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Research Article

Examination of the Relationship Between the Comfort Levels and the Mother to Infant Bonding Levels of Women in the Postpartum Period

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Abstract

Aim: The research was conducted to establish the relationship between the comfort levels of mothers in the postpartum period and mother-infant bonding.
Material and Method: The research is of descriptive type. The sample of the study consisted of 257 women who had just given birth in the Gynecology and Obstetrics service of a public hospital in Türkiye and voluntarily participated in the research between February and April 2023. Personal information questionnaire, postpartum comfort scale, and mother to infant bonding scale were used to collect the data of the study.
Results: The average total score women received from the postpartum comfort scale in the postpartum period was 97.45±15.22. A statistically significant difference was found between the postpartum comfort scale total score average according to the women's working status, number of postpartum days, postpartum care requirement and number of patients in the room (p<.05). Additionally, there was a difference between the mean physical comfort scores of women according to their income level (p<.05). The mean total score of the mother to infant bonding scale was 14.30±2.92. No significant relationship was found between women's postpartum comfort and mother-to-infant bonding levels.
Conclusion: The research findings indicated that women in the postpartum phase exhibited a moderate degree of comfort and maternal-infant bonding, with no statistically significant correlation between the two variables. To enhance postpartum comfort and foster stronger maternal-infant bonds, it is advisable for healthcare providers to assess mothers' needs and expectations comprehensively and deliver high-quality care accordingly.

Keywords: Parturition, woman, comfort, mother-infant interaction

INTRODUCTION

The postpartum phase represents a unique journey for families, playing a crucial role in safeguarding the well-being and growth of both the mother and baby, while also nurturing family health. During this period, the family balances change and regeneration is experienced, and the stress and anxiety of both the family and the mother increase while adapting to the changes experienced (1). In addition, this period is a period that requires giving baby care and creating a safe environment, communicating with the baby and overcoming the problems that arise. Prolonged labor, intense pain during labor and possible complications cause mothers to feel tired and exhausted. In this period of physical and emotional intensity, the mother has to adapt to this new process in order to meet the needs of her baby and to continue her daily life, while trying to meet her self-care and cope with the problems she experiences (2,3). The care and support to be received at the hospital in adapting to this new process is important for the positive maintenance of the postpartum comfort of the mothers. The word “comfort” is defined in

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the dictionary as relaxation that facilitates daily life (4). The notion of comfort has remained central to nursing practice since the time of Florence Nightingale, serving as the ultimate objective in the provision of nursing care (5). The concept of comfort in nursing; It is defined as diagnosing the comfort needs of the individual, family and society being cared for, planning the nursing care for these needs and then evaluating the comfort level (4,6,7). According to the comfort theory developed by Kolcaba, comfort; it is explained as meeting the problems that arise in physical, sociocultural, psychospiritual and environmental dimensions at three levels as relief, relaxation and overcoming problems (4).

In the postpartum period, women experience changes in physical, sociocultural, psychospiritual and environmental areas, and their comfort level is also affected. With the inclusion of a new individual in the family, there are changes in feelings, thoughts and relationships. The first minutes after birth are important in terms of ensuring the adaptation of the mother and the baby to this new situation, and mother to infant bonding (8).

Bonding, as a concept, refers to the connection that develops between an infant and their primary caregiver, fostering the infant's trust (9). Mother-to-infant bonding is a relationship that initiates with the baby's growth and movements within the mother's womb, and it is anticipated to mature gradually over time (10). This connection between the mother and the infant plays a crucial role in shaping the mother's role and ensuring its ongoing fulfillment (11). In the first days after birth, which forms the basis of the mother-infant relationship, mother-infant interaction begins, mothers need social and psychological support, and this support is mostly received from members of the family (12). Supporting the care of the baby, helping the mother to meet her care needs, creating time for sleep and rest, and the support of the spouse positively affect the bonding between the mother and the infant. As a result of relieving pain and bleeding in the postpartum period, ensuring hygiene, nutrition and mobilization, and supporting infant care, the mother will feel sufficient and will be stronger in coping with problems. In this period, ensuring the harmony of the mother who receives holistic care, starting and continuing breast milk early, ensuring the recovery in a short time, preventing the risk factors that may occur and the care to be given to the mother and the baby will provide both postpartum comfort and strengthening the mother's bond with the baby. Midwives and nurses have important responsibilities in providing postpartum care, improving comfort and strengthening the mother's bond with the baby (8,13-15,16-21). Based on this information, the study aimed to determine the relationship between women's comfort levels in the postpartum period and maternal bonds with their newborns.

