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Determination of Mothers' Postpartum Comfort Levels and Affecting Factors

Annelerin Doğum Sonu Konfor Düzeyleri ve Etkileyen Faktörlerin Belirlenmesi

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Abstract

Aim: The study was conducted as a descriptive study in order to determine mothers' postpartum comfort levels and the affecting factors.

Materials and Method: The sample of the study consisted of 526 postpartum mothers in two hospitals in a province of Turkey and who accepted to participate in the study. Data were collected using face-to-face interview method by Personal Information Form and Postpartum Comfort Scale (PCS).

Results: In this study, it was detemined that the mean score of the mothers from PCS was 122.88 (SD 15.02), 46.27 (SD 7.66) in physical comfort, 43.48 (SD 5.10) in psychospritual comfort and 33.09 (SD 6.59) in sociocultural comfort, and the mothers' comfort was found to be at moderate level. Physical, psychospiritual, sociocultural comfort and total mean scores of the mothers who planned their pregnancy, who described health professionals' behaviors as quite gentle, who had education during hospitalization, who were satisfied with the care, who expressed their general health condition as very good and who felt relieved thanks to postpartum care were significantly higher than the other groups ($p<0.05$).

Conclusion: It was determined that planning of pregnancy, perception of birth, general health status, behaviors of health professionals, having education during hospitalization and satisfaction with the care affected the mothers' comfort levels. Mothers should be informed and supported during the prenatal, delivery and postpartum periods, delivery services should be arranged in a way to increase comfort and health professionals should behave gently to mothers and their families.

Keywords: Postpartum comfort, affecting factors, mother, midwifery, nursing.

Öz

Amaç: Araştırma, annelerin doğum sonu konfor düzeyleri ve etkileyen faktörlerin belirlenmesi amacıyla tanımlayıcı olarak yapılmıştır.

Gereç ve Yöntem: Araştırmanın örneklemini, Türkiye'de bir il merkezindeki iki hastanede doğum sonu dönemde bulunan ve araştırmaya katılmayı kabul eden 526 anne oluşturmuştur. Araştırmanın verileri, Kişisel Bilgi Formu ve Doğum Sonu Konfor Ölçeği (DSKÖ) kullanılarak yüz yüze görüşme yöntemiyle toplanmıştır.

Bulgular: Araştırmada, annelerin DSKÖ'den aldıkları puan ortalamasının 122,88 (SS 15,02), fiziksel konforda 46,27 (SS 7,66), psikospritüel konforda 43,48 (SS 5,10), sosyokültürel konforda 33,09 (SS 6,59) olduğu saptanmış olup, annelerin konforlarının orta düzeyde olduğu belirlenmiştir. İsteyerek gebe kalan, sağlık personelinin davranış şeklini oldukça nazik olarak nitelendiren, hastanede yatış süresince eğitim alan, verilen bakımdan memnun olan, genel sağlık durumunu çok iyi olarak ifade eden ve verilen bakım ile doğum sonu rahatladığını ifade eden annelerin fiziksel, psikospritüel, sosyokültürel konfor ve toplam ölçek puan ortalamalarının diğer gruplara göre anlamlı şekilde daha yüksek olduğu bulunmuştur ($p<0,05$).

Sonuç: Gebeliği isteme durumu, doğumu algılama şekli, genel sağlık durumu, sağlık personelinin davranış şekli, hastanede yatış süreci içerisinde eğitim alma ve verilen bakımdan memnun olma durumunun annelerin konfor düzeyini etkilediği belirlenmiştir. Annelerin doğum öncesi, doğum ve doğum sonrası dönemde bilgilendirilerek desteklenmesi, doğum servislerinin konforu artıracak şekilde düzenlenmesi ve sağlık personelinin annelere ve ailelerine nazik yaklaşımlar sergilemesi önerilebilir.

Anahtar Sözcükler: Doğum sonu konfor, etkileyen faktörler, anne, ebelik, hemşirelik.

