



Physical Symptom Severity of Women in the Early Postpartum Period

Erken Postpartum Dönemdeki Kadınların Fiziksel Semptom Şiddeti

İ Meltem UĞURLU¹, İ Gamze ACAVUT², İ İlknur YEŞİLÇİNAR³, İ Kazım Emre KARAŞAHİN⁴

¹University of Health Sciences Turkey, Gülhane Faculty of Health Sciences, Department of Midwifery, Ankara, Turkey

²University of Health Sciences Turkey, Gülhane Training and Research Hospital, Education Unit, Ankara, Turkey

³İzmir Katip Çelebi University Faculty of Health Sciences, Department of Midwifery, İzmir, Turkey

⁴University of Health Sciences Turkey, Gülhane Training and Research Hospital, Clinic of Gynecology and Obstetrics, Ankara, Turkey

ABSTRACT

Objective: This study was carried out to determine the severity of physical symptoms of women on the first postpartum day and postpartum fourth-sixth weeks.

Methods: This descriptive and prospective study was conducted between the dates July 2017 and January 2018 in the obstetrics department of an education and research hospital in Ankara. The study was conducted with a total of 140 women volunteering to participate in the research. The data were collected by face-to-face with women on the first day of postpartum period and by phone on the fourth-sixth weeks. The data were collected with using “Descriptive Prosperities Data Collection Form” and “Postpartum Physical Symptom Severity Scale”.

Results: The most common physical symptoms of women participating in the study were pain in the site of cesarean section or perineum (88.6-47.2%), insufficient sleep quality or insomnia (87.1-64.3%), back pain (49.2-45.0%) and constipation (38.6-33.6%) on first postpartum day and on the fourth-sixth weeks. The least common physical symptoms of women were urinary incontinence (3.5-4.2%), feeling cold (5.7-7.8%), and feeling cold in hands and/or feet (6.4-7.1%). The physical symptoms experienced by women who gave birth by cesarean section were more severe on postpartum first day and those who fed their baby with formula in addition to breast milk were more severe on the postpartum fourth-sixth weeks ($p>0.05$).

ÖZ

Amaç: Bu araştırma, doğum yapan kadınların postpartum birinci günde ve dördüncü-altıncı haftalar arasında fiziksel semptom şiddetini belirlemek amacıyla yapılmıştır.

Yöntemler: Tanımlayıcı ve prospektif tipteki bu çalışma Temmuz 2017-Ocak 2018 tarihleri arasında, Ankara’da bir eğitim araştırma hastanesinin kadın doğum servisinde yürütülmüştür. Çalışma araştırmaya katılmaya gönüllü toplam 140 kadın ile yürütülmüştür. Veriler, kadınlarla postpartum birinci günde yüz yüze ve dördüncü-altıncı haftalar arasında telefon görüşmesi yapılarak toplanmıştır. Veriler “Tanımlayıcı Özellikler Veri Toplama Formu” ve “Postpartum Fiziksel Semptom Şiddet Ölçeği” kullanılarak toplanmıştır.

Bulgular: Araştırmaya katılan kadınların postpartum birinci günde ve dördüncü-altıncı haftalar arasında en fazla yaşadıkları fiziksel semptomların sezaryen bölgesi veya perinede ağrı (%88,6-47,2), yetersiz uyku kalitesi veya uykusuzluk (%87,1-64,3), sırt ağrısı (%49,2-45,0) ve kabızlık (%38,6-33,6) olduğu belirlenmiştir. Kadınların en az yaşadıkları fiziksel semptomların ise idrar kaçırma (%3,5-4,2), normalden daha fazla üşüme (%5,7-7,8) ve ellerde ve/veya ayaklarda üşüme (%6,4-7,1) olduğu belirlenmiştir. Sezaryen ile doğum yapan kadınların postpartum birinci günde, bebeğine anne sütü dışında formül mama da verenlerin ise postpartum dördüncü-altıncı haftalar arasında yaşadıkları fiziksel semptomların daha şiddetli olduğu saptanmıştır ($p>0,05$).

Address for Correspondence: Meltem UĞURLU, University of Health Sciences Turkey, Gülhane Faculty of Health Sciences, Department of Midwifery, Ankara, Turkey

E-mail: meltemugurlu17@gmail.com **ORCID ID:** orcid.org/0000-0002-9183-219X

Received: 17.07.2020

Accepted: 04.08.2020

Cite this article as: Uğurlu M, Acavut G, Yeşilçınar İ, Kardeşahin KE. Physical Symptom Severity of Women in the Early Postpartum Period. *Bezmialem Science* 2021;9(4):415-23.

©Copyright 2021 by the Bezmialem Vakıf University
Bezmialem Science published by Galenos Publishing House.

Conclusion: It was found that women who had a cesarean delivery and fed their baby with formula in addition to breast milk experienced more severe physical symptoms. Therefore, nurses should provide counseling to support normal delivery and to support exclusive breastfeeding in the first six months.