Research Question and Hypothesis

Is there a relationship between women's comfort levels in the postpartum period and mother-infant bonding?

MATERIAL AND METHOD

Type of Research

The research is a descriptive correlational study conducted to elucidate the relationship between the comfort levels of mothers and mother-infant bonding in the postpartum period.

Population and Sample of the Research

In this research, the G-power 3.1.9.4 statistical software was utilized to determine the appropriate sample size. To establish the sample size, we referenced a prior study by Engin and Ayyıldız (n=368) that explored factors associated with maternal bonding to infants. Employing a Type I error level of 0.01, a Type II error level of 0.01 (resulting in a power of 0.99), and an effect size of 0.3, our analysis yielded a calculated sample size of 205 participants (21). Consequently, the research included 257 female participants who met the criteria of free will and acceptance. The acceptance criteria for the study included being 18 years and older, having given birth either vaginally or via cesarean section, being in the postpartum period (between 1 and 40 days), having given birth to one or more babies, having at least primary education, being able to read and understand Turkish, and expressing a willingness to participate in the study. Additionally, individuals who had experienced baby loss during the postpartum period, those who did not have their babies with them, and those diagnosed with postpartum depression or using psychiatric medication were excluded from the study.

Data Collection

The researchers gathered research data through in-person interviews conducted with mothers who had recently given birth (within the postpartum period of 1-40 days) and were under the care of the obstetrics service. Before proceeding with data collection, mothers were presented with comprehensive details regarding the study's purpose. They were then given the opportunity to provide informed consent should they decide to take part. It was made explicitly clear that they had the autonomy to withdraw from the study at any stage, underscoring the voluntary nature of their participation. Furthermore, it was emphasized that mothers would not be subject to any costs or fees associated with their involvement in the research.

Data Collection Tools

Personal information form, postpartum comfort scale and mother to infant bonding scale were used to collect the data of the study.

Personal information form: The questionnaire comprises inquiries related to socio-demographic and obstetric attributes (12-15,19-21). It encompasses a range of questions, including but not limited to the woman's age, educational background, employment status, family structure, income level, pregnancy intention, infant's gender, method of delivery, any complications during childbirth, the occupancy of the room (number of patients), and the necessity for postpartum care.

Postpartum Comfort Scale (PCS): Karakaplan and Yıldız devised this tool for assessing postpartum comfort, as documented in their work (22). The scale, consisting of a total of 24 items, is in a 5-point Likert format. It encompasses three dimensions that investigate the physical, psychospiritual, and sociocultural aspects. Scores on the scale can range from a minimum of 34 to a maximum of 170, with a higher score indicating an increased level of postpartum comfort. The reliability of the data obtained from the scale was assessed using the Cronbach's Alpha test, resulting in a coefficient of 0.78 (22).

Mother to Infant Bonding Scale (MIBS): The scale under consideration assesses the relationship between the maternal-infant bond and the mother's initial emotional state. It can be effectively administered as early as the day following childbirth and was originally developed by Taylor and colleagues (23). Aydemir and Alparslan conducted a study with a sample of Turkish mothers to ensure the validity and reliability of the scale's Turkish version. The study included a translation and cultural adaptation process to ensure the suitability of the scale for Turkish culture. The translated scale was then administered to a group of mothers, and data were collected to assess its psychometric properties. The validity of the scale was evaluated using various methods, including content validity, construct validity, and criterion validity. Content validity was established by having experts in the fields of mother-infant attachment and emotional well-being review the scale items and provide feedback on their relevance and clarity. Construct validity was examined by analyzing the relationships between scale scores and other measurements of mother-infant attachment and emotional well-being. Criterion validity was established by comparing scale scores with established measures of mother-infant attachment and emotional well-being. The scale, consisting of a total of 8 items, is in a 4-point Likert format. Responses are scored between 0-3. The score that can be obtained from the scale is 0-24. As the score obtained from the scale increases, it is considered an indicator of mother-infant attachment problems. The reliability of the scale was assessed using Cronbach's alpha coefficient, which measures the internal consistency of scale items. The coefficient was calculated for the first day after birth and the 8-12 weeks postpartum period. The reported values of 0.69 and 0.68 indicate that the scale has acceptable internal consistency (24).