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INTRODUCTION

While each period is a developmental crisis for mother and her family, it is accepted that the postpartum period has a distinct place.[1] Besides physiological changes, postpartum period carry a risk for the mother and baby because of the transition to parenting and the difficult process in which new roles and responsibilities are assumed.[2] The mother and the newborn need quality and thorough care, rest, support, encouragement in order to spend this period in a healthy way.[3] In this respect, postpartum is the period when the disease and the health come closer, which necessitates the bio-psycho-social adjustment of the women and their families.[4]

The purpose of postpartum care is to improve family and community support in order to protect and develop the health of baby and mother, and to meet their health and social needs.[5] In the postpartum period, care and education can provide a smooth, comfortable postpartum period and a safer future. Providing comfort in the postpartum period facilitates the adaptation of the mother to this period and accelerates the adaptation process.[1] The care given for the mother and the baby is very important to facilitate the adaptation of the mother to the postpartum period, the early onset and continuation of lactation, to provide the mother-baby interaction, to accelerate the healing process, to prevent complications and to provide postpartum comfort. Midwives and nurses are key people in this process.[6,7] Midwives and nurses should be able to evaluate the characteristics of the postpartum period and deviations from normal, make necessary interventions, take precautions, inform and support people according to their needs. This is because the future health of the woman is closely related to the quality of care she receives in this period.[6]

Kolcaba describes comfort as "the expected outcome having a complex structure in physical, psycho-spiritual, social and environmental integrity to provide assistance and comfort for the individual's needs and to overcome problems".[8,9] An individual whose comfort is not met feels deficiency, when his/her needs are met, he/she feels safer and more comfortable. Although comfort oriented practices are frequently discussed in pain management, the number of studies performed in the postpartum period is limited.[1,3,6,10-15] As a result of the studies, it was determined that mothers' comfort was affected by education, mode of delivery, planning of pregnancy, postpartum problems, meeting of expectations, midwifery care and the environmental conditions of the hospital.[3,13,15,16]

Mother and newborn health affect the family health in particular and the comunity health in general, and postpartum comfort is crucial in this process. Thus, it is important to determine mothers' postpartum comfort levels and affecting factors. Accordingly, this study was conducted to determine mothers' postpartum comfort levels and affecting factors.

Research Questions

- What is the postpartum comfort level of mothers?
- What is the mothers' evaluation about environmental comfort?
- Are the postpartum comfort levels of mothers related to their obstetric characteristics?

MATERIAL AND METHOD

Design and Participants

This descriptive study was carried out with mothers who gave birth in maternity ward of university hospital and private hospital of a province in Central Anatolia Region of Turkey. The population of the study consisted of all mothers giving birth in these two hospitals within one year (N=2947). 526 mothers were included in the study with the sampling method in which the number of individuals in the population was known and the incidence of comfort (average 60%) was taken into consideration.[13]

Inclusion Criteria

The women who gave birth in these two hospitals, gave birth at 37-42 weeks of gestation, had alive baby, at least primary school graduate, agreed to participate in the study were included to the research as participants.

Exclusion Criteria

Mothers who had an anomaly in their babies, who had a complication after birth, and whose baby had an important and chronic health problem were not included in the research.

Instruments and Data Collection

The data were collected by face-to-face interview method using Personal Information Form and Postpartum Comfort Scale in 8-16 hours after delivery. The interviews lasted 10-15 minutes on average.

Personal Information Form

The Personal Information Form was developed by searching the literature by the researcher.[1,13,14] This form consists of a total of 32 questions, including 20 closed-ended and 9 open-ended, in order to determine the socio-demographic characteristics of the mothers, obstetric histories and environmental comfort levels in postpartum comfort.

