding self-efficacy is explained by the self-efficacy construct, which integrates the breastfeeding self-efficacy theory developed by Dennis with the social-cognitive theory of Bandura[11,12]. According to the self-efficacy construct, individuals must be convinced that they can successfully perform a particular task or behavior and believe that they can achieve an expected health outcome. Individuals should believe that such behavior is capable of doing so besides achieving the expected outcome[11]. Breastfeeding self-efficacy is related to the perception of a woman's ability to breastfeed her baby and her belief that she has sufficient knowledge/skills to successfully breastfeed[12]. Breastfeeding self-efficacy perception is a variable that is easy to change and evaluate. The analysis of this variable contributes to the early identification of both breastfeeding problems and the identification of women at high risk, and the realization of personalized care initiatives[13,14]. Postpartum pain, which increases with breastfeeding, adversely affects the success of the breastfeeding process and hence the mother's breastfeeding self-efficacy. Problems in breastfeeding arising from postpartum pain can be diagnosed in the early period with the attention of health professionals working in postpartum clinics can be treated with personalized care initiatives[15]. This study was carried out to

identify the effect of postpartum afterpain on self-efficacy of breastfeeding.

MATERIALS AND METHODS

This was a descriptive study. Data were collected at an state hospital at the Inner Anatolia in Turkey between July-December 2017. The population of the study consisted of 3981 females admitted to the postpartum service of a state hospital as of 2016. The sampling included 376 postpartum women who met the following criteria: Birth being a term birth (38-42 weeks), Woman being in the first 12-24 hours of postnatal phase, having no physical and psychiatric illnesses, having given birth to a one, healthy newborn, having had a vaginal delivery, having no obstacle for breastfeeding, baby having been breastfed by the mother at least once after the birth participating voluntarily.

This study started after receiving approval from related local authorities. "In order to protect the rights of the women within the scope of the research, the ethical principles were met before collecting the research data: the "Informed Consent" principle by explaining the women the purpose of the study, the "Privacy and Protection of Privacy" principle by telling them that the information to be collected would be kept confidential, and the "Respect for Autonomy" principle by including those who wanted to participate voluntarily. Moreover, after the completion of the questionnaire, the questions of the postpartum women were answered, and they were given information about the subject". The data were collected by face-to-face interviews with the postpartum women.

Measures

The participants were administered the Personal Information Form, The Short-Form McGill Pain Questionnaire, The Short-Form Breastfeeding Self-Efficacy Scale.

Personal Information Form

The form, which was created by the researcher from the relevant literature, was used to identify certain sociodemographic, obstetric, breastfeeding and pain-related characteristics of women. There are a total of 27 questions, 8 of which is on socio-demographic characteristics (age, educational level, economical status, social support status etc.), 7 on obstetric history (parity, status of planned pregnancy, health problem in pregnancy, status of prenatal care receiving, baby's birth weight etc.), 6 on breastfeeding status (first breastfeeding time, the status of being willing to breastfeed, the level of breastfeeding related knowledge, breastfeeding related knowledge resources, breastfeeding problems status, her own breastfeeding success etc.) and 6 on pain status (place of pain, frequency of pain, need for analgesia etc.)

Short-Form McGill Pain Questionnaire (SF-MPQ)

The SF-MPQ a scale used for measuring acute pain, was developed by Melzack[16]. And the validity and reliability of the Turkish version was confirmed by Bicici and Gunes[17]. The SF-MPQ was widely translated and used to assess the pain experience of several types of patients. ıt was detected in the correlation performed for Turkish validity analysis of SF-MPQ by using numerical rating scale that correlation coefficients of sensory and affective pain, evaluative total pain intensity and VAS which are the subdimensions of SF-MPQ were 0.36, 0.77, 0.92 respectively and the correlation coefficient of the all scale was 0.59. In the Cronbach alpha reliability method performed in order to find out the reliability coefficient of SF-MPQ, the Cronbach alpha coefficient of the all scale was found as 0.78 at test and as 0.91 at retest. SF-MPQ's Cronbach alpha value which was calculated in combination of its sensory and affective pain characteristics was 0.75; SF-MPQ's Cronbach alpha value which was calculated in combination of its evaluative total pain intensity and 92 VAS was 0.77. All scale's and its subscales' test and retest correlation coefficients were between 0.57 – 0.88, it was found significant at it was found significant at $p<0.01$.