Statistics of Data

The research data underwent analysis using Statistical Package for the Social Sciences (SPSS) 25.0 software. To assess the socio-demographic and obstetric characteristics of the mothers, descriptive statistics were employed, encompassing figures, percentages, arithmetic means, and standard deviations. For data associated with the PCS and MIBS, various statistical parameters were computed, including arithmetic means, standard deviations, medians, as well as minimum and maximum values. The distribution of the data was evaluated using the Shapiro-Wilk normality test. The choice between the Kruskal-Wallis H test and the Mann-Whitney U test depended on the number of variables considered. To explore relationships within the data, the Spearman correlation coefficient was utilized, with Spearman rank correlation coefficient (rho, ρ) values categorized as very weak (0.00-0.25), weak (0.26-0.49), moderate (0.50-0.69), high (0.70-0.89), and very high (0.90-1.00) correlations (25). Throughout the study, a significance level (α) of .05 was established, with any p-value less than .05 regarded as statistically significant (26).

Ethics of Research

Ethics committee approval (dated 5.12.2022 and number 11-2022/09) and institutional permission (2/09.01.2023) were obtained to conduct the research. The research's objectives were conveyed to the willing mothers who expressed their willingness to participate, and their informed consent was duly obtained. It was explicitly emphasized that participation in the study was entirely voluntary, and strict measures were in place to safeguard the confidentiality of the collected data.

RESULTS

The study revealed that the average age of the participating mothers was 28.45 years, with a standard deviation of 5.01. In terms of educational background, 31.5% (n=81) had completed middle school. A significant portion of the participants, specifically 74.7% (n=192), were unemployed, and 65.4% (n=168) reported having an income that matched their expenses. The majority, at 82.9% (n=213), belonged to nuclear families. Regarding pregnancy, a substantial 88.7% (n=228) of the mothers stated that their pregnancies were voluntary. In terms of childbirth, 59.1% (n=152) underwent cesarean sections, and 59.9% (n=154) gave birth within the first day postpartum. Furthermore, 90.7% of the women (n=233) expressed a need for postpartum care. Notably, the primary care requirement identified among them was the need for breastfeeding support, accounting for 45.5% (n=117) of the responses (Table 1).

Table 1. Socio-Demographic and obstetric characteristics of the mothers (n=257)		
Characteristic	**Mean**	**SD**
Age	28.45	5.01
	n	**%**
Education level		
Primary school	27	10.5
Middle school	81	31.5
High school	71	27.6
University and above	78	30.4
Employment status		
Yes	65	25.3
No	192	74.7
Income status		
Income less than expenditure	60	23.3
Income equal to expenditure	168	65.4
Income more than expenditure	29	11.3
Family type		
Nuclear family	213	82.9
Extented family	44	17.1
Desirability of pregnancy		
Yes	228	88.7
No	29	11.5
Sex of the baby		
Girl	132	51.4
Male	125	48.6
Mode of delivery		
Normal/vaginal delivery	105	40.9
Caesarean section	152	59.1
How many days after the end of labor		
Day 1	154	59.9
Day 2 and above	103	40.1
Complications in childbirth		
Yes	17	6.6
No	240	93.4
Regular prenatal check-ups		
Yes	247	96.1
No	10	3.9
Need for postnatal care		
Yes	233	90.7
No	24	9.3
Initial postnatal care needs		
Breastfeeding	117	45.5
Mobilization	71	27.6
Self-care	26	10.1
Baby care	19	7.4
Number of patients in the patient room		
1 patient	134	52.1
2 patients	123	47.9
	Mean	**SD**
Number of births	1.99	0.96
Number of Abortions/Curettage	0.33	0.61

The mean scores of the mothers were 38.33±6.16 in the physical comfort subscale, 26.92±7.31 in the psychospiritual comfort subscale, 32.19±6.50 in the socio-cultural comfort subscale and 97.45±15.22 in the total scale (Table 2). In the evaluation of the comfort level of the mothers participating in the study, it was found that the physical comfort sub-dimension was 2.73 points, the psychospiritual comfort sub-dimension was 2.69 points, the Socio-cultural Comfort sub-dimension was 3.21 points and the total scale was 2.86 points. The mean total score of the MIBS was 14.30±2.92 (Table 2).