Postpartum Comfort Scale (PCS)

Karakaplan et al.[14] developed the PCS from the Turkish version of the scale. PCS evaluates the physical, psychospiritual and sociocultural comforts of mothers who had a cesarean or vaginal delivery. These comfort areas also constitute the sub-scales of the scale. The scale is likert type and consists of 34 items. The Cronbach Alpha for this study was found to be 0.78 and the scale was found to be reliable in terms of internal. For each item, it is scored between "I strongly agree" (5 points) and "I strongly disagree" (1 point). "I strongly agree" expresses the best comfort (5 points) in positive sentences

and low comfort in negative sentences (1 point). In negative (negative) expressions, since the reverse coding is done, "I strongly agree" signifies low comfort, and 1 point, "I strongly disagree" signifies high comfort and 5 points. In this direction, the lowest score can be taken from the scale is 34, the highest score is 170. If the values obtained as a result of the study are close to 170, it indicates that comfort is high.[14] In this study, the Cronbach Alpha value for the total PCS was 0.80.

Ethics

Prior to the research, Sivas Cumhuriyet University Non-Interventional Clinical Research Ethics Committee approval was obtained from the author's university ethics review board (Decision no: 2012-12/27). The study was carried out according to the principles of the Helsinki Declaration. Mothers were informed about the purpose and scope of the study and written informed consent was obtained from those who accepted to participate in the research.

Statistical Analysis

The data obtained from the study was evaluated using Statistical Package for Social Sciences (SPSS 22.0) for Windows package program. Mean and standard deviation were used for dependent variables, and number and percentage values were used for independent variables in defining the data. The distribution of the data was evaluated by the Kolmogorov Smirnov and Shapiro-Wilk tests. Comparisons between groups were evaluated using the Mann Whitney U test and Kruskal Wallis test. In the cases where there is a statistically significant difference between independent and dependent variables, searching for the variable that caused difference was conducted with Bonferroni test. Regression analysis (enter) was used to determine the relationship and direction between the variables. The error level was accepted as 0.05 for the significance of the statistical results.

RESULTS

It was determined that 79.7% (n=419) of the mothers were in the 20-34 age group (mean 27.07 (SD 5.63), 62% (n=326) were primary school graduates, 82.5% (n=434) were housewives and 64.1% (n=59) were civil servants.

When the obstetric characteristics of the mothers were examined, it was determined that 65.2% gave birth in the university hospital, 46% gave birth with episiotomy, 84.4% had planned pregnancy, 11.2% had a very smooth birth and 73% had postpartum pain. Health professionals behaved gently to 68.4% of them, 72.8% had education during the hospitalization period, 83.5% were satisfied with the care, 47% of them were in good health and 57.6% were relieved after the given care (**Table 1**).

Table 1. Obstetric characteristics of mothers (n=526)

Obstetric characteristics	n	%
Place of delivery		
University hospital	343	65.2
Private hospital	183	34.8
Mode of delivery		
Caesarean section	178	33.8
With episiotomy	242	46.0
Without episiotomy	106	20.2
Planned pregnancy		
Yes	444	84.4
No	82	15.6
Description of birth		
Quite easy	59	11.2
Easy	102	19.4
Difficult	223	42.4
Quite difficult	142	27.0
Postpartum pain		
Yes	384	73.0
No	142	27.0
Behaviors of health professionals		
Quite gentle	360	68.4
Partly gentle	139	26.4
Not gentle	27	5.2
Having education during hospitalization		
Yes	383	72.8
Partly	104	19.8
No	39	7.4
Satisfaction with the care		
Yes	439	83.5
Partly	71	13.5
No	16	3.0
General health status		
Very good	74	14.0
Good	247	47.0
Not bad	186	35.4
Bad	19	3.6
Effect of care on postpartum comfort		
Relieved	303	57.6
Partly relieved	197	37.5
Not relieved	8	1.5
Not relieved at all	18	3.4

When the expressions of mothers regarding environmental comfort were examined, 59.1% of mothers stated that environment was not noisy, 93.9% stated that heating was sufficient and 49.4% stated that the ventilation was sufficient. 90.3% of mothers felt safe in the hospital, 69.2% stated that their beds were comfortable and 77.6% stated that their relatives were able to visit them (**Table 2**).