SF-MPQ consists of three parts. Part One: Contains 15 words describing the characteristics of pain. 11 of them sensory and 4 of them perceive pain in the perceptual dimension. A total of three pain scores are obtained in this section [sensory pain score (0-33 points), perceptual pain score (0-12 points), total pain score (0-45)]. Increasing the score indicates that the pain is increasing. Part Two: Contains 5 words that describe the severity of pain. Section Three: The current pain intensity of the individual is evaluated using the visual comparison scale. As a result of validity and reliability analyses performed, the SF-MPQ has been determined as a valid and reliable scale to be used in Turkish population. In this study, the Cronbach alpha reliability coefficient of the scale was 0.80

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

The SF-BSES was developed by Dennis[10]. Turkish validity and reliability of the scale were made by Tokat et al. [18]. SF-BSES is a 14-item instrument developed to measure breast-feeding confidence. All items are preceded by the statement "I can always" and are anchored by a 5-point Likert-type scale, with 1=not at all confident and 5=always confident. All items are presented positively and scores are summed to produce a final score ranging from 14 to 70, with higher scores indicating better breast-feeding self-efficacy. Scale Cronbach's alpha coefficient for internal consistency was 0.87 antenatally and 0.86 postnatally. Antenatal and postnatal SF-BSES scores were significant predictors of breastfeeding duration and exclusivity at 12 weeks after the birth. In this study, the Cronbach alpha reliability coefficient of the scale was 0.82.

Statistical analysis

Total and subscales of the SF-MPQ and SF-BSES were shown as mean (standard deviation) and minimum and maximum values of scales. The Kolmogorov Smirnov normality test were used for the evaluation, the distribution of the data were normal, before the analysis. Therefore, the independent sample t-test, F tests (ANOVAs) were used to compare the total scores between/ among subgroups of the postpartum women' sociodemographic characteristics. Pearson's correlation coefficients were calculated to determine the correlations between the scores of SF-MPQ and SF-BSES. A p-value < 0.05 was considered statistically significant.

RESULTS

The mean age of the postpartum women was 27.35±5.32, and 88% of them were between the ages of 18 and 34. A total of 54% of the postpartum women had an educational level of middle school and lower. 74.7% of them evaluated their economic status as medium level, 72.1% of them live in a nuclear family, and 14.9% of them are employed at an income-generating job. 77.9% of their spouses are in the 18-34 age group and the mean age is found to be 31.3 ± 6.05. 62.5% of the spouses have high school and higher education level, almost all (99.2%) work at an income-generating job.The mean total score received from the SF-BSES by the postpartum women was found to be 36.88 ± 8.54 (min: 14, max: 70). The mean scores of the sensory and affective pain, total pain intensity, and visual analoque scale sub-dimensions of the SF-MPQ were found to be 33.53 ± 4.18 (min:0, max:45), 2.60 ± 1.39 (min:0, max:5), 6.23 ± 1.91 (min:0, max:10), respectively (Table 1).

Table 1. SF-MPQ sub-dimension mean scores and SF-BSES total mean score of the postpartum women

Scales and sub-dimensions	Scale Min – Max Score	m (sd)
SF-BSES Total Score	14-70	36.88 (8.54)
SF-MPQ Sub-Dimension Scores		
Sensory and affective pain	0-45	33.53 (4.18)
Total pain intensity	0-5	2.60 (1.39)
Visual analoque scale	0-10	6.23 (1.91)

SF-MPQ, The Short-Form McGill Pain Questionnaire; SF-BSES, The Short Form Breastfeeding Self-Efficacy Scale; m, mean; sd, standard deviation