Table 2. Mean, median distributions and Cronbach's alpha values of mothers' Postpartum Comfort Scale and Mother to Infant Bonding Scale subscale and total scores (n=257)		
	Mean±SD*	**Min-Max**
Postpartum Comfort Scale		
Physical comfort	38.33±6.16	39.00 (14.00-54.00)
Psychospiritual comfort	26.92±7.31	29.00 (10.00-43.00)
Socio-cultural comfort	32.19±6.50	34.00 (10.00-44.00)
Total scale score	97.45±15.22	101.00 (40.00-123.00)
Mother to Infant Bonding Scale	14.30±2.92	15.00 (3.00-21.00)

*SD: standard deviation

There were no statistically significant variations observed in the mean scores, encompassing both the total scores and sub-dimension scores of both the PCS and the MIBS. These findings held true across various factors, including the mothers' age, educational background, family structure, pregnancy intention, infant gender, delivery method, occurrence of birth complications, consistent attendance at prenatal check-ups, parity, history of abortions or curettage, and the initial postnatal needs of the women ($p>.05$). Significant statistical differences were identified in the study's findings. Firstly, in relation to the employment status of the women, a notable difference emerged in the mean scores of the psychospiritual comfort sub-dimension ($U=5194.000$, $p=.043$) and the total score ($U=5173.500$, $p=.039$) of the PCS. Furthermore, when examining income status, a disparity was observed in the mean scores of women's Physical Comfort ($KW=8.009$, $p=.018$). As a result of the conducted research, it has been determined that the source of the observed difference primarily arises from variations between groups with income levels exceeding their expenses and those not exceeding their expenses ($U=567.000$, $p=.008$). Moreover, a significant difference has also been found between the group with income exceeding their expenses and the group with income equal to their expenses. Additionally, it can be observed that the sub-dimensions of Physical Comfort and Psychospiritual Comfort, as well as the total scores of the PCS, vary according to the postpartum care requirement, the number of days postpartum, and the number of patients in the room ($p<.05$) (Table 3).

Table 3. Mean total and subscale scores of the Postpartum Comfort Scale and mean total scores of the Mother to Infant Bonding Scale according to socio-demographic and obstetric characteristics of mothers

Features		Postpartum Comfort Scale				Mother to Infant Bonding Scale
		Physical Comfort	Psychospiritual Comfort	Socio-cultural Comfort	Total Score	
Age		ρ*=0.053 p=0.397	ρ=-0.002 p=0.974	ρ=-0.113 p=0.071	ρ=-0.028 p=0.660	ρ=0.029 p=0.644
		Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Education status	Primary school	40.00±6.17	27.85±5.69	34.44±4.75	102.29±6.74	13.88±3.30
	Middle school	38.04±5.79	28.39±7.02	32.77±6.13	99.22±13.84	14.41±2.70
	High school	38.01±6.25	26.19±7.57	31.52±7.05	95.73±17.23	14.29±2.60
	University and above	38.35±6.48	25.74±7.67	31.41±6.73	95.51±16.36	14.34±3.31
		KW=3.387, p=0.336	KW=5.287, p=0.152	KW=5.567, p=0.135	KW=2.665, p=0.446	KW=0.731, p=0.866
Employment status	Yes	37.72±6.37	25.50±7.84	31.23±6.88	94.46±15.89	14.09±3.39
	No	38.54±6.10	27.40±7.08	32.51±6.35	98.46±14.89	14.38±2.76
		U=5808.500, p=0.404	U=5194.000, p=0.043**	U=5544.000, p=0.178	U=5173.500, p=0.039**	U=6223.000, p=0.972
Income status	Income less than expenditure	39.20±5.98	27.28±7.15	32.95±5.79	99.43±12.60	14.46±2.61
	Income equal to expenditure	38.50±6.18	27.03±7.07	32.15±6.63	97.69±15.46	14.13±3.18
	Income more than expenditure	35.62±5.90	25.55±8.94	30.82±7.07	92.00±17.84	14.96±1.70
		KW=8.009, p=0.018**	KW=0.237, p=0.888	KW=1.996, p=0.369	KW=4.267, p=0.118	KW=0.609, p=0.738
Family type	Nuclear family	38.35±6.28	26.52±7.33	32.05±6.62	96.93±15.36	14.29±2.85
	Extended family	38.25±5.62	28.88±6.94	32.84±5.89	99.97±14.41	14.38±3.28
		U=4559.500, p=0.778	U=4042.000, p=0.151	U=4518.500, p=0.708	U=4125.000, p=0.294	U=4455.500, p=0.589
Desirability of pregnancy	Yes	38.25±6.15	26.89±7.22	32.07±6.49	97.23±15.23	14.36±2.86
	No	39.00±6.36	27.137±8.07	33.06±6.57	99.20±15.29	13.86±3.45
		U=3103.500, p=0.591	U=3250.000, p=0.882	U=2860.000, p=0.236	U=2984.500, p=0.393	U=3086.000, p=0.539
Sex of the baby	Girl	38.15±6.49	26.81±7.57	32.63±6.44	97.59±15.85	14.34±2.86
	Male	38.53±5.82	27.04±7.05	31.72±6.55	97.30±14.58	14.26±3.00
		U=8049.500, p=0.736	U=7988.000, p=0.659	U=7405.500, p=0.155	U=8094.000, p=0.793	U=8217.000, p=0.953