Table 2. Mothers' expressions regarding environmental comfort (n=526)

Expressions	n	%
Noise		
Yes	120	22.8
Partly	95	18.1
No	311	59.1
Sufficiency of heating		
Sufficient	494	93.9
Partly sufficient	24	4.6
Insufficient	8	1.5
Sufficiency of ventilation		
Sufficient	260	49.4
Partly sufficient	154	29.3
Insufficient	112	21.3
Feeling safe		
Yes	475	90.3
Partly	41	7.8
No	10	1.9
Comfort of the bed		
Yes	364	69.2
Partly	114	21.7
No	48	9.1
Visit of relatives		
Yes	408	77.6
Partly	84	16.0
No	34	6.4

When the PCS mean scores of the mothers were examined, total mean score was 122.88 (SD 15.02), sub-scale mean scores were 46.27 (SD 7.66) in physical comfort, 43.48 (SD 5.10) in psychospiritual comfort and 33.09 (SD 6.59) in sociocultural comfort (**Table 3**).

Table 3. PCS mean scores of mothers

PCS Subscales	n	Min-max score possible from the scale	Min-max score taken from the scale	Mean±SD
Physical	526	14-70	18-70	46.27±7.66
Psychospiritual	526	10-50	22-50	43.48±5.10
Sociocultural	526	10-50	16-50	33.09±6.59
Total	526	34-170	62-170	122.88±15.02

PCS: Postpartum Comfort Scale, SD: Standard deviation

When distribution of mothers' PCS mean scores according to their obstetric characteristics were examined, physical, psychospiritual and sociocultural comfort and total scale mean scores of mothers who planned their pregnancy, found behaviors of health professionals quite gentle, had education during hospitalization, satisfied with the care, expressed their health condition as very good, relieved with the postpartum care were found to be higher than other groups, and the difference was found to be statistically significant. The physical comfort mean scores of mothers who described their birth as easy and psychospiritual and total scale mean scores of mothers who described their birth as quite easy were higher than other groups, and the difference was found to be statistically significant. In addition, physical comfort and total mean scores of mothers without postpartum pain were found to be significantly high (**Table 4,** $p<0.05$).

In the model examining the relationship between some obstetric characteristics and PCS scores of the mothers, there was no autocorrelation between the variables (Durbin-Watson=1.920). While there was a positive significant relationship between mothers' PCS scores and their planned pregnancy, having education during hospitalization, expressing general health status very good/good, effect of care on postpartum comfort ($p<0.05$), there was no significant relationship in terms of other variables ($p>0.05$). It was found that the variables in the model explained 21% of the total variance (**Table 5**).

Table 5. The relationship between some obstetric characteristics and PCS scores of mothers (multiple linear regression analysis)

Model	B	SE	β	t	p
Constant	104.122	2.060		50.541	0.001*
Planned pregnancy (yes)	5.541	1.620	0.135	3.421	0.001*
Description of birth (quite easy/easy)	1.289	1.299	0.040	0.993	0.321
Postpartum pain (no)	1.221	1.350	0.036	0.904	0.366
Behaviors of health professionals (quite gentle)	1.899	1.466	0.059	1.295	0.196
Having education during hospitalization (yes)	5.911	1.518	0.177	3.894	0.001*
Satisfaction with the care (yes)	2.028	1.858	0.051	1.091	0.276
General health status (very good/good)	4.557	1.302	0.150	3.499	0.001*
Effect of care on postpartum comfort (relieved)	5.766	1.337	0.192	4.314	0.001*

Model: Enter, R=0.458, R^2=0.210, Adjusted R^2=0.198, F=17.185, p=0.001
PCS: Postpartum Comfort Scale, F: ANOVA test, SE: Standard error, β: Beta, t: t test, * Significant

Table 4. Distribution of mothers' PCS mean scores according to their obstetric characteristics

