

Araştırma Makalesi/ Research Article

Determination of the Relationship Between Perceived Spousal Support, Fatigue, and Breastfeeding Self-Efficacy in the Early Postpartum Period

Erken Postpartum Dönemde Algılanan Eş Desteği Yorgunluk ve Emzirme Öz Yeterlilik Arasındaki İlişkinin Belirlenmesi

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ABSTRACT

Objective: This study aimed to determine the relationship between perceived spousal support, fatigue, and breastfeeding self-efficacy in the early postpartum period.

Methods: This cross-sectional descriptive and correlational study was conducted at a pediatric outpatient clinic in the Eastern Anatolia region of Türkiye. A Demographic Questionnaire, Scale of Spouse Support Perceived By Women During the Early Postpartum Process, Breastfeeding Self-Efficacy Scale, and Visual Analogue Scale for Fatigue were used to interview 266 mothers in the early postpartum period. Mothers were ensured to complete the survey forms in full.

Results: The mean total scores of mothers were determined as 65.04 ± 11.39 for the Spouse Support Perceived Scale, 54.27 ± 29.29 for the Fatigue Subscale of the Visual Analog Scale, 32.96 ± 12.01 for the Energy Subscale, and 61.54 ± 8.33 for the Breastfeeding Self-Efficacy Scale. Positive correlations were found between mothers' scores on the Spouse Support Perceived Scale and the Fatigue and Energy Subscales of the Visual Analog Scale for Fatigue and the Breastfeeding Self-Efficacy Scale, respectively ($p < 0.05$).

Conclusion: In conclusion, an increase in spouse support perceived scores in early postpartum mothers was found to be associated with an increase in fatigue and breastfeeding self-efficacy scores. In line with these results, health workers should integrate spouses into their education and counseling services both before and after birth, paying attention to the relationship between spouse support and breastfeeding self-efficacy.

Keywords: Breastfeeding self-efficacy, early postpartum period, nursing, spousal support, fatigue

ÖZ

Amaç: Bu araştırma erken postpartum dönemde algılanan eş desteği, yorgunluk ve emzirme öz yeterlilik arasındaki ilişkinin belirlenmesi amacıyla yapıldı.

Yöntem: Kesitsel tanımlayıcı ve ilişki arayıcı desende olan çalışma, Türkiye'nin Doğu Anadolu bölgesindeki bir hastanenin pediatri polikliniğinde gerçekleştirildi. Erken postpartum dönemdeki 266 anneye görüşmek için Demografik Soru Formu, Erken Lohusalık Sürecinde Kadınların Algıladıkları Eş Desteği Ölçeği, Emzirme Öz Yeterlilik Ölçeği ve Yorgunluk İçin Görsel Benzerlik Skalası kullanıldı. Annelerin anket formlarını eksiksiz doldurmaları sağlandı.

Bulgular: Annelerin toplam puan ortalamasının Erken Lohusalık Sürecinde Kadınların Algıladıkları Eş Desteği Ölçeği için 65.04 ± 11.39 , Yorgunluk için Görsel Benzerlik Skalası Yorgunluk Alt Boyutu için 54.27 ± 29.29 , Enerji Alt Boyutu için 32.96 ± 12.01 ve Emzirme Öz Yeterlilik Ölçeği için 61.54 ± 8.33 olduğu belirlendi. Annelerin Erken Lohusalık Sürecinde Kadınların Algıladıkları Eş Desteği Ölçeği puanları ile sırasıyla Yorgunluk İçin Görsel Benzerlik Skalası Yorgunluk ve Enerji Alt Boyutları ve Emzirme Öz Yeterlilik Ölçeği puanları arasında pozitif bir korelasyon olduğu saptandı ($p < 0.05$).

Sonuç: Sonuç olarak erken postpartum dönemdeki annelerde eş desteği algısı puanlarındaki artışın yorgunluk ve emzirme öz yeterlilik puanlarındaki artış ile ilişkili olduğu saptandı. Bu sonuçlar doğrultusunda; eş desteği ile emzirme öz-yeterliliği ilişkisine dikkat edilerek, sağlık çalışanları hem doğum öncesi hem doğum sonrası dönemde yapacağı eğitim ve danışmanlık hizmetlerine eşleri de entegre etmelidir.

