

## Determination of the life quality and self-care ability of the mothers in post-partum period

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### Abstract

**Objective:** To determine the life quality and self-care ability of mothers in the post-partum period.

**Methods:** This descriptive study was conducted at a family health centre based in Kars Province of Turkey from May to September 2015, and comprised mothers who were in the post-partum period. Personal information form, maternal post-partum quality of life questionnaire and self-care ability scale were used to collect data. SPSS was used for data analysis.

**Results:** There were 290 participants with a mean age of  $26.81 \pm 6.21$  years (range: 16-45 years). Mean scores for sub-dimensions in the maternal post-partum quality of life questionnaire were recorded at  $19.00 \pm 6.23$  for affinity/family/friend,  $21.05 \pm 6.10$  for socio-economic,  $20.79 \pm 5.97$  for spouse,  $20.56 \pm 6.23$  for health, and  $19.86 \pm 6.21$  for psychological/baby. The total maternal post-partum quality of life mean score was  $20.17 \pm 5.51$ . The mean score for the self-care ability scale was  $84.56 \pm 21.39$ .

**Conclusion:** The self-care ability and post-partum life quality were substantially affected by educational status, economic condition, family type and post-partum week.

**Keywords:** Post-partum period, Life quality, Self-care ability. (JPMA 68: 210; 2018)

### Introduction

Post-partum period is a term in which a new member participates in the family and a new order is established. In this period, the mother complies with being pregnant, the new order and changes in body images.<sup>1,2</sup> Furthermore, the mothers may have physical and psychological problems such as breast problems, infection, insomnia, fatigue, stress, haemorrhoid, feeling of inadequacy in the care of the newborn baby, inconsistency, post-partum depression.<sup>1-4</sup> All these problems regarding post-partum period may affect the life quality of mothers negatively.<sup>5-7</sup> In a study conducted to examine the post-partum life qualities of mothers and determine related factors, Sis Celik et al. identified that the post-partum life quality of the mothers are on intermediate level.<sup>8</sup> Altuntug and Ege found that education affects the post-partum life quality positively.<sup>9</sup>

Orem defined self-care ability as "the activities initiated and done by individuals in order to maintain their lives, health and well-being".<sup>10</sup> Mothers need self-care ability on an adequate level in order to sustain the health of both themselves and their babies. There are several studies in the literature dealing with the relationship between life

quality and self-care ability.<sup>11-15</sup> All of these studies point out that there is a relationship between life quality and self-care ability. In a study Orem's self-care model was implemented on women in the post-partum period, and found that the care that was attached prevented post-partum complications and increased self-care ability.<sup>4</sup>

In the post-partum period in which significant physical and psychological changes are observed, the assessment of self-care, which is one of the elements which may be related to the life quality of mothers, might be a guide in planning the nursing care that will be provided in the post-partum period. The current study was planned to identify the life quality and self-care ability of mothers in the post-partum period.

### Subjects and Methods

This descriptive study was conducted in a family health centre based in Kars Province of Turkey from May to September 2015, and comprised mothers who were in the post-partum period. Data was collected during face-to-face meetings.

A power analysis was conducted before the study to determine sample size. The points of "post-partum life quality" and "self-care ability" were used as a reference, similar to previous studies.<sup>3,8</sup> As a result of the power analysis that was conducted by considering alpha ( $\alpha$ )= 0.05, power (1- $\beta$ )= 0.80 and deviation 5%, the minimum sample size was calculated at 260. Mothers who were in the 4th or 6th week of the post-partum period, whose

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infant was born maturely, who did not have any loss of sense related to speaking and hearing, who did not receive any psychiatric diagnosis, who did not have any chronic disease and who accepted to participate were included in the study.

A personal information form involving the informative features of the mothers, maternal post-partum quality of life (MPQOL) questionnaire and self-care ability scale were used for collecting data.

The personal information form comprised questions that aimed to identify age and educational status of the participants, and to determine the type of birth, number of children born, working and economic condition and the family type.