Characteristics Test / p	n	Physical Mean±SD	Psychospiritual Mean±SD	Sociocultural Mean±SD	Total Mean±SD
Planned pregnancy					
Yes	444	46.59±7.83*	43.86±4.98*	33.52±6.56*	124.00±15.18*
No	82	44.53±6.46	41.45±5.29	30.80±6.30	116.79±12.51
MWU		15284.500	13051.500	13819.500	12739.000
p		0.021*	0.001*	0.001*	0.001*
Description of birth					
Quite easy	59	46.30±7.60	45.37±3.79*	34.96±6.46	126.64±13.78*
Easy	102	48.64±7.62*	43.21±5.19	33.57±6.54	125.44±15.12
Difficult	223	45.96±7.66	43.30±5.26	32.91±6.66	122.21±15.33
Quite difficult	142	45.05±7.43	43.19±5.14	32.26±6.44	120.51±14.52
KW		11.312	9.597	6.723	11.687
p		0.010*	0.022*	0.081	0.009*
Postpartum pain					
Yes	384	45.23±7.46	43.44±5.04	33.35±6.67	122.05±15.04
No	142	49.09±7.52*	43.59±5.28	32.41±6.33	125.11±14.7*
MWU		18969.500	26463.000	25286.000	24023.000
p		0.001*	0.604	0.201	0.036*
Behaviors of health professionals					
Quite gentle	360	46.88±7.57*	44.19±4.73*	34.27±6.47*	125.37±14.52*
Partly gentle	139	45.93±7.08	42.05±5.38	30.94±6.09	118.93±13.78
Not gentle	27	28.48±5.98	41.44±6.32	28.48±5.98	109.92±17.12
KW		15.630	20.710	39.719	35.342
p		0.001*	0.001*	0.001*	0.001*
Having education during hospitalization					
Yes	383	47.03±7.52*	44.10±4.90*	34.20±6.72*	125.00±14.85*
Partly	104	44.76±6.97	41.68±4.88	29.88±4.87	116.33±12.25
No	39	42.84±9.36	42.23±6.20	30.79±5.86	115.87±16.19
KW		9.514	25.581	44.563	36.515
p		0.009*	0.001*	0.001*	0.001*
Satisfaction with the care					
Yes	439	46.73±7.47*	44.00±4.72*	33.79±6.47*	124.55±14.36*
Partly	71	45.42±7.07	42.07±4.94	29.87±6.07	117.36±12.43
No	16	37.56±10.19	35.68±7.98	28.18±5.90	101.43±20.84
KW		12.091	26.677	30.331	31.229
p		0.002*	0.001*	0.001*	0.001*
General health status					
Very good	74	51.79±8.26*	46.02±4.04*	35.55±6.55*	133.37±14.72*
Good	247	46.86±7.12	43.78±4.70	33.16 ±6 .33	123.84±13.66
Not bad	186	44.21±6.34	42.31±5.39	32.30±6.62	118.83±13.80
Bad	19	37.36±8.57	41.26±6.67	30.47±7.29	109.10±18.86
KW		31.229	35.553	14.275	58.442
p		0.001*	0.001*	0.003*	0.001*
Effect of care on postpartum comfort					
Relieved	303	48.06±7.69*	44.66±4.35*	34.29±6.38*	127.04±13.96*
Partly relieved	197	44.10±6.56	42.07±5.40	31.79±6.46	117.97±13.85
Not relieved	8	40.50±9.97	37.12±8.20	32.25±7.20	109.87±23.38
Not relieved at all	18	42.50±9.14	41.94±5.79	27.72±6.06	112.16±16.64
KW		34.307	37.878	29.398	53.437
p		0.001*	0.001*	0.001*	0.001*

PCS: Postpartum Comfort Scale, SD: Standard deviation, MWU: Mann Whitney U test, KW: Kruskal Wallis test, * Significant

DISCUSSION

Obstetric characteristics of mothers can affect postpartum process positively or negatively. For this reason, obstetric characteristics of the mothers were evaluated according to the literature. In the study, it was determined that 66.2% of the mothers gave vaginal birth and 46% of them gave birth with episiotomy. In a study conducted at a university hospital, 41.5% of the mothers were found to give vaginal birth and 85.5% of them gave birth with episiotomy.[17] In a study conducted at a state hospital, 50.4% of mothers were found to give vaginal birth and 80% of them gave birth with episiotomy.[18] In a study conducted at a maternity hospital, 40.5% of mothers were found to give vaginal birth and 29.7% of them gave birth with episiotomy.[6] In Turkey, while caserean section rate was 53.1% in the same year, vaginal childbirth rate was higher in the study when compared to literature.[19] This is thought to be due to efforts to reduce cesarean delivery rates in the institutions where the study was conducted. The findings of the study are similar in terms of episiotomy rates.