Anahtar Kelimeler: Emzirme öz yeterlilik, erken postpartum dönem, eş desteği, hemşirelik, yorgunluk

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Introduction

The postpartum period is a critical transition period characterized by not only physical but also psychological and social changes (Bekmezci et al., 2016). The Meleis transition theory identifies childbirth and breastfeeding as significant transitional periods in a woman's life during the postpartum period (Meleis, 2010). Transition refers to the role transition from a known situation to another unknown situation. The most important role of nurses here is to help patients complete a healthy transition to a new situation and role (Gündoğan and Güler, 2024). In this transition period, mothers excessively exposed to external interventions experience disruptions in emotional and physical well-being (Onat and Karakoç, 2021). Consequently, disorders manifest with emotional symptoms such as postpartum depression, mood swings, feelings of guilt, suicidal and/or homicidal thoughts, along with physical symptoms including fatigue, infections, sleep disturbances, back and abdominal pain (Aktaş et al., 2017). Among these disorders, fatigue has been indicated as one of the most common complaints among women (Yılmaz and Turfan, 2021). Postpartum fatigue, a primary concern for most mothers, negatively impacts maternal behaviors, daily activities, infant care, the mother-infant relationship, maternal emotions (high levels of stress and anxiety), communication between mother and baby, breastfeeding behaviors, success, and self-efficacy (Onat and Karakoç, 2021; Açıkgöz and Yörük, 2022). Studies suggest that postpartum fatigue exacerbates anxiety in mothers, leading to difficulties in sustaining breastfeeding and early termination of breastfeeding behaviors (Wang et al., 2014).

According to Gerçek et al. (2017), self-efficacy refers to an individual's belief in their competence to perform a specific behavior (Gerçek et al., 2017). A mother's perception of her breastfeeding self-efficacy can play a significant role in her decision to breastfeed, the effort she puts into it, and her overall emotional experience with breastfeeding (Brockway et al., 2017). Mothers with higher levels of self-efficacy are more likely to approach challenges in the postpartum period with a positive mindset and choose to breastfeed more frequently. They believe in the importance of breastfeeding and demonstrate successful breastfeeding behaviors (Brockway et al., 2017).

Several factors influence the breastfeeding process during the postpartum period. Studies conducted globally and within our country link

several factors to the drop in breastfeeding rates during the early postpartum period. These include the mother's return to work, breast-related problems such as mastitis, cracked nipples, or fissures, difficulties with the baby latching properly, the lack of professional support, and women's perceptions of breastfeeding challenges. Among these factors, spousal support is a significant but often overlooked factor (Durmazoğlu et al., 2021). Mothers require support from their spouses to initiate and sustain breastfeeding during the postpartum period. In studies on partner support and breastfeeding in the literature, it has been observed that partner support positively influences the mother's breastfeeding preference, the infant's feeding method, the rate of exclusive breastfeeding, and the duration of breastfeeding (Durmazoğlu et al., 2021; Han et al., 2023). Studies conducted in different countries also suggest that mothers who receive support from their partners have longer breastfeeding durations and higher breastfeeding self-efficacy (Ogbo et al., 2020).

In Türkiye, where patriarchal and traditional values persist, spouses who play an active role in decision-making within the family structure are believed to influence mothers' breastfeeding behaviors during the breastfeeding process. In literature, there has been an individual increase in studies related to these three variables in recent years. However, no study has been found that examines the role between partner support, breastfeeding self-efficacy, and fatigue. The findings of this study contribute significantly to filling the gap in literature regarding the relationship between spousal support, fatigue, and breastfeeding self-efficacy in the early postpartum period. Specifically, this research provides valuable insights that could inform the development of targeted intervention strategies in similar sociocultural contexts. The interaction between spousal support and fatigue and its impact on breastfeeding self-efficacy could assist healthcare professionals and policymakers in offering more tailored support and guidance to mothers. For instance, fostering active spousal involvement during the breastfeeding period could help reduce maternal fatigue while enhancing breastfeeding self-efficacy. Additionally, these findings could serve as a guide in shaping healthcare policies, particularly in integrating spousal support during the postpartum period. Therefore, this study was conducted to determine the relationship between perceived spousal support, fatigue, and

breastfeeding self-efficacy in the early postpartum period.