MPQOL has been improved by Hill et al, and validity and reliability of the Turkish form has been conducted by Altuntug and Ege.<sup>16</sup> MPQOL is composed of five sub-dimensions and 40 items. Every single item questions the importance and satisfaction of MPQOL for people. The items are planned in a Likert-type scale between "1" and "6". Sub-dimensions of the scale related to affinity-family-friend (10 items), socio-economic (9 items), spouse (5 items), health (8 items) and psychological/baby (8 items). In order to calculate the points of the life quality scale, 3.5 was subtracted from each satisfaction item ranging between 1 and 6 (in this way, the numbers were calculated as -2.5, -1.5, -0.5, 0.5, 1.5 and 2.5) and then they were multiplied by the significance point of the same item. The points obtained after the operation were added and they were divided into scale question number (40 items), and in order not to form a negative result, a fixed value of 15 was added to the number found after division, and the result was finalised. In this way, Life Quality Score was calculated between 0 and 30. The post-partum life quality improved with the increase in points received from the scale, and vice versa. Cronbach's alpha reliability coefficient was 0.95 in the validity and reliability study of the scale.<sup>16</sup> In this study, the coefficient was 0.98.

The self-care ability scale is used to measure an individual's power of providing self-care for herself/himself or self-care ability. Improved by Kearney and Fleischer in 1979, the scale was adapted by Nahcivan in Turkey and its validity and reliability were conducted.<sup>17</sup> It is a five-point Likert-type scale and is composed of 35 items. Each expression is graded from 0 to 4, and they have been classified as follows: 0 (it is not defining me), 1 (it is not defining me much), 2 (no idea), 3 (it defines me a little) and 4 (it defines me very well). Eight expressions in the scale (items no. 3, 6, 9, 13, 19, 22, 26 and 31) are

evaluated as negative/unfavourable, and grading is reversed. The maximum score to be received from the scale is 140. Higher score reflects better self-care ability, and vice versa. Alpha's reliability coefficient of the scale has been recorded to be 0.89.<sup>18</sup> The coefficient was 0.92 in this study.

SPSS 21 was used for data analysis. Analysis of variance (ANOVA), t-test, Kruskal-Wallis test, Mann-Whitney U test, Tukey's range test and Pearson correlation analysis were conducted to evaluate the data.  $P < 0.05$  was considered significant.

Approval for the study was obtained from the Directorate of Public Health of Kars Province and the ethics committee of the Faculty of Medicine at the Kafkas University. re re Informed consent was also obtained from the subjects.

## Results

Of the 290 participants, 42(14.1%) were aged 42 years

**Table-1:** Informative and Obstetric Features of the Mothers (n=290).

Informative Features	Number (n)	Percentage (%)
<b>Age (years)</b>		
19 and below	42	14.1
20-30	171	59.3
31 and over	77	26.6
<b>Educational status</b>		
Primary school graduate	132	45.5
Secondary school graduate	76	26.2
High school graduate	51	17.6
High school graduate	31	10.7
<b>Employment Status</b>		
Yes	41	14.1
No	249	85.9
<b>Economic Condition</b>		
Income is equal to expense	138	47.6
Income is less than expense	109	37.6
Income is more than expense	43	14.8
<b>Family Type</b>		
Elementary family (mother, father and children)	121	41.7
Extended family (parents, children, grandparents)	169	58.3
<b>Type of birth</b>		
Vaginal	242	83.4
Caesarean	48	16.6
<b>Number of children</b>		
1	106	36.6
2	66	22.8
3	51	17.6
4 and over	67	23
<b>Postpartum period (week)</b>		
4	142	49
5	76	26.2
6	72	24.8

**Table-2:** Point Average Distribution of the Mothers' MPQOL and Self-care Ability Scale (n=290).

Maternal Postpartum Quality of Life Sub-dimensions and Self-care Ability Scale	$\bar{x} \pm SS$
Affinity/Family/Friend	19.00±6.23
Socioeconomic	21.05±6.10
Spouse	20.79±5.97
Health	20.56±6.23
Psychological/Baby	19.86±6.21
Total MPQOL Point	20.17±5.51
Self-care Ability	84.56±21.39

MPQOL: Maternal post-partum quality of life.

or below, 171(59.3%) were in the 20-30 age group and 77(26.6%) were 31 years old or above. The overall mean age was 26.81 6.21 years (range: 16-45 years).