84.4% of the mothers in the study planned their pregnancy. In similar studies, this rate was 78-80%.[20,21]

It was found that 11.2% of mothers had a quite easy birth, 73% had postpartum pain and 47% had good general health. In the study of Topçu Özer,[1] it was determined that 24% of mothers who gave vaginal birth and 22.7% of mothers who did cesarean section described their births as quaite easy. In the study of Aksoy Derya and Pasinlioğlu,[11] 48% of the mothers in the control group and 44% in the experimental group described the birth as good. In the study, the rate of mothers who described birth as difficult and quite difficult, and who had postpartum pain was high. It is thought to be due to the meaning assigned to birth in Turkish society. The beliefs in our society such as the more pain experienced during birth, the more woman will be considered a good mother, the belief that the baby's value will be understood more and the belief that the body will be cleaned as a result of these pains can increase the perception of pain during delivery and in postpartum period.[22]

In the study, it was found that 68.4% of the mothers stated that health professionals behaved quite gently, 72.8% had education during hospitalization, 83.5% were satisfied with the care and 57.6% were relieved after the given care. Similar to the results of the study in the literature, 90% of the midwives and nurses were satisfied with the care they gave during postpartum in the study of Gürcüoğlu and Vural,[17] 88% of them were satisfied in the study of Pınar et al.[3] 80% of them were satisfied-very satisfied in the study of Topçu Özer,[1] 92% of them were satisfied in the study of Mirzaei et al.[23] and different from our study findings, 39% of the mothers were moderately satisfied in the study of Varghese.[24]

Environmental comfort is a premise that can contribute to the healing process of the woman positively, which makes her feel better and can be considered as an indicator of postpartum health care and social support. In the study, more than half of the mothers (59.1%) stated that there was no noise in the environment, almost all (93.9%) stated that heating was sufficient and almost half of them (49.4%) stated that the ventilation was sufficient. Moreover, a significant number of mothers (90.3%) felt safe, more than half (69.2%) stated that their bed was comfortable, and most mothers (77.6%) stated that their relatives could easily visit. In the study of Pınar et al.[3] mothers stated that cleaning (96%) and privacy (92%) were good in the environment, in the study of Karakaplan[13] mothers stated that heating (77.3%), privacy (94.7%) and safety (90.7%) were good in the environment. Aksoy Derya and Pasinlioğlu[11] found that 68% of the mothers in the control group felt safe, 76% had comfortable beds, and 78% were satisfied with the environment (heat, sound, light, air and cleaning). The findings of our study are in parallel with most of the findings in the literature. Among the factors that reduce environmental comfort in the literature are cold environment, noise, crowd, bright light, bad smell, not respecting the privacy of the patient, stretchers and beds which are not comfortable.[1,13]

Postpartum period is a period of crisis in which significant physiological, emotional, social changes are experienced for many women, adaptation and comfort levels are impaired and family experience intense stress.[25] Therefore, it is important to determine the comfort levels of puerperants in the postpartum period, to determine the problems experienced by the mothers regarding the postpartum period, to plan and implement the appropriate care. The mean total score of the mothers from the PCS was 122.88 (SD 15.02) in the study, the minimum possible score from the PCS was 34 and the maximum score was 170. In other studies carried out in Turkey, it was determined that the comfort of mothers at birth was between 82-131 on average.[6,11,12,15,16] Although the research findings are similar to the literature, it can be said that mothers' postpartum comfort levels are at moderate level.