Methods

Study Design

This research is a cross-sectional descriptive and correlational study type.

Population and Sample/Study Group

The study population comprised mothers of infants aged 0-7 days who visited the Pediatric Outpatient Clinic of a research hospital in a city in eastern Türkiye between October and December 2023. Mothers who were over 18 years old, had term deliveries, were in the early postpartum period (0-7 days postpartum), did not experience birth complications, did not have any conditions preventing breastfeeding, were fluent in Turkish, had no communication barriers, and volunteered to participate were included in the study. G*Power 3.1.9.7 software was used to calculate the sample size. The power of the study was calculated with a 0.05 error margin after data collection. The sample size calculation utilized data from the study by Ayden et al. (2020). With a medium effect size of 0.5, 95% power, and a 0.05 error margin, the total sample size was determined to be $n=242$, and the study was completed with 266 mothers (Cohen, 1988).

Data Collection Instruments

Questionnaire: The form developed by the researcher included five questions about the mothers' socio-demographic characteristics, such as education level, age, employment status, family structure, and income level. Additionally, it contained eight questions addressing the mode of delivery, gestational week, infant gender, birth weight, infant age (in days), whether breastfeeding education was received, breastfeeding history with previous children, and feeding method.

Spouse Support Perceived by Women During the Early Postpartum Process Scale (SSPEPS): Designed by Hotun Şahin et al. (2014) to assess women's perceived spousal support in the early postpartum period, the scale includes 10 items with positive statements (items 1, 2, 3, 4, 5, 6, 7, 11, 13, and 16) and 6 items with negative statements (items 8, 9, 10, 12, 14, and 15). The scale is rated on a five-point Likert scale, with 1 being "strongly disagree" and 5 being "strongly agree." For the negative items, the scores are reversed. Scores range from 16 to 80, with higher scores indicating greater perceived spousal support in the early postpartum period. The scale consists of three subscales: emotional support

(7 items), social support (6 items), and physical support (3 items). The original Cronbach's alpha was 0.87, while in the current study, it was found to be 0.94.

The Visual Analog Scale for Fatigue (VAS-F) was first created by Lee et al. in 1991 and then adapted to Turkish by Yurtsever in 2003. It has 13 items that measure fatigue (items 1, 2, 3, 4, 5, 11, 12, 13, 14, 15, 16, 17, and 18) and 5 items that measure energy (items 6, 7, 8, 9, and 10). The scale is also utilized to assess fatigue during pregnancy and the postpartum period (Demirel Bozkurt et al., 2011). Each item features a 10 cm horizontal line, with positive statements at one end and negative statements at the other. While the items of the fatigue subscale progress from positive to negative, the opposite order is present in the energy subscale. The lowest score obtained from the fatigue subscale is 0; the highest score is 130. The scores in the energy subscale range from 0 to 50. A high score from the fatigue subscale and a low score from the energy subscale indicate that the severity of fatigue is high. Cronbach's alpha was 0.90 for fatigue and 0.74 for energy, while in this study, the coefficients were 0.89 for fatigue and 0.77 for energy.

Breastfeeding self-efficacy scale (BSES): Dennis and Faux (1999) originally developed the scale with 33 items, and a shorter 14-item version was introduced in 2003. The Turkish validation was conducted by Aluş Tokat and Okumuş in 2009. The scale uses a five-point Likert format (1 = 'Not sure at all' to 5 = 'Absolutely sure'), with possible scores ranging from 14 to 70. Higher scores reflect greater breastfeeding self-efficacy. The original scale reported a Cronbach's alpha of 0.94, while Aluş Tokat et al. found it to be 0.86. In the present study, the Cronbach's alpha was calculated as 0.89.