Keywords: Postpartum period, physical symptom, birth

Sonuç: Hemşireler, sezaryen ile doğum yapan ve bebeğini anne sütü dışında formül mama ile de besleyen annelerin fiziksel semptomları daha şiddetli yaşayabileceğini dikkate alarak, normal doğumu ve ilk altı ay yalnızca anne sütü ile beslemeyi destekleyici şekilde danışmanlık vermelidir.

Anahtar Sözcükler: Postpartum dönem, fiziksel semptom, doğum

Introduction

Childbirth is an important experience for women's health (1). The postpartum period is the beginning of a period in which vital changes are experienced for women (2). In this period, in which psychological and sociological changes are experienced as well as physiological changes, woman and her family can encounter many problems that may adversely affect the health of mother and newborn (2,3).

Some of the changes that occur in the postpartum period are urogenital changes, preparation of the breasts for lactation, the beginning of the role of motherhood, hormonal changes and, accordingly, sudden changes in mood. These changes are more intense especially in the early postpartum period (3-6). Bleeding, pain, fever, fatigue, insomnia, vaginal discharge, constipation and urinary tract infections are among the problems due to the changes experienced in the early postpartum period (5,6). In addition, breast problems and related breastfeeding problems can be seen (6,7). In the late postpartum period, symptoms such as incontinence, sexual dysfunction and perineal pain may occur due to birth-related traumas (8-10). These symptoms adversely affect maternal health, maternal adaptation to the postpartum period and quality of life (5,10,11). For these reasons, the postpartum period is critical for mothers and newborns (1-6,8).

It is stated that physical well-being in the postpartum period is related to psychological well-being and adaptation to motherhood. In addition, it is thought that effective management of the physical symptoms of the mother positively affects the maintenance of infant care and breastfeeding (3,5,12). It is of great importance to determine the problems experienced by women in the postpartum period and to what extent these problems affect the role of motherhood (5).

This study was planned to determine the physical symptoms and their severity experienced by women between the first day and the fourth-sixth weeks of the postpartum period, to facilitate women's adaptation to this period and to contribute to the effective management of the process by the nurses.

Methods

Type and Sample of the Study

This prospective descriptive study was conducted between July 2017 and January 2018 in the obstetrics clinic of a training and research hospital in Ankara. The universe of the research consisted

of women who gave birth and hospitalized in the postpartum service between the dates of the study. Sample selection was not made in the study, and all women who met the inclusion criteria and volunteered to participate in the study were tried to be reached. Women over the age of 18, who could speak Turkish and who gave birth at term (38-42 weeks) were included in the study. Women who had a systemic disease, whose birth was at risk and who did not volunteer to participate in the study were excluded from the study.

Between the dates of the research, 3 of the 160 women who gave birth and were admitted to the postnatal service were not included in the study because they gave birth with forceps, 5 were not included because they could not communicate in Turkish, 4 were not included because they gave birth preterm, 4 were not included because they did not volunteer to participate in the study, and 4 were not included because they could not be reached by phone between the 4th and 6th weeks. The research was completed with 140 postpartum women (87.5%).

Ethical Aspect of Research

Zekai Tahir Burak Women's Health Training and Research Hospital Clinical Research Ethics Committee Ethics committee permission (decision no: 87/2017, date: 06.06.2017) was obtained to conduct the research. After the participants were informed about the purpose and implementation of the research, their written consent was obtained. The study was conducted in accordance with the principles of the Declaration of Helsinki.

Data Collection Tools

"Descriptive Characteristics Data Collection Form I-II" and "Postpartum Physical Symptom Severity Scale" were used as data collection tools.

Descriptive Characteristics Data Collection Form I-II

The forms were prepared by the researchers in line with the literature review (3,8,13). Descriptive characteristics data collection form I consisted of 10 questions in total to determine the sociodemographic and obstetric characteristics of the participants; such as age, employment, income status, number of pregnancies, and the presence of postnatal social support and characteristics of feeding the baby in the first 24 hours after birth. Descriptive characteristics data collection form II consisted of a total of 4 questions to determine the social support and feeding characteristics of the participants between the fourth and sixth weeks after birth.

Postpartum Physical Symptom Severity Scale

The scale was developed by Chien et al. (4) in 2009 to determine the incidence and persistence of postpartum physical symptoms. The scale is a Likert type scale scored between 0 (absent) and 1 (mild), 2 (moderate) and 3 (high), and it consists of a total of 18 items. The total score that can be obtained from the scale varies between 0-54. A high score indicates a high postpartum physical symptom severity, and a low score indicates a low postpartum physical symptom severity. While the scale evaluates all the physical symptoms that may be encountered in the postpartum period, it is suitable for an easy and quick assessment without increasing the burden of research participants, health workers and researchers. The validity and reliability study of the scale in Turkey was conducted by Arkan et al. (3) in 2015, and the Cronbach alpha value was found to be 0.79.

Data Collecting

Before the study, a preliminary study was made with 10 women to evaluate the applicability and comprehensibility of the data collection form. Accordingly, in order to make the data collection form easier to understand, a few word corrections were made and the form was given its final shape. Pre-treatment women were not included in the study.