Mothers' mean scores from PCS subscales were 46.27 (SD 7.66) in physical comfort, 43.48 (SD 5.10) in psychospiritual comfort and 33.09 (SD 6.59) in sociocultural comfort. In the study of Karakaplan,[13] physical comfort was found to be 68.18 (SD 7.45) in mothers who gave vaginal birth, 61.65 (SD 4.22) in psychospiritual comfort, and 27.34 (SD 4.67) in sociocultural comfort. Çapık et al.[16] reported that mothers who gave vaginal birth received 45.61 (SD 7.65) from physical comfort, 38.20 (SD 4.66) from psychospiritual comfort, and 31.86 (SD 5.11) from sociocultural comfort. In the study of Aksoy Derya and Pasinlioğlu,[11] it was found that the mean score of the mothers in the control group was 52.38 (SD 5.19) in physical comfort, 43.92 (SD 4.78) in psychospiritual comfort and 34.76 (SD 2.70) in sociocultural comfort. In the study of Kartal et al.[6] the mean scores of mothers were 46.20 (SD 7.82) in physical comfort, 40.58 (SD 4.50) in psychospiritual comfort and 31.27 (SD 5.80) in sociocultural comfort. It can be said that physical, psychospiritual and sociocultural comfort levels of the mothers who participated in the study were at a moderate level and were similar to the literature.

Many factors affect the comfort level of mothers before and after delivery. Pregnancy is a source of happiness for parents when it takes place in the best possible time. Unwanted pregnancy and the increase in the number of children may cause psychological problems in pregnancy and postpartum periods, make it difficult for mothers to adapt to the postpartum period and affect the psychological dimension of their comfort.[16] Mothers who planned their pregnancy in the study had higher PCS mean scores. Similar to our study results, Çapık et al.[16] found the psychospiritual comfort levels of mothers who planned their pregnancy higher, whereas Topçu Özer[1] found that planning or not planning pregnancy did not have any effect on postpartum comfort level. In the study of Azizi et al.[26] it was found that the quality of life of the mothers who planned their pregnancy was higher. It is considered that planning of pregnancy is important for the acceptance of motherhood, positive maternal infant attachment and for coping with symptoms, and therefore the comfort level of the women who plan their pregnancy is higher than other women.

Postpartum pain is one of the most common complaints negatively affecting the comfort level of women. Bilgin and Kömürcü[27] reported that 62% of mothers who received only standard care without any additional intervention experienced pain in postpartum period. Francisco et al.[28] reported that 18.2% of mothers experienced perineal pain. Postpartum pain adversely affected the maternal well-being. Thus, physical comfort and total mean scores of mothers without postpartum pain were found to be higher.

The physical comfort mean scores of mothers who described their birth as easy and psychospiritual and total scale mean scores of mothers who described their birth as quite easy were higher than other groups. In the study of Karakaplan,[13] it was stated that the comfort scores of the mothers who defined their births in other ways were close to each other except for the mothers who defined their births as "a little difficult". This may be due to the fact that birth is considered as easy and postpartum complaints are less.

It was emphasized that caregivers were important in providing the comfort of women who gave birth.[29] In the study of Karakaplan.[13] it was stated that mothers' expectations from the midwives and nurses were positive attitudes and approaches, psychological support, being more concerned, being cheerful and respectful during the postpartum period. In the study, the physical, psychospiritual, sociocultural comfort and total scale scores of the mothers, who described health professionals' attitudes as quite gentle, were found to be higher.

Informing about postpartum process and providing timely and effective trainings for mothers are very important for them to feel safe, to experience less stress, to adapt more easily to the postpartum process and to better manage the problems that may arise. In the study, mothers who received education during the hospitalization period had higher psychospiritual, sociocultural comfort and total scale scores than the other mothers. In the study of Altuntuğ and Ege,[30] it was determined that education affected the readiness for discharge, reduced the possible difficulties that could be experienced in self care and infant care and increased postpartum quality of life. In the study of Takehara et al.[31] it was found that the spouses who were informed during the delivery and postpartum period had higher mental health and quality of life at the end of the birth. Çapık et al.[16] found that informing did not have any effect on postpartum comfort.