Data Collection

Before commencing data collection, mothers who met the inclusion criteria for the study were introduced, provided with information, and obtained written and verbal consent. Subsequently, they were requested to complete the survey forms comprehensively. Survey forms were collected through face-to-face interviews, taking approximately 15-20 minutes to complete.

Statistical Analysis

The SPSS 25.0 package program was used in the statistical analysis of the data. The conformity of the data to normal distribution was evaluated using the Shao method. Accordingly, the Skewness value was 1.531, the Kurtosis value was 2.542, and it was

determined that it showed a normal distribution between -3 and +3. Descriptive statistics of the quantitative variables in the study were given with mean (x), standard deviation (ss), minimum (min), and maximum (max) values. Pearson correlation analysis was applied to test the relationship between the SSPEPS, VAS-F, and BSES score averages of the mothers participating in the study. The correlation results were interpreted by taking the following values into account (İlhan, 2021).

- $r < 0.20$ and values close to zero indicate no or a very weak relationship,
- Between 0.20-0.39 indicates a weak relationship,
- Between 0.40-0.59 indicates a moderate relationship,
- Between 0.60-0.79 indicates a high level of relationship,
- Between 0.80-1.0 indicates a very high relationship.

Regression analysis was performed to explain the dependent variable. To perform regression analysis, the assumptions of the regression model must be met. When we look at these assumptions, it is seen that the data are normally distributed, the linearity assumption is met (Table 3), the established model is statistically significant, and there is no autocorrelation problem (Durbin-Watson value is between 1.5-2.5). The reliability of the Likert-type scales in the study was calculated with Cronbach's α coefficient. The statistical significance level was taken as 0.05 in all tests.

Limitations and Strengths of the Study

This study has several limitations. First, it was conducted with mothers residing in a city in eastern Türkiye, and due to the region's specific living conditions and sociocultural characteristics, the findings cannot be generalized to all mothers. Second, the data collection tools were based on self-reported measures, which may have led some mothers to conceal their true feelings. Third, since the results are derived from cross-sectional data, longitudinal studies are necessary to draw more robust conclusions.

Results

A total of 266 mothers in the early postpartum period took part in the study. The findings revealed that 34.2% of the mothers were high school graduates, 88.0% were not employed, 72.6% had a moderate-income level, 76.7% belonged to a nuclear family, and 37.6% of mothers have one child. Additionally, it was found that 59.0% of the mothers

had a cesarean section, 56.4% had a female baby, 58.6% fed their baby with formula, 71.8% did not receive breastfeeding education, and 92.8% of mothers with multiple children breastfed their other babies as well. Moreover, the findings indicated that the mean age of mothers was 28.29 ± 5.75 , the average gestational age of the infants was 38.51 ± 1.18 weeks, the average birth weight was 3054.31 ± 363.01 grams, and the average age of the infants was 3.57 ± 2.33 days (Table 1).

Table 1. Descriptive characteristics of mothers (n=266)

| | | n | % |
|--|-------------------------|-----|----------------------|
| Education Level | Primary School | 43 | 16.2 |
| | Middle School | 44 | 16.5 |
| | High School | 91 | 34.2 |
| | University and Above | 88 | 33.1 |
| Employment Status | Employed | 32 | 12.0 |
| | Unemployed | 234 | 88.0 |
| Income level | Good | 55 | 20.6 |
| | Moderate | 193 | 72.6 |
| | Poor | 18 | 6.8 |
| Family Type | Nuclear Family | 204 | 76.7 |
| | Extended Family | 62 | 23.3 |
| Number of Children | 1 | 100 | 37.6 |
| | 2 | 93 | 35.0 |
| | 3 | 49 | 18.4 |
| | 4 and above | 24 | 9.0 |
| Birth Type | Vaginal Birth | 109 | 41.0 |
| | Cesarean Section | 157 | 59.0 |
| Baby's Gender | Female | 150 | 56.4 |
| | Male | 116 | 43.6 |
| Baby's Feeding Method | Exclusive Breastfeeding | 156 | 58.6 |
| | Breastfeeding + Formula | 101 | 38.0 |
| | Formula Feeding | 9 | 3.4 |
| Maternal Breastfeeding Education Status | Yes | 75 | 28.2 |
| | No | 191 | 71.8 |
| *Breastfeeding Status of Other Children | Yes | 154 | 92.8 |
| | No | 12 | 7.2 |
| | Min-Max | | X ± SS |
| Mother's Age (Years) | (18-42) | | 28.29 ± 5.75 |
| Week of Gestation | (37-42) | | 38.51 ± 1.18 |
| Baby's Birth Weight (Grams) | (2180-4000) | | 3054.31 ± 363.01 |
| Baby's Age (Days) | (1-7) | | 3.57 ± 2.33 |