Before the application, women who were hospitalized in the postpartum clinic and met the inclusion criteria were informed about the purpose and method of the study. Participation in the study was based on volunteerism. Data were collected in two phases, within the first 24 hours in the postpartum clinic and after birth between four and six weeks. First, the data were collected by the researchers by face-to-face interview method, using the descriptive characteristics data collection form I and the postpartum physical symptom severity scale within the first 24 hours in the postpartum clinic. During the interview, all the questions of the women were answered and it lasted an average of 10-15 minutes. In order to re-evaluate between the four-sixth weeks, an explanation was made to the participants, their permission was obtained, and their contact numbers were recorded to reach them by phone. In the second stage, the descriptive characteristics data collection form II and the postpartum physical symptom severity scale were applied again by contacting the participants by phone between the postpartum fourth and sixth weeks. During the telephone interview, all questions of the women were answered and the interview lasted 5-10 minutes on average.

Statistical Analysis

The SPSS for Windows Version 22.00 (IBM Corporation, Armonk, New York, USA) package program was used to evaluate the data. Number, percentage, and mean ± standard deviation were calculated for descriptive features. The normal distribution of continuous variables was evaluated with the single-sample Kolmogorov-Smirnov test. The Mann-Whitney U test and the Kruskal Wallis test were used to compare the mean physical symptom severity scores experienced between the first

day and the fourth-sixth weeks postpartum according to some characteristics of the participants. A p<0.05 value was accepted for statistical significance.

Results

It was determined that the mean age of the participants was 29.72±5.78 and 48.6% of them graduated from high education. Of the women 70% stated that they were not working and 54.3% of them stated that their income was equal to their expense. In addition, it was determined that 75.8% of the women had planned pregnancy and 45% had their first pregnancy. Of the women 61.4% underwent cesarean section and 38.6% had vaginal delivery (Table 1).

It was determined that 64.3% of women on postpartum first day and 62.1% of women between four and six weeks after birth fed their babies only with breast milk. The rate of women who stated that they gave formula to their babies along with breast milk was found to be 35.7% on the first postpartum day and 37.8% between the fourth and sixth weeks. Women's reasons for using formula on the first postpartum day and between four and six weeks were not enough milk (13.6-27.8%), the doctor's

Table 1. Socio-demographic and obstetric characteristics of women (n=140)

| Age | n | % |
|----------------------------------|------------|------|
| 18-34 | 110 | 78.6 |
| 35 or above | 30 | 21.4 |
| Age (mean ± SD) | 29.72±5.78 | |
| Educational status | | |
| Elementary school or below | 17 | 12.1 |
| Secondary school | 55 | 39.3 |
| High school | 68 | 48.6 |
| Working status | | |
| Working | 42 | 30.0 |
| Not working | 98 | 70.0 |
| Income status | | |
| Income does not meet expenses | 11 | 7.9 |
| Income only meets expenses | 76 | 54.3 |
| Income easily meets expenses | 53 | 37.9 |
| Pregnancy planning status | | |
| Planned | 106 | 75.8 |
| Not planned | 34 | 24.2 |
| Number of pregnancies | | |
| Primigravida | 63 | 45.0 |
| Multigravida | 77 | 55.0 |
| Delivery type | | |
| Vaginal delivery | 54 | 38.6 |
| Cesarean section | 86 | 61.4 |

SD: Standard deviation

Table 2. Characteristics of women regarding feeding their babies and receiving social support on the first postpartum day and postpartum fourth-sixth weeks (n=140)

| | Postpartum 1 st day | | Postpartum 4 th -6 th weeks | |
|---|--------------------------------|------|---|------|
| | n | % | n | % |
| Feeding with breast milk or formula | | | | |
| Only breast milk | 90 | 64.3 | 87 | 62.1 |
| Breast milk and formula | 50 | 35.7 | 53 | 37.8 |
| Reasons for using formula other than breast milk | (n=50) * | | (n=53) * | |
| Not enough breast milk | 19 | 13.6 | 39 | 27.8 |
| The baby is not sucking | 9 | 6.4 | 2 | 1.4 |
| The baby stays in the neonatal intensive care unit | 10 | 7.1 | 6 | 4.3 |
| Doctor's recommendation | 13 | 9.3 | 23 | 16.4 |
| Low birth weight of the baby | 3 | 2.1 | 2 | 1.4 |
| The baby is at risk of jaundice | 1 | 0.7 | 5 | 3.6 |
| The presence of a relative who helps other than the spouse immediately after the birth | | | | |
| Yes | 118 | 84.3 | 96 | 68.6 |
| No | 22 | 15.7 | 44 | 31.4 |
| The level of kinship of the person who will help other than the spouse | (n=118) | | (n=96) | |
| Mother | 85 | 72.0 | 71 | 74.0 |
| Mother-in-law | 18 | 15.2 | 17 | 17.7 |
| Other (sister, aunt, grandmother) | 15 | 12.8 | 8 | 8.3 |

*n was folded because more than one option was marked

recommendation (9.3-16.4%), and the baby staying in the neonatal intensive care unit (7.1-4.3%). It was determined that 84.3% of the women on the postpartum first day and 68.6% between the fourth and sixth weeks had someone other than their spouse to help, and that this person was often (72-74%) their mother (Table 2).