In order for the mother to feel comfortable, it is necessary to eliminate and control the pain in the early period, to meet the needs of the mother, to gain the normal eating habits, and to satisfy the needs of the baby.[3,16,32] Physical, psychospiritual, sociocultural comfort and total mean scores of the mothers who were satisfied with the care and who felt relieved thanks to postpartum care were significantly higher than the other groups. In the study of Topçu Özer,[1] it was found that the physical comfort levels of the mothers who were very satisfied with the care were higher. In the study of Karakaplan,[13] it was found that 38% of mothers stated that the care they received had a positive effect on their comfort and comfort levels of these women were higher than the other women. The research results are similar to the literature.

As a result of the regression analysis conducted in the study, it was found that there was a positive significant relationship between the mothers' PCS scores and their planned pregnancy. In studies, it has been found that planned pregnancy has affected the psychospritual comfort and quality of life of mothers in the postpartum period, but planned pregnancy positively affects the postpartum process in general.[13,16,26,33] Thus, mothers can have a more compatible and comfortable postpartum period.[34]

It is very important to meet the educational needs of the mother in order for them to adapt to the new situation physically and psychosocially in the postpartum period.[6] In the study, there was a positive significant relationship between mothers' having education during hospitalization and their PCS scores. In the study of Çelik et al.[35] mothers who had information about postpartum period were found to have better postpartum quality of life than other mothers, and in the study of Erkaya et al.[12] mothers who gave birth by cesarean and had education about postpartum care were found to have higher postpartum comfort levels.

In the study, there was a significant positive relationship between mothers' expressing their general health status very good/good and PCS scores. It is reported that mothers experience many health problems in the postpartum period depending on the labor. These problems prevent a healthy postpartum period, affect postpartum quality of life and postpartum compliance.[36] Since health is one of the most important values along with life satisfaction and well-being, it is thought that mothers expressing their health status good in the postpartum period also had a positive effect on their comfort.[37]

It is expected that initiatives to meet the health care needs that will provide the comfort of the individual in the provision of health services will increase the perception of comfort and decrease the tension of the individual.[38] In the study, it was determined that there was a significant positive relationship between the postpartum comfort of the care given to mothers and PCS scores. In the study of Aksoy Derya and Pasinlioğlu,[11] it was found that the care given to the puerperant in line with the comfort theory increased the comfort level by meeting their comfort needs. In line with our research findings, it is seen that providing midwifery care to the mother in the postpartum period facilitates compliance with this period, supports individual needs and increases postpartum comfort.[12]

CONCLUSION

As a result, evaluating mothers' comfort during the postpartum period and determining the affecting factors are important in terms of planning, implementing and evaluating midwifery services. In this respect, it can be recommended to inform and support the mothers during the prenatal, delivery and postpartum periods, to arrange the birth services in a way to increase comfort, and to show gentle approaches to mothers and their families.

Limitations

The items of environmental comfort are included in the sociocultural subscale in the development of PCS. Thus, PCS is limited in measuring environmental comfort. For this reason, questions related to environmental comfort have been added to the Personal Information Form.

A state hospital was requested to be included in the study but it could not be included since institutional permission could not be granted. This caused a decrease in the number of the population and sample, and reflects the province in a limited number.

ETHICAL CONSIDERATIONS

Ethics Comittee Approval: Prior to the research, Sivas Cumhuriyet University Non-Interventional Clinical Research Ethics Committee approval was obtained from the author's university ethics review board (Decision no: 2012-12/27). The study was carried out according to the principles of the Helsinki Declaration. Mothers were informed about the purpose and scope of the study and written informed consent was obtained from those who accepted to participate in the research

Informed Consent: Written informed consent was obtained from all participants who participated in this study.

Status of Peer-review: Externally peer-reviewed.

Conflict of Interest Statement: The authors have no conflicts of interest to declare.

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