*Mothers with multiple children

The mean scores of mothers on SSPEPS, VAS-F, and BSES are presented in Table 2. It was found that the mean total score for the SSPEPS was 65.04 ± 11.39, the mean score for the VAS-F Fatigue Subscale was 54.27 ± 29.29, the mean score for the VAS-F Energy Subscale was 32.96 ± 12.01, and the mean total score for the BSES was 61.54 ± 8.33.

Table 2. Mean Scores of Mothers on SSPEPS, VAS-F, and BSES (n=266)

| Scale Score | Min-Max | X ± SS |
|---------------|-------------------------|---------------------------|
| SSPEPS | 18.00-75.00 | 65.04 ± 11.39 |
| VAS-F | Fatigue Subscale | 0.00-130.00 54.27 ± 29.29 |
| | Energy Subscale | 5-50 32.96 ± 12.01 |
| BSES | 24.0-70.0 | 61.54 ± 8.33 |

SSPEPS: Spouse Support Perceived By Women During The Early Postpartum Process Scale,
VAS-F: Visual analog scale for fatigue, BSES: Breastfeeding self-efficacy scale

The results of the Pearson correlation analysis conducted to explore the relationships among mothers' SSPEPS, VAS-F, and BSES scores are shown in Table 3. The analysis revealed a moderate negative correlation between SSPEPS and the Fatigue Subscale of VAS-F (r = -0.434; p < 0.01), as well as a weak positive correlation between SSPEPS and the Energy Subscale of VAS-F (r = 0.319; p < 0.01) and between SSPEPS and BSES (r = 0.336; p < 0.01). Furthermore, a weak negative correlation was identified between the Fatigue Subscale of VAS-F and BSES (r = -0.391; p < 0.01), while a weak positive correlation was noted between the Energy Subscale of VAS-F and BSES (r = 0.349; p < 0.01). (Table 3).

Table 3. Correlation Assessment of SSPEPS, VAS-F, and BSES (n=266)

| | SSPEPS | VAS-F-Fatigue Subscale | VAS-F-Energy Subscale | BSES |
|-------------------------------|--------|------------------------|-----------------------|--------------|
| SSPEPS | r | 1 | -0.434** | 0.319** |
| | p | | 0.000 | 0.000 |
| VAS-F-Fatigue Subscale | r | 1 | -0.522** | -0.391** |
| | p | | 0.000 | 0.000 |
| VAS-F-Energy Subscale | r | | 1 | 0.349** |
| | p | | | 0.000 |
| BSES | r | | | 1 |
| | p | | | |

**Correlation is significant at the 0.01 level
VAS-F: Visual analog scale for fatigue
SSPEPS: Spouse Support Perceived by Women During the Early Postpartum Process Scale
BSES: Breastfeeding self-efficacy scale

The model created to investigate the effect of spousal support on fatigue was determined to be statistically significant (F=61.335; p=0.000). In the established model, 18.5% of the variance in fatigue levels was explained by spousal support. An increase of one unit in the spousal support variable led to a decrease of 0.434 units in fatigue levels (beta=-0.434). Additionally, the model established to examine the impact of spousal support on energy levels was found to be statistically significant (F=29.830; p=0.000). In the established model, 9.8% of the variance in energy levels was explained by spousal support. An increase of one unit in spousal support variable led to an increase of 0.319 units in energy levels (Beta= 0.319). The model created to evaluate the effect of spousal support on breastfeeding self-efficacy was determined to be statistically significant (F=33.681; p=0.000). In the established model, 11.0% of the variance in breastfeeding self-efficacy levels was explained by spousal support. An increase of one unit in spousal support variable led to an increase of 0.336 units in breastfeeding self-efficacy levels (Beta= 0.336) (Table 4).