It was determined that the postpartum physical symptom severity scale mean score of the women participating in the study on the first postpartum day was 7.85 ± 4.45 [minimum (min): 0, maximum (max): 21], and 6.21 ± 5.16 (min: 0, max: 24) between the fourth and sixth weeks. The most common physical symptoms experienced by women on the first day and the fourth-sixth weeks after delivery were pain in the site of cesarean section and perineum (88.6-47.2%), poor sleep quality and insomnia (87.1-64.3%), back pain (49.2-45.0%), and constipation (38.6-33.6%). The least common physical symptoms they experienced were urinary incontinence (3.5-4.2%), feeling cold (5.7-7.8%), and chilling in hands and/or feet (6.4-7.1%). The symptoms which showed most decrease in the four-sixth weeks compared to postpartum first day were pain in the site of cesarean section and perineum (-41.4%), constipation (-26.5%), inadequate sleep quality/insomnia (-22.8), and joint pain (-15%). Vaginal infection (8.6%), excessive vaginal discharge (7.2%), urinary tract infection (3.7%) and hemorrhoids (3.6%) were found to be

the symptoms that increased the most between the postpartum first day and postpartum four-sixth weeks (Table 3, Figure 1).

In the study, no statistically significant relationship was found between the postpartum physical symptom severity scale mean scores of women between the postpartum first day and the fourth-sixth weeks in terms of age, education status, employment status, pregnancy planning status, number of pregnancies, and the presence of someone other than the spouse to support them ($p > 0.05$). While the mean postpartum physical symptom severity scale score of women who gave birth by cesarean section on the first postpartum day was statistically significantly higher ($z = -2.573$, $p = 0.010$) compared to women who delivered vaginally, there was no difference between the types of delivery in terms of the mean scores of the postpartum physical symptom severity scale on the postpartum fourth-sixth weeks ($p > 0.05$). While the mean postpartum physical symptom severity scale score on the postpartum fourth-sixth weeks was statistically significantly higher ($z = -3.334$, $p = 0.001$) in those who gave formula to their babies other than breast milk compared to those who gave only breast milk, there was no difference in terms of the mean scores of the scale on the first postpartum day between the mothers who gave formula to their babies other than breast milk and those who gave only breast milk ($p > 0.05$) (Table 4).

Table 3. Physical symptom severity of women on first postpartum day and on postpartum fourth-sixth weeks (n=140)

| Symptoms | Physical symptom severity on postpartum first day | | | | Physical symptom severity on postpartum fourth-sixth weeks | | | | Change % |
|---|---|--------|------------|----------|--|--------|------------|----------|----------|
| | Severity of symptom % | Mild % | Moderate % | Severe % | Severity of symptom % | Mild % | Moderate % | Severe % | |
| Pain in the site of cesarean section or perineum | 88.6 | 27.9 | 45.7 | 15.0 | 47.2 | 30 | 13.6 | 3.6 | -41.4 |
| Poor sleep quality or insomnia | 87.1 | 25 | 41.4 | 20.7 | 64.3 | 25.7 | 28.6 | 10 | -22.8 |
| Constipation | 38.6 | 19.3 | 9.3 | 10.0 | 33.6 | 12.1 | 12.9 | 8.6 | -26.5 |
| Back pain | 49.2 | 27.1 | 15 | 7.1 | 45.0 | 25 | 11.4 | 8.6 | -4.2 |
| Headache | 26.4 | 16.4 | 7.1 | 2.9 | 28.7 | 17.9 | 7.9 | 2.9 | 2.3 |
| Hemorrhoids | 22.1 | 12.1 | 5 | 5 | 25.7 | 10 | 10 | 5.7 | 3.6 |
| Joint pain | 27.1 | 14.3 | 5.7 | 7.1 | 12.1 | 12.9 | 3.6 | 2.1 | -15.0 |
| Numbness in hands | 19.2 | 12.1 | 5.7 | 1.4 | 12.1 | 7.1 | 4.3 | 0.7 | -7.1 |
| Excessive vaginal discharge | 15.0 | 11.4 | 3.6 | - | 22.2 | 12.9 | 5.0 | 4.3 | 7.2 |
| Vaginal infection | 7.1 | 5 | 1.4 | 0.7 | 15.7 | 10.0 | 2.1 | 3.6 | 8.6 |
| Numbness in feet | 11.4 | 7.1 | 4.3 | - | 6.4 | 3.6 | 2.1 | 0.7 | -5.0 |
| Excessive vaginal bleeding | 23.5 | 17.1 | 6.4 | - | 10.7 | 10.0 | - | 0.7 | -12.8 |
| Urinary tract infection | 8.5 | 5 | 1.4 | 2.1 | 12.2 | 7.9 | 3.6 | 0.7 | 3.7 |
| Dizziness | 21.4 | 18.6 | 2.1 | 0.7 | 18.5 | 16.4 | 2.1 | - | -2.9 |
| Varicose veins on legs | 14.3 | 9.3 | 3.6 | 1.4 | 8.6 | 5.7 | 2.9 | - | -5.7 |
| Urinary incontinence | 3.5 | 2.1 | 1.4 | - | 4.2 | 2.1 | 2.1 | - | 0.7 |
| Feeling cold | 5.7 | 5 | 0.7 | - | 7.8 | 5.0 | 1.4 | 1.4 | 2.1 |
| Cold hands and/or feet | 6.4 | 5 | 1.4 | - | 7.1 | 3.6 | 2.1 | 1.4 | 0.7 |
| Mean of total score of Postpartum Physical Symptom Severity Scale | 7.85±4.45 (min: 0, max: 21) | | | | (6.21±5.16) (min: 0, max: 24) | | | | |