In this study, the breastfeeding self-efficacy was found to be higher in the women who were 35 years and over, found their social support adequate, planned their current pregnancy, received prenatal care, expressed their willingness to breastfeed, had no breastfeeding problem. The self-efficacy of breastfeeding is low for women who experienced postpartum abdominal pain, who described the frequency of pain as 'continuous, continuous and constant', and who stated that they needed analgesia ($p < 0.05$; Table 2; Table 3). There is no statistically significant difference found between the mean score of breastfeeding self-efficacy in terms of the education level of women, economic status perception, parity, health problem in pregnancy, birth weight of the baby, first breastfeeding time, and sources of information on breastfeeding ($p>0.05$; Table 2; Table 3).

In this study, the 'visual analogue scale' sub-dimensions scores are low for women between the ages of 18-34, who found their social support

sufficient, gave birth to a baby with the weight of 2510-4000 g, who expressed their willingness to breastfeed and who described the frequency of pain as 'short, instant, temporary' ($p<0.05$; Table 4; Table 5).

Three sub-dimension mean scores of SF-MPQ were found low for women who were primipara, women who did not have any health problems in their pregnancy, found the level of knowledge related to breast milk and breastfeeding adequate and did not need analgesia ($p<0.05$; Table 4; Table 5). 'The sensory and affective pain' and 'total pain intensity' sub-dimension scores are lower for women who had a planned pregnancy, had informed that their source of information was health professionals and who had found their breastfeeding success adequate ($p<0.05$; Table 4; Table 5). A statistically significant negative correlation was determined between the postpartum women's SF-BSES total scores and their SF-MPQ sub-dimension scores ($p<0.05$). The postpartum women with afterpain were found to have low levels of breastfeeding self-efficacy (Table 6).

Table 2. Distribution of the SF-BSES mean scores according to some "sociodemographic" and "obstetric" characteristics of the postpartum women (n= 376)

Characteristics	SF-BSES		
	m (sd)	t / F	p
Sociodemographic characteristics			
Age			
18-34 age	36.73 (8.56)	1.062	0.028
≥ 35 age	39.20 (8.60)		
Educational level			
Middle school and lower	37.21 (8.02)	0.808	0.420
High school and over	36.49 (9.12)		
Status of economical			
Good	36.31 (8.58)		
Moderate	36.90 (8.60)	0.103	0.902
Bad	37.13 (8.35)		
Social support			
Sufficient	38.43 (6.06)	1.120	0.002
Unsufficient	35.10 (6.80)		
Obstetrics characteristics			
Parity			
Primiparity	37.65 (9.02)	0.589	0.556
Multiparity	36.79 (8.49)		
Status of Planned Pregnancy			
Planned	38.03 (8.36)	1.518	0.013
Unplanned	36.49 (8.58)		
Health Problem in Pregnancy			
Yes	38.31 (8.64)	1.385	0.167
No	36.62 (8.51)		
Status of Prenatal Care Receiving			
Yes	38.08 (8.24)	1.629	0.048
No	34 45 (8.62)		
Baby's birth weight			
≤ 2500 gr	35.84 (8.43)		
2510-4000 gr	37.90 (8.34)	2.250	0.107
≥ 4010 gr	36.54 (9.01)		

SF-BSES, The Short Form Breastfeeding Self-Efficacy Scale; m, mean; sd, standard deviation; F, One Way Anova Test; t, Independent samples t test

Table 3. Distribution of the SF-BSES mean scores according to some "breastfeeding" and "pain" characteristics of the postpartum women (n= 376)