Table 4. Regression analysis on the effect of spousal support on fatigue and breastfeeding self-efficacy (n=266)

| Model 1 | | | | | | |
|--|-------------------------------|--------|-------|---------------|--------|--------------|
| Independent Variable | Dependent Variable | β | S.D. | Standardize β | t | p |
| Constant | VAS-F-Fatigue Subscale | 74.205 | 1.329 | | 56.828 | 0.000 |
| SSPEPS | | -0.169 | 0.022 | -0.434 | -7.832 | 0.000 |
| F-statistic=61.335; p-value=0.000; R ² =0.189; Adjusted R ² =0.185; Durbin Watson: 2.019 | | | | | | |
| Constant | VAS-F-Energy Subscale | 55.082 | 1.940 | | 28.386 | 0.000 |
| SSPEPS | | 0.302 | 0.055 | 0.319 | 5.462 | 0.000 |
| F-statistic=29.830; p-value=0.000; R ² =0.102; Adjusted R ² =0.098; Durbin Watson: 2.026 | | | | | | |
| Constant | BSES | 36.731 | 4.922 | | 7.462 | 0.000 |
| SSPEPS | | 0.460 | 0.079 | 0.336 | 5.804 | 0.000 |
| F-statistic=33.681; p-value=0.000; R ² =0.113; Adjusted R ² =0.110; Durbin Watson: 2.006 | | | | | | |

**Correlation is significant at the 0.01 level
S.D: Standart Deviation
SSPEPS: Spouse Support Perceived By Women During The Early Postpartum Process Scale
VAS-F: Visual analog scale for fatigue
BSES: Breastfeeding self-efficacy scale

The model established to examine the impact of fatigue on breastfeeding self-efficacy was determined to be statistically significant ($F=47.744$; $p=0.000$). In the established model, fatigue accounted for 15.0% of the variance in breastfeeding self-efficacy levels. Additionally, a one-unit increase in the fatigue variable led to a decrease of 0.391 units in breastfeeding self-efficacy levels ($\text{Beta}=-0.391$). Furthermore, the model developed to

assess the effect of energy on breastfeeding self-efficacy was found to be statistically significant ($F=36.695$; $p=0.000$). In this model, energy explained 11.9% of the variance in breastfeeding self-efficacy levels. Moreover, a one-unit increase in the energy variable resulted in an increase of 0.349 units in breastfeeding self-efficacy levels ($\text{Beta}=0.349$) (Table 5).

Table 5. Regression Analysis on the Impact of VAS-F Fatigue and Energy Subscales on Breastfeeding Self-Efficacy (n=266)

| <i>Model 2</i> | | | | | | |
|--|--------------------|---------|--------|------------------------|--------|--------------|
| Independent Variable | Dependent Variable | β | S.D. | Standardize β | t | p |
| Constant | BSES | 138.965 | 12.369 | | 11.235 | 0.000 |
| VAS-F- Fatigue Subscale | | -1.376 | 0.199 | -0.391 | -6.910 | 0.000 |
| F-statistic=47.744; p-value=0.000; R2=0.153; Adjusted R2=0.150; Durbin Watson: 1.784 | | | | | | |
| Constant | BSES | 1.957 | 5.165 | | 0.379 | 0.705 |
| VAS-F- Energy Subscale | | 0.504 | 0.083 | 0.349 | 6.058 | 0.000 |
| F-statistic=36.695; p-value=0.000; R2=0.122; Adjusted R2=0.119; Durbin Watson: 1.541 | | | | | | |