min: Minimum, max: Maximum

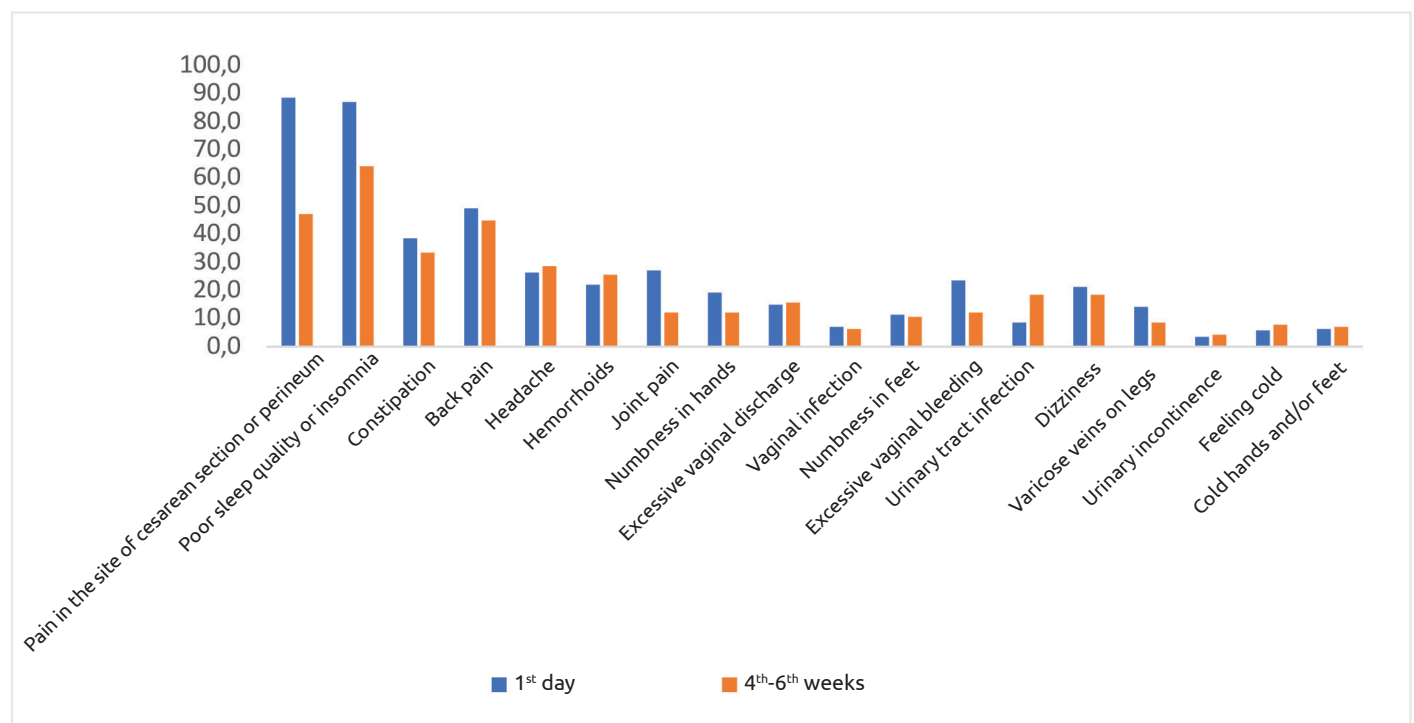


Figure 1. Physical symptom severity of women on first postpartum day and postpartum fourth-sixth weeks (n=140)

Table 4. According to some characteristics of women, mean physical symptom severity scale score between postpartum first day and four-sixth weeks (n=140)