Characteristics	**SF-BSES**		
	m (sd)	**t / F**	**p**
Breastfeeding related characteristics			
First breastfeeding time			
Within 30-60 minutes following delivery	34.51 (8.09)	1.614	0.107
≥ 1 hour after birth	37.09 (8.56)		
The status of being willing to breastfeed			
Yes	38.95 (8.50)	3.841	0.041
No	34.92 (9.79)		
The level of breastfeeding related knowledge			
Sufficient	39.83 (8.40)	1.157	0.048
Unsufficient	34. 99 (8.91)		
Breastfeeding related knowledge resources			
Health Professionals	38.64 (4.70)		
Environment (family, friends)	36.05 (8.82)	1.132	0.042
Mass media (TV, internet)	36.15 (7.86)		
Breastfeeding problems			
Yes	35.90 (4.50)	2.401	0.002
No	37.02 (3.09)		
Her own breastfeeding success			
Sufficient	37.76 (9.90)		
Unsufficient	34.06 (8.34)	0.552	0.048
Pain related characteristics			
Place of Pain			
Abdomen pain	35.65 (8.46)		
Backache	37.94 (8.40)	2.816	0.041
Chest pain	37.23 (8.78)		
Frequency of Pain			
Continuous, continuous, constant	35.42 (8.44)		
Rhythmic, periodic, intermittent	38. 33 (8.29)	4.714	0.010
Short, instant, temporary	37.38 (8.87)		
Need for analgesia			
Yes	34.77 (8.29)	0.358	0.026
No	37.12 (9.13)		

Abbreviations: SF-BSES, The Short Form Breastfeeding Self-Efficacy Scale; m, mean; sd, standard deviation; F, One Way Anova Test; t, Independent samples t test

Tablo 4. Distribution of the SF-MPQ mean scores according to some "sociodemographic" and "obstetric" characteristics of the postpartum women (n= 376)

Characteristics	SF-MPQ		
	Sensory and affective pain m (sd)	Total pain intensity m (sd)	Visual Analoque Scale m (sd)
Sociodemographic characteristics			
Age			
18-34 age	37.74 (4.22)	2.69 (1.58)	6.28 (1.86)
≥ 35 age	33.54 (4.14)	2.59 (1.37)	5.48 (1.95)
Significance test*	2.291 / 0.007	1.458 / 0.064	1.410 / 0.046
Educational level			
Middle school and lower	33.78 (4.22)	2.63 (1.32)	6.48 (0.42)
High school and over	33.24 (4.13)	2.56 (1.39)	6.82 (1.24)
Significance test*	1.259 / 0.209	1.477 / 0.633	2.042 / 0.460
Status of economical			
Good	31.91 (4.77)	1.58 (0.78)	5.22 (2.50)
Moderate	32.69 (4.06)	2.63 (1.32)	6.44 (1.24)
Bad	33.18 (4.06)	2.56 (1.39)	8.67 (1.80)
Significance test**	0.788 / 0.455	1.270 / 0.03	1.410 / 0.002
Social support			
Sufficient	30.42 (3.06)	2.02 (0.30)	6.40 (1.04)
Unsufficient	33.08 (4.12)	2.06 (1.32)	8.60 (1.00)
Significance test*	0.808 / 0.045	1.202 / 0.42	1.216 / 0.032
Obstetrics characteristics			
Parite			
Primipar	33.39 (4.50)	2.03 (1.04)	4.12 (2.26)
Multipar	37.55 (4.15)	3.86 (1.00)	7.80 (2.08)
Significance test*	2.221 / 0.048	2.72 / 0.034	4.312 / 0.001
Status of Planned Pregnancy			
Planned	33.65 (4.28)	1.60 (1.20)	6.18 (1.02)
Unplanned	36.18 (3.89)	2.68 (1.18)	6.84 (1.80)
Significance test*	1.936 / 0.042	1.04 / 0.043	1.480 / 0.146
Health Problem in Pregnancy			
Yes	38.42 (3.32)	4.62 (1.48)	7.12 (2.42)
No	33.00 (3.84)	2.12 (1.02)	5.44 (1.06)
Significance test*	2.326 / 0.004	2.54 / 0.023	1.110 / 0.040
Status of Prenatal Care Receiving			
Yes	34.20 (2.80)	2.23 (0.22)	5.18 (0.86)
No	35.65 (4.27)	3.46 (1.30)	6.01 (1.60)
Significance test*	1.204 / 0.058	1.530 / 0.048	0.328 / 0.426
Baby's birth weight			
≤ 2500 gr	36.42 (4.28)	2.28 (1.46)	5.80 (1.87)
2510-4000 gr	34.48 (3.02)	2.90 (0.52)	4.24 (1.08)
≥ 4010 gr	37.08 (4.43)	2.50 (1.41)	6.28 (1.80)
Significance test**	3.788 / 0.042	1.477 / 0.633	3.020 / 0.002