**Correlation is significant at the 0.01 level S.D: Standart Deviation SSPEPS: Spouse Support Perceived By Women During The Early Postpartum Process Scale VAS-F: Visual analog scale for fatigue BSES: Breastfeeding self-efficacy scale

Discussion

This study was conducted to determine the relationship between perceived spousal support, fatigue, and breastfeeding self-efficacy in the early postpartum period and was discussed in line with the literature. Partner support refers to the assistance provided by the newborn's father to his partner in caring for the baby (Mensah, 2011). In this context, support has been classified into two categories: emotional and informational support, which equip individuals with knowledge and encouragement to improve their skills, self-assessment, and self-esteem, and practical or instrumental support, which involves direct or tangible actions to assist individuals (Emmott et al., 2020). The study found that mothers' perceived spousal support during the early postpartum period was high. This result can be explained by the perception of motherhood as a blessing in our country and in societies where traditional culture is strong, and the support given to mothers during this period is increased. Aydın et al. (2022) also reported that mothers perceived a high level of spousal support in this early stage. Similarly, Işık and Bal (2022) found that perceived spousal support during the postpartum period was notably high. Similar results were found in other studies conducted in Türkiye (Durmazoğlu et al., 2021; Kılıç et al., 2024)). When we look at the literature, there are few studies conducted with the 'SSPEPS' developed in Türkiye, and there are no studies conducted abroad. When we look at studies

conducted with different measurement tools abroad; a study conducted in Iran during the postpartum period shows a high perception of spousal support (Eslahi et al., 2021). Comparable findings were observed in other studies conducted in India and Saudi Arabia (Almutairi et al., 2017; Joseph and Radhakrishnan, 2021). According to Meleise's concept of transition, the perceived spousal support of mothers in the early postpartum period is a critical factor in both psychological and physical adaptation. Spousal support can relieve the mother's emotional burden, help them cope with fatigue, and contribute to the development of parenting skills in general. When we look at the study results, it is seen that the perception of spousal support is high (Meleis, 2010). The study results indicate a high perception of spousal support.

Fatigue is a complex, multidimensional phenomenon with physical, psychological, and social dimensions that can persist for up to a year after childbirth (Abushaikha et al., 2018). Fatigue levels are reported to peak on the tenth day postpartum at 38.8%, with a gradual decline observed in the first and third months, dropping to 27.1% and 11.4%, respectively (Jeong et al., 2021). The mothers included in the study were found to have moderate fatigue (54.27) and high energy levels (32.96). Another study reported moderate fatigue and functional status (Abushaikha et al., 2018). A study conducted in Japan also found that mothers' levels of fatigue were high in the early

postpartum period (Kojima and Asazawa, 2020). Another study evaluating fatigue levels in the second month postpartum found that mothers had moderate fatigue (69.12) and moderate energy levels (30.14) (Aktaş and Karaçam, 2017). During the evaluation of fatigue levels in the postpartum period, it was determined that mothers experienced high levels of fatigue (109.44) along with elevated energy levels (41.93) (Yılmaz and Turfan, 2021). The variations observed in the studies may be attributed to the evaluation of fatigue at different time intervals and with different measurement tools. The finding of moderate fatigue in the study is important for general health problems in the postpartum period that health professionals need to consider for mothers. Again, this result seems to be compatible with Meleise's concept of transition.

Breastfeeding self-efficacy refers to a mother's perceived ability to breastfeed her child. This factor significantly predicts a mother's breastfeeding behavior, reflecting her confidence and capability in breastfeeding (Maleki-Saghooni et al., 2020). In the current study, the breastfeeding self-efficacy levels among participating mothers were found to be high (61.54). Mercan and Selçuk (2021) reported similarly elevated breastfeeding self-efficacy levels (55.13) in women during the early postpartum period. Additionally, another study conducted in Türkiye indicated high levels of breastfeeding self-efficacy (57.00) among postpartum women (Gümüşsoy et al., 2020). In Brazil, a study found breastfeeding self-efficacy levels to be high (63.51) (Zubaran and Foresti, 2013). Furthermore, research in Iran reported a high breastfeeding self-efficacy level (57.64) in the first week postpartum (Poorshaban et al., 2017). The study results are consistent with the literature.