Moreover, 132(45.5%) participants were primary school graduates, 249(85.9%) were unemployed and 109(37.6%) could not meet their expenses with their income. Besides, 169(58.3%) mothers lived in an extended family. Also, 242(83.4%) mothers had delivered vaginal birth, 106(36.6%) had a single child, and 76(26.2%) of them were in the fifth week of the post-partum period (Table-1).

The examination of mothers' post-partum quality of life revealed that the mean score of the affinity/family/friend sub-dimension was 19.00±6.23 points, that of socio-economic sub-dimension was 21.05±6.10, spouse 20.79±5.97, health 20.56±6.23, and that of psychological/baby sub-dimension was 19.86±6.21. The total mean score of MPQOL was 20.17±5.51 and that of self-care ability scale was

**Table-3:** Comparison of MPQOL and Self-care Ability Scale Point Averages Depending on Informative and Obstetric Features of the Mothers (n=290).

	n	MPQOL $\bar{x} \pm SS$	Test and p Value	Self-care $\bar{x} \pm SS$	Test and p Value
<b>Age (years)</b>					
19 and below	42	19.45±6.31		79.85±22.16	F=1.440
20-30	171	20.35±5.29	F=0.39	86.02±22.28	p=0.239
31 and over	77	20.18±5.58	p=0.645	83.83±18.28	
<b>Educational status</b>					
Primary school graduate	132	19.65±5.00 <sup>a</sup>		80.59±19.04 <sup>a</sup>	F=6.169
Secondary school graduate	76	19.19±5.78 <sup>a</sup>	F=5.326	83.25±22.55 <sup>a</sup>	P=0.000
High school graduate	51	21.08±6.44	p=0.000	89.37±22.83	
High school graduate	31	23.35±3.92 <sup>b</sup>		96.80±20.47 <sup>b</sup>	
<b>Employment status</b>					
Yes	41	21.75±4.95	t=1.963	89.66±21.97	t=1.650
No	249	19.92±5.57	p=0.051	83.73±21.23	p=0.100
<b>Economic Condition</b>					
Income is more than expense	43	22.66±5.11 <sup>a</sup>		92.23±23 <sup>a</sup>	
Income is less than expense	109	19.48±5.87 <sup>b</sup>	F=5.519	83.35±35 <sup>b</sup>	F=3.465
Income is equal to expense	138	19.95±5.15 <sup>b</sup>	p=0.004	83.93±93	P=0.033
<b>Family Type</b>					
Elementary family	121	21.79±5.43	t=4.358	90.52±22.33	t=4.120
Extended family	169	19.02±5.29	p=0.000	80.30±19.69	p=0.000
<b>Type of birth</b>					
Vaginal	242	20.39±5.52	t=1.445	147.05	Z=5434.00
Caesarean	48	19.13±5.38	p=0.149	137.71	p=0.481
<b>Number of child</b>					
1	106	21.19±5.47		154.98	
2	66	20.18±5.45	F=2.500	142.94	KW=4.363
3	51	18.84±5.28	p=0.06	125.58	p=0.225
4 and over	67	19.58±5.62		148.19	
<b>Postpartum period (week)</b>					
4	142	21.59±5.52 <sup>a</sup>	F=9.768	90.01±22.39 <sup>a</sup>	F=9.629
5	76	18.96±5.05 <sup>b</sup>	p=0.000	78.72±19.44 <sup>b</sup>	p=0.000
6	72	18.68±5.32 <sup>b</sup>		79.99±18.76 <sup>b</sup>	

There is a meaningful difference in the same column between different thumb indexes.