SF-MPQ, The Short-Form McGill Pain Questionnaire; m, mean; sd, standard deviation; F, One Way Anova Test; t, Independent samples t test

Tablo 5. Distribution of the SF-MPQ mean scores according to some "breastfeeding" and "pain" characteristics of the postpartum women (n= 376)

Characteristics	SF-MPQ		
	Sensory and affective pain m (sd)	Total pain intensity m (sd)	Visual Analoque Scale m (sd)
Breastfeeding related characteristics			
First Breastfeeding Time			
30-60 minutes following delivery	32.70 (4.23)	2.42 (1.28)	6.54 (1.62)
≥ 1 hour after birth	33.61 (4.18)	2.74 (0.82)	6.21 (1.93)
Significance test	1.149 / 0.251	1.504 / 0.164	0.939 / 0.348
The status of being willing to breastfeed			
Yes	30.18 (3.02)	2.40 (1.18)	4.12 (1.20)
No	34.42 (3.42)	3.20 (1.24)	6.28 (1.42)
Significance test	1.158 / 0.026	1.418 / 0.128	1.324 / 0.048
The status of breastfeeding related knowledge			
Sufficient	32.44 (3.12)	2.84 (1.06)	4.40 (1.20)
Unsufficient	36.18 (4.26)	4.17 (1.23)	7.20 (1.36)
Significance test	1.223 / 0.020	2.504 / 0.014	1.210 / 0.034
Breastfeeding related knowledge resources			
Health Professionals	31.16 (3.18)	2. 88 (1.24)	4.52 (1.82)
Environment (family, friends)	34.40 (4.16)	2.42 (1.20)	6.48 (1.24)
Mass media (TV, internet)	37.64 (3.28)	4.40 (1.78)	6.64 (0.36)
Significance test	2.860 / 0.032	1.504 / 0.048	1.820 / 1.210
Breastfeeding Problems			
Yes	36.18 (3.82)	3.20 (1.22)	7.43 (1.26)
No	35.22 (4.00)	2.48 (1.20)	5.12 (1.48)
Significance test	1.416 / 0.620	1.608 / 0.410	1.224 / 0.214
Her own breastfeeding success			
Sufficient	30.18 (3.21)	2.24 (1.16)	6.20 (1.82)
Unsufficient	36.88 (2.48)	3.48 (1.10)	7.86 (2.06)
Significance test	3.168 / 0.004	1.406 / 0.048	1.102 / 1.038
Pain related characteristics			
Place of Pain			
Abdomen pain	37.08 (3.12)	4.40 (2.02)	7.60 (1.17)
Backache	34.44 (2.16)	3.48 (1.18)	7.50 (1.48)
Chest pain	34.08 (4.43)	3.40 (1.26)	6.34 (1.78)
Significance test	2.802 / 0.048	1.714 / 0.864	2.182 / 0.126
Frequency of Pain			
Continuous, continuous, constant	37.02 (3.46)	3.78 (4.18)	7.48 (1.02)
Rhythmic, periodic, intermittent	35.18 (4.16)	2.64 (1.08)	6.54 (1.62)
Short, instant, temporary	33.02 (4.00)	2.14 (1.22)	5.21 (1.93)
Significance test	3.108 / 0.002	1.216 / 0.140	1.220 / 0.034
Need for analgesia			
Yes	36.16 (3.02)	4.20 (2.04)	7.12 (1.46)
No	32.12 (4.08)	2.04 (1.24)	5.04 (1.42)
Significance test	1.148 / 0.020	2.480 / 0.012	1.428 / 0.018