| | Postpartum physical symptom severity scale mean score (1 st day) | Postpartum physical symptom severity scale mean score (between 4 and 6 weeks) |
|---|---|---|
| Age | | |
| 18-34 | 7.63±4.45 | 6.20±5.24 |
| 35 or above | 8.66±4.44 | 6.23±4.91 |
| z | -1.233 | -0.400 |
| p ^a | 0.218 | 0.689 |
| Educational status | | |
| Elementary school or below | 8.41±5.26 | 8.05±6.11 |
| Secondary school | 7.67±4.79 | 5.72±5.03 |
| High school | 7.86±3.98 | 6.14±4.98 |
| z | 0.733 | 1.783 |
| p ^b | 0.693 | 0.410 |
| Working status | | |
| Working | 7.61±4.49 | 5.97±5.10 |
| Not working | 7.90±4.44 | 6.24±5.18 |
| z | -0.419 | -0.235 |
| p ^a | 0.675 | 0.814 |
| Pregnancy planning status | | |
| Planned | 7.91±4.20 | 6.16±5.16 |
| Not planned | 7.67±5.22 | 6.35±5.21 |
| z | -0.931 | -0.264 |
| p ^a | 0.352 | 0.792 |
| Number of pregnancies | | |
| Primigravida | 7.33±3.72 | 6.57±5.30 |
| Multigravida | 8.28±4.95 | 5.92±5.05 |
| z | -0.670 | -0.810 |
| p ^a | 0.503 | 0.418 |
| Delivery type | | |
| Vaginal delivery | 6.51±3.60 | 5.62±4.66 |
| Cesarean section | 8.69±4.74 | 6.58±5.44 |
| z | -2.573 | -0.879 |
| p ^a | 0.010 | 0.379 |
| Feeding with breast milk or formula | | |
| Yes | 7.88±4.47 | 7.84±5.42 |
| No | 7.84±4.46 | 5.21±4.75 |
| z | -0.009 | -3.334 |
| p ^a | 0.993 | 0.001 |
| The presence of a relative who helps | | |
| Yes | 7.91±4.25 | 6.42±5.35 |
| No | 7.54±5.48 | 5.75±4.74 |
| z | -0.977 | -0.652 |
| p ^a | 0.329 | 0.515 |

^aMann-Whitney U test, ^bKruskal-Wallis test

Discussion

The postpartum period is a transitional period in which important changes are experienced by women both physiologically and psychologically (3). In this period, women may experience some problems due to the changes in their bodies as well as adapting to motherhood (13,14). These problems are frequently encountered as pain, sleep problems, urinary incontinence, sexual dysfunction and depression (9,15-17).

In this study, which was conducted to determine the severity of physical symptoms experienced by women in the postpartum period, the most common physical symptoms experienced by women in the first postpartum day and in the postpartum fourth-sixth weeks were pain in the site of cesarean section or perineum, poor sleep quality or insomnia, back pain and constipation. Cooklin et al. (13) showed that the most common physical symptoms experienced by women in the first week after delivery were pain in the site of cesarean section, perineal pain, back pain and constipation; and in the sixth week they were back pain, cesarean delivery pain and constipation. Aksu et al. (16) found that the most common physical disorders experienced by postpartum women (n=400) in the sixth week and sixth month were fatigue, sleep problems, dysuria, and low back pain. Cooklin et al. (18) identified the problems that caused the most physical burden to women in the eighth postpartum week as cesarean/perineal pain, back pain, constipation, hemorrhoids, urinary and intestinal incontinence. Since the healing process of women still continues between the fourth and sixth weeks, pain in the site of cesarean section or perineum continues and is the most common physical symptom. At the same time, it is thought that mothers experience sleep problems, fatigue and low back pain symptoms intensely due to reasons such as carrying baby care and housework together and having to wake up at night to feed their babies. Keeping the mother's social support systems strong during this process will help her pass this process more comfortably and smoothly.

In our study, it was determined that almost all of the women on the first postpartum day and more than half of them between the fourth and sixth weeks of the postpartum period had a relative to help other than their spouse, and this person was mostly their mother. In the study conducted by Elmas and Aluř Tokat (19), more than half of the women stated that they received support from their family members in the first postpartum four weeks, and nearly half of the women in the study conducted by Erçel and Kahyaoglu Süt (20) stated that they received support from their family members in the postpartum period. The existence of support systems of a significant part of women in the postpartum period is considered positive in terms of having a healthier process.

In our study, it was observed that the severity of postpartum physical symptoms decreased between the fourth and sixth weeks compared to the first week, as a natural consequence of the postpartum recovery process. In two different studies evaluating physical health problems in the early postpartum period, Cooklin

et al. (13,18) showed that the percentage of women who stated that they experienced at least one physical symptom decreased in the eighth week compared to the first week. Our study results also showed that the physical symptoms experienced by women were observed at different frequencies on the first postpartum day and on the postpartum fourth-sixth weeks. For example; some physical symptoms such as pain in the site of cesarean section or perineum, constipation, poor sleep quality or insomnia showed the greatest reduction; some symptoms such as dizziness, back pain, numbness in the feet decreased at a lower rate and were permanent; and it was determined that there was an increase in the severity of some symptoms such as vaginal infection, vaginal discharge and urinary tract infection. In a study examining postpartum physical symptoms in primiparous women, the symptoms that showed the most decrease between the first week and the fourth week were complaints of perineal pain (1st-4th weeks: 74-20%), cesarean delivery pain (1st-4th weeks: 95-61%) and constipation (1st-4th week: 49-30%), Urinary incontinence (weeks 1-4: 19-8%) and intestinal incontinence (weeks 1-4: 4-1%) were found to be the least common among the symptoms evaluated (13). Chien et al. (4) showed that the physical symptoms that showed the most decrease between the first month and the first year in the postpartum period were pain in the site of cesarean section or perineal pain, poor sleep quality or insomnia and constipation, and that the most increasing symptoms were chilling in the hands and feet. Song et al. (15) determined that the most common physical symptoms experienced by women in the postpartum second day and fourth-sixth weeks were fatigue, edema, nipple problems, and constipation. Studies have shown that the symptoms of back pain experienced in the first days of the postpartum period decrease at a very low rate in the fourth-sixth months or, on the contrary, increase and become permanent (13,15).