*ρ=Spearman correlation test, **p<0.05

Table 3. Mean total and subscale scores of the Postpartum Comfort Scale and mean total scores of the Mother to Infant Bonding Scale according to socio-demographic and obstetric characteristics of mothers

Features		Postpartum Comfort Scale				Mother to Infant Bonding Scale
		Physical Comfort	Psychospiritual Comfort	Socio-cultural Comfort	Total Score	
		Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Mode of delivery	Normal/vaginal delivery	38.00±5.87	26.67±7.28	32.57±6.35	97.24±14.40	14.20±2.73
	Caesarean section	38.57±6.37	27.09±7.34	31.92±6.60	97.59±15.80	14.34±3.06
		U=7470.000, p=0.383	U=7583.500, p=0.498	U=7280.000, p=0.231	U=7558.000, p=0.471	U=7400.000, p=0.297
How many days after the end of labor	Day 1	37.50±6.63	25.36±7.77	31.53±7.14	94.40±17.00	14.38±2.79
	Day 2 and above	39.58±5.18	29.26±5.85	33.17±5.28	102.01±10.61	14.18±3.12
		U=6273.500, p=0.004**	U=5645.000, p=0.000**	U=7185.000, p=0.200	U=5768.000, p=0.000**	U=7920.500, p=0.985
Complications in childbirth	Yes	39.35±4.06	27.94±6.90	34.52±4.71	101.82±10.35	13.11±14.39
	No	38.26±6.29	26.85±7.34	32.02±6.58	97.14±15.47	3.12±2.90
		U=1845.000, p=0.509	U=1959.500, p=0.785	U=1472.000, p=0.055	U=1736.000, p=0.304	U=1516.500, p=0.063
Regular prenatal check-ups	Yes	38.38±6.17	26.85±7.38	32.12±6.52	97.36±15.31	14.37±2.85
	No	37.20±6.30	28.80±5.05	33.80±5.94	99.80±13.14	12.60±4.14
		U=1119.500, p=0.616	U=1098.500, p=0.553	U=1006.000, p=0.319	U=1150.000, p=0.712	U=928.000, p=0.161
Need for postnatal care	Yes	38.71±5.92	27.41±7.13	32.49±6.18	98.63±14.20	14.31±2.98
	No	34.66±7.35	22.16±7.48	29.20±8.62	86.04±19.80	14.25±2.38
		U=1814.500, p=0.005**	U=1650.500, p=0.001**	U=2288.500, p=0.142	U=1740.500, p=0.002**	U=2534.500, p=0.427
Initial postnatal care needs	Breastfeeding	38.52±5.45	28.29±6.83	33.15±5.68	99.97±13.01	14.27±2.90
	Mobilization	38.90±6.27	26.53±7.35	32.16±6.53	97.60±15.36	14.30±2.98
	Self-care	40.50±7.02	27.00±7.18	31.80±6.92	99.30±14.74	13.92±3.34
	Baby care	36.73±5.45	25.89±7.83	30.63±6.63	93.26±15.60	15.10±3.03
		KW=4.314, p=0.229	KW=3.532, p=0.317	KW=3.035, p=0.386	KW=5.698, p=0.127	KW=1.640, p=0.650
Number of patients in the patient room	1 patient	39.02±6.26	28.21±6.62	32.58±5.38	99.82±13.57	14.36±3.21
	2 patients	37.58±5.99	25.52±7.78	31.76±7.53	94.86±16.49	14.24±2.59
		U=6922.000, p=0.026**	U=6630.500, p=0.007**	U=8100.000, p=0.812	U=6774.000, p=0.014**	U=7503.500, p=0.192
Number of births		ρ=-0.036, p=0.562	ρ=-0.043, p=0.490	ρ=-0.101, p=0.107	ρ=-0.079, p=0.209	ρ=0.080, p=0.203
Number of abortions/curettage		ρ=-0.031, p=0.622	ρ=0.063, p=0.317	ρ=0.032, p=0.612	ρ=0.031, p=0.619	ρ=0.075, p=0.232