SF-MPQ, The Short-Form McGill Pain Questionnaire; m, mean; sd, standard deviation; F, One Way Anova Test; t, Independent samples t test

Table 6. The correlation between SF-BSES total scores and SF-MPQ sub-dimension scores of postpartum women

		SF-BSES	
		r[a]	p
	Sensory and affective pain	-0,629	0,000
SF-MPQ	Total pain intensity	-0.340	0.000
	Visual analoque scale	-0.251	0.000

SF-MPQ, The Short-Form McGill Pain Questionnaire; SF-BSES, The Short Form Breastfeeding Self-Efficacy Scale; [a] Pearson's correlation coefficient

DISCUSSION

Breastfeeding is a cost-effective behavior that strengthens the bond between mother and baby, brings about positive psychological and physiological effects both on the mother and newborn. For a successful/effective breastfeeding process, it is important that the mother finds herself adequate in breastfeeding. The high breastfeeding self-efficacy of mothers contributes to a prolonged breastfeeding time[10] as well as the satisfaction of the mother/baby from the breastfeeding process[19] and to the mother's acquisition of proper breastfeeding[20]. In the literature, there are many studies dwelling on mothers' breastfeeding self-efficacy.

In this study, it was determined that the level of breastfeeding self-efficacy of mothers was found below mean (36.88+8.54; min=14; max=70) (Table 1). Varaei et al. reported that 44% of the mothers had low breastfeeding self-efficacy[20], in a study conducted by Rahmatnejad and Bastani this rate was found to be 49 %[21]. In addition to this, according to the study carried out by Hasanpoor, Bani, Ansari and Ebrahimi only 2.5% of mothers had high breastfeeding self-efficacy. Breastfeeding self-efficacy is closely related to mothers' knowledge levels[22]. Myths and inadequate knowledge about breastfeeding diminish breastfeeding self-efficacy[23,24]. In many societies, women's main source of information on breastfeeding is the environment and the internet. However, the information obtained from these sources of information is often incomplete or inadequate. In this study, the breastfeeding self-efficacy of women who found their own knowledge level related to breastfeeding adequate and obtained information from health professionals was found to be high (Table 3). Health education offered by health professionals contributes to the increase of breastfeeding self-efficacy, to the acquisition of behavioral change and to the success of the breastfeeding process[25,26].

In our study, breastfeeding self-efficacy was found to be high for women aged 35 years and over, whose pregnancy at the time was planned, who received prenatal care, and expressed their willingness to breastfeed. Nevertheless, there is no statistically significant found difference between women's educational status, economic status perception, and parity of breastfeeding self-efficacy ($p>0.05$; Table 2; Table 3). In the literature, however, it is reported that many factors such as women having their first pregnancy and lack of breastfeeding experience[21,26], a young age for motherhood, low education level, low income level, mother's full-time study, smoking[26-28], and mother's health problems (postpartum depression, anxiety and mastitis etc.) reduce breastfeeding self-efficacy[29,30]. The low self-efficacy of breastfeeding among adolescent mothers increases the risk of early weaning compared to adult women[27]. Breastfeeding self-efficacy also affects the condition of the newborn. Aktaş and Küçük found that mothers with infantile colic infants had lower breastfeeding self-efficacy[41]. Health professionals should analyze the status of women having risk factors while assessing breastfeeding self-efficacy and individualize the care within the framework of these data.

Postpartum social/professional support affects women's breastfeeding decision. Perceived social support enhances the self-efficacy of breastfeeding for women, making it easier for her and her baby to acquire the skills necessary to meet her own needs[27,31-33]. In this study, the breastfeeding self-efficacy scores were found to be high for the women who found their social support (family members, friends etc.) adequate (Table 2). Many researchers in the literature state that women with strong social support are more successful in breastfeeding[32,34,35]. "In Turkish culture, the family elders (such as mother / mother-in-law) are very effective on breastfeeding processes. Family elders' approach to breastfeeding affects the breastfeeding status of the new generation and prevents practices recommended by healthcare professionals. For example; the family elders are often quite repressive in the first hours after birth, with formula feeding, early start to supplementary foods and feeding with feeding bottles (with the thought that the mother's milk will be insufficient).