Fatigue is defined as a continuous sense of mental and physical exhaustion that is not easily alleviated by sufficient rest. It is marked by low energy, significant tiredness, muscle weakness, and challenges with concentration (Giallo et al., 2016). It has been observed that an increase in perceived spousal support during the postpartum period correlates with a decrease in fatigue levels and an increase in energy levels. Support from a partner and other family members is considered a crucial strategy for managing fatigue (Kutlubay and Düzgün, 2021). McVeigh (2000) found a positive relationship between receiving support from a spouse and postpartum functional status, and a negative relationship with physical status. Taylor et al. (2013) also reported that inadequate spousal

support and maternal anxiety were associated with fatigue. The regression analysis conducted is consistent with the literature and demonstrates an important finding of the study.

It has been noted that as mothers perceive greater spousal support in the early postpartum period, their breastfeeding self-efficacy levels also rise. Uludağ and Öztürk reported that breastfeeding self-efficacy improved with increasing perceived spousal support during the postpartum period. Evgin and Özdil found that spousal support positively affected mothers' breastfeeding self-efficacy. Açıkğöz and Yörük found that women receiving support in baby care had higher breastfeeding self-efficacy levels. Similar to this study, other cross-sectional study results confirm the hypothesis that spousal support positively influences mothers' breastfeeding self-efficacy (Rabiepoor et al., 2019). The regression analysis supports this finding, and increasing fathers' awareness and support is necessary to improve breastfeeding outcomes.

It was determined in the study that as mothers' fatigue increases after childbirth, their breastfeeding self-efficacy decreases. The ongoing fatigue of mothers after childbirth can lead to feelings of inadequacy for both themselves and their babies (Beydağ, 2007). Consequently, increased fatigue leads to a weakened body and an inability to muster the strength for breastfeeding, which is an expected outcome. It is a well-known fact that the better the harmony between the mother and baby, the healthier and shorter the breastfeeding process, enabling the mother to feel adequate, provide motivation, and find the energy and strength to spend more time with her baby (Akarsu et al., 2017). All these factors support breastfeeding success. In line with these results, the expected outcome of increased breastfeeding self-efficacy and energy due to increased fatigue was obtained. These two findings are supported by regression analysis.

Conclusions

The study revealed that mothers in the early postpartum period experienced high levels of spousal support, moderate levels of fatigue, elevated energy levels, and high breastfeeding self-efficacy. It is observed that as the support from partners to mothers increases, mothers' fatigue decreases, and breastfeeding self-efficacy increases. These results suggest that integrating partner-focused interventions into postpartum care programs may provide significant long-term benefits in increasing mothers' breastfeeding success and improving their

overall health during the postpartum period. Such interventions may have lasting positive effects on both maternal and infant health. Further research is needed to identify factors affecting early postpartum period fatigue. Effective universal and targeted therapeutic interventions should be conducted to support mothers in managing their fatigue.

Ethics Committee Approval: The study obtained ethical approval from the Institutional Review Board for Health and Sports Sciences Research of a University before its commencement (approval date: 29/09/2023, approval number: 09/06). Approval was obtained from the institution where the study took place. The participating mothers were informed about the research, assured of their voluntary participation, and guaranteed that their personal information would remain confidential and not be disclosed or used for other purposes. They were also informed of their right to withdraw from the study at any point. Written and verbal consent were obtained from the mother.

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Author Contributions: Study Design: SK, GA; Supervision: HYK; Data Collection: SK; Data Analysis: SK; Study Supervision: GA; Writing of the manuscript: SK, GA; Critical Reviews: SK, GA.

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What did the study add to the literature?

- This study contributes to the literature by identifying a positive relationship between perceived spousal support, fatigue levels, and breastfeeding self-efficacy in mothers during the early postpartum period.
- Findings indicate that increased spousal support is associated with lower fatigue levels and higher breastfeeding self-efficacy.
- The study highlights the importance of enhancing spousal support to improve maternal well-being.

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