*ρ=Spearman correlation test, **p<0.05

No significant differences were found in the scores obtained from the MIBS based on the socio-demographic and obstetric characteristics of the mothers included in the study in the difference analysis (p>.05) (Table 3).

The relationship between the scores obtained from the MIBS and the sub-dimension scores of the PCS, as well as the total scores of the PCS, was examined through correlation analysis, and no significant relationship was found between the specified variables (Table 4).

Table 4. The relationship between Mothers' Postpartum Comfort Scale sub-dimension and total mean scores and Mother to Infant Bonding Scale total mean scores (n=257)

Postpartum Comfort Scale	Mother to Infant Bonding Scale
Physical comfort	ρ*=-0.032, p=0.615
Psychospiritual comfort	ρ=-0.029, p=0.639
Socio-cultural comfort	ρ=-0.119, p=0.057
Total scale score	ρ=-0.078, p=0.215

*ρ=Spearman correlation coefficient

DISCUSSION

The aim of the research is to examine the relationship between mothers' comfort levels and the level of bonding with their babies during the postpartum period. The postpartum period is marked by a cascade of physiological, psychological, and social changes, coupled with the assumption of new parental roles and responsibilities. Factors like shifting family dynamics, sleep disturbances, fatigue, difficulties in meeting infant-related needs, and problem-solving challenges can intensify stress levels among women during this period, potentially disrupting their adaptation and comfort levels, leading to a crisis situation (27,28). Consequently, assessing the comfort levels of postpartum women holds significant importance as it aids in recognizing the challenges they face, facilitating appropriate care planning and implementation (29). In this study, the mean total score for the participating mothers was 97, with the scale ranging from a minimum score of 34 to a maximum of 170. Comparable research reported postpartum comfort scores for mothers falling within the range of 82 to 131 (27-31), aligning with the findings of this study, indicating that mothers' postpartum comfort levels tend to be moderate.

According to the findings obtained in the research, the PCS scale had a level of 38.33 (SD 6.16) for the physical comfort subscale, 26.92 (SD 7.31) for the psychospiritual comfort subscale, and 32.19 (SD 6.50) for the socio-cultural comfort subscale. To provide context, a study conducted by Akgün and Aksoy (2020) reported mean scores in their research as follows: physical comfort sub-dimension at 46.27 (SD 7.66), psychospiritual comfort sub-dimension at 43.48 (SD 5.10), and socio-cultural comfort sub-dimension at 33.09 (SD 6.59) (32). In a similar fashion to the obtained results, Kaya et al., (2024) found in their study that the PCS scale had mean levels of 44.55 (SD 7.96) for the Physical Comfort subscale, 42.06 (SD 6.69) for the Psychospiritual Comfort subscale, and 32.75 (SD 6.43) for the Socio-cultural Comfort subscale (14). Kartal et al. (2018), the mothers' mean scores were 46.20 (SD 7.82) for the physical comfort subscale, 40.58 (SD 4.50) for the psychospiritual comfort subscale, and 31.27 (SD 5.80) for the socio-cultural comfort subscale (30). These findings collectively suggest that mothers typically confront the challenges of the postpartum period at a moderate level, and their overall postpartum comfort levels align with this moderate trend, consistent with existing literature.