For this reason, health care staff should also consider family elders as target groups in breastfeeding and infant nutrition in their education programs. Women who experience postpartum afterpain may be reluctant to breastfeed, which may increase the risk of feeding their baby with other nutrients other than breast milk[10,18,34,35]. Another study found that breastfeeding self-efficacy during postnatal period is closely associated with the mother's social and professional support (nurse, midwife) when the mother breastfeeds her baby within the first hour after birth[36]. Additionally, the attitude and support of the partner towards breastfeeding particularly affect breastfeeding self-efficacy[32,37]. Health professionals should strengthen the perception of women's social support in order to increase mother's breastfeeding self-efficacy, and ensure that the woman/spouse/family develop positive attitudes towards breastfeeding[26,34,36-38]. In this study, no statistically significant difference was found between breastfeeding self-efficacy and parity (Table 2). However, many researchers in the literature put forth that there is a relationship between parity and afterpain. After a normal vaginal delivery, approximately 50% of primipara women and 86% of multiparous women experience afterpain[1]. In multiparous women (with every consecutive birth), the sensitivity of the central nervous system and consequently the severity of the pain increase due to the decrease in uterine muscle strength[1,3,7]. Therefore, afterpain is experienced more severely in multiparous women than in primipara women[39,40]. In the postpartum period, every woman, especially multiparous woman, should be subject to an evaluation in terms of afterpain.

Afterpain affects breastfeeding self-efficacy. In this study, the self-efficacy of breastfeeding is found low for women who experienced postpartum abdominal pain, who described the frequency of pain as 'continuous, continuous and constant', and who expressed that they needed analgesia ($p<0.05$; Table 2; Table 3). At the same time, postpartum women with afterpain were found to have low levels of breastfeeding self-efficacy (Table 6). The prolongation of labor may increase the need for additional narcotics after birth. Controlling the pain will allow the mother to adapt easily to her baby and to initiate the breastfeeding process at an early stage[1,6]. At this point, health professionals bear important responsibilities. In order to control the pain following delivery by caesarean section, the administration of analgesics is routinely performed and if there is a significant pain experienced by the puerperal mother after normal delivery, drug application (drugs that are used orally and do not have any inconvenience in the passage of milk, such as paracetamol) should be administered[8]. If there persists a pain that is too strong to respond to paracetamol, drugs (tablets, suppositories or intramuscular or intravenous injection) from the non-steroid anti-inflammatory drug group should be applied. If epidural anesthesia is applied during normal delivery, analgesia can be provided by means of the catheter. In addition to medical treatment, cold application, rest, early mobilization, warm shower in the episiotomy area help to reduce the pain[1,8].

In this study, it was found that postpartum womens's breastfeeding self-efficacy decreased in line with severity of afterpain. It was found that age, multiparity, social support, unplanned pregnancy, and the level of knowledge about breastfeeding affect the mother's breastfeeding self-efficacy and postpartum pain severity. Considering the relationship between breastfeeding self-efficacy and afterpain, it can be thought that controlling the postpartum pain, increasing the level of knowledge about breastfeeding / helping them develop positive attitudes and strengthening the needed social support will yield beneficial results. In this context, the control of afterpain and the periodic evaluation of breastfeeding self-efficacy will allow for an early detection of women with low self-efficacy and for a more satisfactory/effective experience of the breastfeeding process.

Yazar Katkıları: Çalışma konsepti/Tasarımı: FE; Veri toplama: -; Veri analizi ve yorumlama: FE, DK; Yazı taslağı: FE, DK; İçeriğin eleştirel incelenmesi: FE, DK; Son onay ve sorumluluk: FE, DK; Teknik ve malzeme desteği: FE, DK; Süpervizyon: FE; Fon sağlama (mevcut ise): yok.
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