It was found that postpartum physical symptom severity scale mean scores of women who gave birth by cesarean section on the first postpartum day were higher than women who delivered vaginally. In a study in Austria in which the physical health symptoms of primiparous mothers were evaluated in the first postpartum eight weeks, it was determined that 94% of the women experienced pain in the site of cesarean section and 74% had perineal pain in the evaluation performed in the first postpartum week (13). In addition, studies indicate that pain associated with childbirth was more permanent, especially in those who gave birth by cesarean section (8,13). In the study conducted by Çapık et al. (1), it was determined that postpartum physical comfort of postpartum women who delivered vaginally was higher than women who gave birth by cesarean section. Egelioglu Çetiřli et al. (21) found that the severity of physical symptoms experienced by primiparous mothers who gave birth by cesarean section between the fourth and sixth weeks of postpartum period was higher than the mothers who had vaginal birth, while in our study, no difference was found between the types of delivery in terms of the mean scores of physical symptoms experienced by women between the fourth and sixth weeks of postpartum period. In the study conducted

by Işık et al. (22), it was found that the pain scores of mothers who had vaginal birth were lower on the postpartum 24th hour than those who gave birth by cesarean section. Webb et al. (23) determined that the functional limitations experienced in the early postpartum period were related to the mode of delivery and that those who had a cesarean section experienced the most severe pain during movement (such as sitting and standing), while those who had vaginal delivery did not experience these limitations. It was thought that the reason for the postpartum physical symptom scores of those who gave birth by cesarean section on the first day of the postpartum period higher than the women who had vaginal birth was due to the severe abdominal pain associated with cesarean section, and the symptoms such as limitation of movement, constipation and insomnia due to this pain. It is thought that the severity of physical symptoms is less due to the faster recovery in normal delivery. It is important for nurses to encourage normal birth by providing education and counseling to women about delivery methods of pregnancy, to reduce cesarean section rates and improve maternal health.

In the study, it was determined that the postpartum physical symptom severity of women who gave only breast milk to their babies between the fourth and sixth weeks of postpartum period was lower than those who gave formula to their babies other than breast milk. Egelioglu Çetişli et al. (21), found no difference in terms of postpartum physical symptom severity scale scores according to primiparous mothers' feeding status other than breast milk on the postpartum fourth-sixth weeks. In the study conducted by Elmas and Aluş Tokat. (19), it was determined that at the end of the postpartum fourth week, those who fed their babies with formula in addition to breast milk found that their total sleep was more adequate than those who gave only breast milk, and the fatigue they felt was less. These data seem to be different from our research results, but Hughes et al. (24) determined in their study that environmental factors such as noise, mode of delivery and feeding of the newborn did not affect the total sleep duration, and basically, breastfeeding supported maternal sleep. In our study, it was observed that women's inadequate sleep quality/insomnia problems decreased on the postpartum fourth-sixth weeks. This may be due to the fact that mothers fall asleep more easily and feel rested due to the effect of prolactin hormone secreted during breastfeeding, even if they have to wake up more at night to feed their babies (19). Considering that the severity of physical symptoms is less in women who only breastfeed their babies on the fourth-sixth weeks after birth, the importance of exclusively breastfeeding for the first six months should be emphasized during the education and counseling services provided beginning from the prenatal period.

Conclusion

Determining the physical symptoms experienced by women in the postpartum period and their severity is important for nurses to plan postpartum care and to diagnose problems that may occur later on. According to the results obtained from our study, women in the postpartum period often experienced

various physical symptoms such as pain in the site of cesarean section or perineum, poor sleep quality or insomnia, back pain and constipation. In addition, it was determined that the severity of physical symptoms on the first postpartum day was higher in women who gave formula to their babies in addition to breast milk, and it was determined that the severity of physical symptoms on the postpartum fourth-sixth weeks was higher in women who gave birth by cesarean section. These results reveal the importance of normal delivery and exclusive breastfeeding for the first six months. Nursing care, which is planned to reduce and eliminate physical symptoms in the postpartum period, is an important attempt to protect and increase the physical and psychological health of women. In the literature, it is seen that the studies on this subject are quite limited and different physical symptoms are evaluated at different time intervals in the studies (13,21). It is considered that studies with larger samples and long-term follow-up on physical symptoms experienced in the postpartum period will be useful in terms of obtaining strong evidence.

Ethics

Ethics Committee Approval: Zekai Tahir Burak Women's Health Training and Research Hospital Clinical Research Ethics Committee Ethics committee permission (decision no: 87/2017, date: 06.06.2017) was obtained to conduct the research.

Informed Consent: After the participants were informed about the purpose and implementation of the research, their written consent was obtained.

Peer-review: Internally peer reviewed.