It was determined that women whose income level was less than expenses had better physical comfort than those whose income level was equal to expenses and whose income level was more than expenses. In the study of Birgili et al. (2020) also, which was conducted to investigate the postpartum comfort levels of laboring women and the factors affecting them, it was found that the physical comfort of women with low income level was better, which was same from our study (15). It can be thought that women with middle and high income levels may have more expectations and the service provided may not meet their needs and hospital conditions may cause them to feel uncomfortable, and therefore their comfort may be negatively affected.

It was observed that comfort levels of non-working women were better than working women. In Birgili study, it was found that the mean total score of PCS of non-working women was higher than that of working women (15). The majority of the women who participated in the study were not working. The absence of work-related stress factors may have caused women to feel more comfortable and have better comfort levels.

The study results have shown that as the number of days spent in the hospital after childbirth increases, women's comfort levels also increase. As the problems arising from the adaptation period of the postpartum mothers decrease, an increase in mothers' comfort and comfort levels is observed.

An interesting finding of the study was that women who needed postnatal care had higher comfort levels. The first postpartum care need was breastfeeding support. The most common health problems experienced after childbirth are breastfeeding and breast problems. The support of health personnel and relatives is important in terms of comfort and trust (33). The decrease in the problems of women in need of care in the postpartum period with the fulfillment of their care needs may have increased the comfort of mothers.

In the study, it was determined that the comfort levels of those who were left alone in the hospital room were higher. In another research on the subject, it was concluded that

staying alone in the hospital after childbirth, having one's spouse as a companion, receiving visits from relatives, and being able to benefit from the hospital's facilities increased the level of comfort (34). Furthermore, in another study, it was observed that staying alone in the room had a positive impact on privacy and meeting expectations, thus enhancing satisfaction with the childbirth experience (35). The fact that there were no other patients in the room after the birth of the women who participated in our study may have led the women to be comfortable in the room where they were lying, to ensure that the room was suitable for their needs and that they were with their family, and as a result, the hospital facilities were at a level that could meet their needs, which may have led to a high level of comfort. These results show that privacy and hospital environment should be considered as an important factor on comfort and that their comfort can be increased by ensuring that they stay in single and clean rooms as much as possible, especially in the postpartum period for the adaptation of mother and baby.

In the first moments of the postpartum period, a deep bond between mothers and their babies is said to form immediately during their initial encounter, and the mother-infant bond that begins during pregnancy continues until the postpartum period. The first few days after birth represent a crucial and sensitive period for the development of the bond between the mother and the baby (8,36). In our research, we observed that the bond between the mother and the baby was at a moderate level, and we found no significant relationship between postpartum comfort and the level of the bond between the mother and the baby. Specifically, while our results were consistent with a moderate level of bonding between the mother and the baby, some other studies using the Mother to Infant Bonding Scale have reported higher levels of bonding between the mother and the baby compared to our findings (8,36,37). The reason for this moderate level of bonding in our study may be the early postpartum period, which could potentially hinder women from fully adapting to their maternal roles. Therefore, further evidence-based research with larger sample groups that examines the relationship between postpartum comfort and the bond between the mother and the baby in more detail is needed.

CONCLUSION

The study's findings indicated that women who had recently given birth reported a moderate level of comfort. Furthermore, factors such as employment status, the number of days postpartum, the requirement for postpartum care, and the number of patients sharing the room had an impact on the total score of the PCS. Additionally, income status influenced the level of physical comfort experienced by mothers. In terms of mother-to-infant bonding, the study revealed a moderate level, with no significant relationship identified between postpartum comfort and the level of mother-to-infant bonding. It is advisable that nurses and midwives closely monitor women during the postpartum period, assessing their postpartum comfort and mother-to-infant bonding. In cases where issues or challenges are detected within the mother, baby, or any family member, appropriate counseling and guidance should be provided.

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