Authorship Contributions

Concept: M.U., Design: M.U., G.A., İ.Y., Data Collection or Processing: M.U., G.A., İ.Y., Analysis or Interpretation: M.U., G.A., İ.Y., K.E.K., Literature Search: M.U., G.A., İ.Y., Writing: M.U., G.A., İ.Y.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

References

1. Çapık A, Özkan H, Apay SE. Determination of Affecting Factors and Postnatal Comfort Levels of Postpartum Women. *DEUHFED* 2014;7:186-92.
2. Yıldız H, Küçükşahin N. Kırsal bölgede annelerin doğum sonu yaşadıkları sorunlar ve bakım gereksinimleri. *Türkiye Aile Hekimliği Dergisi* 2011;15:159-66.
3. Arkan G, Egelioglu Çetişli N. Validity And Reliability Study Of Postpartum Physical Symptom Severity Scale. *JASCD* 2017;4:18-34.
4. Chien LY, Tai CJ, Hwang FM, Huang CM. Postpartum physical symptoms and depressive symptomatology at 1 month and 1 year after delivery: a longitudinal questionnaire survey. *Int J Nurs Stud* 2009;46:1201-8.

5. Bağıcı S, Altuntuğ K. Problems experienced by mothers in postpartum period and their associations with quality of life. *International Journal of Human Sciences* 2016;13:3266-79.
6. Yonemoto N, Dowswell T, Nagai S, Mori R. Schedules for home visits in the early postpartum period. *Cochrane Database Syst Rev* 2013;:CD009326.
7. Xiao X, Ngai FW, Zhu SN, Loke AY. The experiences of early postpartum Shenzhen mothers and their need for home visit services: a qualitative exploratory study. *BMC pregnancy and child birth* 2020;20:5.
8. Chang SR, Chen KH, Ho HN, Lai YH, Lin MI, Lee CN, et al. Depressive symptoms, pain, and sexual dysfunction over the first year following vaginal or cesarean delivery: a prospective longitudinal study. *Int J Nurs Stud* 2015;52:1433-44.
9. Kılıç M. Prevalence and risk factors of sexual dysfunction in healthy women in Turkey. *Afr Health Sci* 2019;19:2623-33.
10. Karakuş A, Yanikkerem E. Postpartum dönemde inkontinans ve yaşam kalitesi: son 10 yıllık çalışmalar. *CBU SBED* 2015;2:54-9.
11. Beydağ KD. Adaptation to motherhood in the postpartum period and the nurse's role. *TAF Preventive Medicine Bulletin* 2007;6:479-84.
12. Aksakallı M, Çapık A, Ejder Apay S, Pasinlioğlu T, Bayram S. Determination of Support Needs and Support Levels Among Postpartum Women. *J Psy Nurs* 2012;3:129-35.
13. Cooklin AR, Amir LH, Jarman J, Cullinane M, Donath SM; CASTLE Study Team. Maternal Physical Health Symptoms in the First 8 Weeks Postpartum Among Primiparous Australian Women. *Birth* 2015;42:254-60.
14. Yesilcinar I, Yavan T, Karasahin KE, Yenen MC. The identification of the relationship between the perceived social support, fatigue levels and maternal attachment during the postpartum period. *J Matern Fetal Neonatal Med* 2017;30:1213-20.
15. Song JE, Chae HJ, Kim CH. Changes in perceived health status, physical symptoms, and Sleep satisfaction of postpartum women over time. *Nurs Health Sci.* 2014;16:335-42.
16. Aksu S, Varol FG, Hotun Sahin N. Long-term postpartum health problems in Turkish women: prevalence and associations with self-rated health. *Contemp Nurse* 2017;53:167-81.
17. Wan H, Hu S, Thobaben M, Hou Y, Yin T. Continuous primary nursing care increases satisfaction with nursing care and reduces postpartum problems for hospitalized pregnant women. *Contemp Nurse* 2011;37:149-59.
18. Cooklin AR, Amir LH, Nguyen CD, Buck ML, Cullinane M, Fisher JRW, et al. Physical health, breastfeeding problems and maternal mood in the early postpartum: a prospective cohort study. *Arch Womens Ment Health* 2018 ;21:365-74.
19. Elmas S, Aluş Tokat M. The Effects of Newborn Feeding Methods on the Sleep and Fatigue of the Mother. *DEUHFED* 2016;9:45-51.
20. Erçel Ö, Kahyaoglu Süt H. Sleep Quality and Quality of Life in Postpartum Woman. *JTSM* 2020;1:23-30.
21. Egelioglu Çetişli N, Işık S, Kahveci M, Hacılar A. Postpartum Physical Symptom Severity and Breastfeeding Behaviour of Primipar Mother According to Their Birth Type *HEAD* 2020;17:98-103.
22. Işık G, Egelioglu Çetişli N, Başkaya VA. Postpartum Pain, Fatigue Levels and Breastfeeding Self-Efficacy According to Type of Birth. *DEUHFED* 2018;11:224-32.
23. Webb DA, Bloch JR, Coyne JC, Chung EK, Bennett IM, Culhane JF. Postpartum physical symptoms in new mothers: their relationship to functional limitations and emotional well-being. *Birth* 2008;35:179-87.
24. Hughes O, Mohamad MM, Doyle P, Burke G. The significance of breastfeeding on sleep patterns during the first 48 hours postpartum for first time mothers. *J Obstet Gynaecol* 2018;38:316-20.