MPQOL: Maternal post-partum quality of life.

84.56±21.39 (Table-2).

There was a significant positive relationship between the sub-dimensions of self-care ability and affinity/family/friend on intermediate level ( $r=0.473$ ;  $p=0.000$ ). A positive and strong relationship was found between the sub-dimensions of socio-economic, spouse, health, psychological/baby and total MPQOL scale ( $r=0.599$ ,  $r=0.548$ ,  $0.648$ ,  $r=0.577$ ,  $r=0.634$ ;  $p=0.000$ ).

A meaningful difference was found between the means score of MPQOL and self-care ability scale depending on the educational status of the mothers ( $F=5.326$ ;  $p=0.000$ ;  $F=6.169$ ;  $p=0.000$ , respectively).

The highest mean score was found in the group whose income was more than their expenses. Moreover, there was a meaningful relationship between the mean score of MPQOL and self-care ability scale based on the economic status ( $F=5.519$ ;  $p=0.004$ ;  $F=3.465$ ;  $p=0.033$ , respectively). The MPQOL mean score was 21.79 5.43 for people who lived in an elementary family, and 19.02 5.29 for people who lived in an extended family. Self-care ability mean score was 90.52 22.33 for people who lived in an elementary family, and 80.30 19.69 for people who lived in an extended family. There was a meaningful difference between the mean scores of MPQOL and self-care ability scale depending on the type of family ( $p=0.000$ ).

A meaningful difference was found between the post-partum week of mothers and the mean scores of MPQOL and self-care ability scale ( $p=0.000$ ). With respect to MPQOL and self-care ability scale, this difference resulted from the comparison of the mothers who were in the fourth week of the post-partum period and those who were in fifth or sixth week (Table-3).

## Discussion

The findings of the current study are expected to help health professionals increase self-care ability and life quality of mothers.

The total MPQOL mean score of the mothers who participated in this study was 21.17, whereas the mean score of sub-dimensions (affinity/family/friend, socio-economic, spouse, health, psychological/baby) was in the range of 19.00 and 20.79. A study conducted by Sis Celik et al. found a similar score, putting the life quality of mothers at 16.85 in the post-partum period.<sup>8</sup>

The mean score of self-care ability scale was found to

be 84.56. A study found the mean post-partum self-care ability score of the mothers who were in the 42nd day of the post-partum period and who had a Caesarean to be 118.07.<sup>3</sup> The score was higher as compared to the current study as only 28.3% participants in our study had an educational status of high school or above versus 57.1% in the other study.<sup>3</sup>

A positive relationship was found in our study between self-care ability and post-partum life quality. Similar to our findings, other studies also found a positive relationship between self-care ability and life quality. Altiparmak found a positive relationship between self-care ability and life quality among pregnant women.<sup>12</sup> Altiparmak et al. emphasized the importance of improving self-care ability in order to increase the life quality of cancerous patients.<sup>11</sup> Hashemi et al. expressed that the Orem self-care programme increases the life quality.<sup>13</sup> Alemdar and Cinar Pakyüz revealed that self-care ability increases life quality among haemodialysis patients. Tel et al. found a positive relationship between self-care ability and life quality among elder people having osteoarthritis.<sup>15,19</sup>

A meaningful relationship between the point averages of MPQOL and self-care ability scale was found depending on the educational status of mothers. There are studies in the literature demonstrating that high education levels increase life quality and self-care positively, similar to the findings of our study.<sup>8,12,20-24</sup>

In the current study, a comparison of the mean score of MPQOL and self-care ability scale showed that the highest mean score belonged to the group whose income was higher than expenses. A meaningful difference was detected between the mean scores of MPQOL and the self-care ability scale depending on the economic status of the study group. It is believed that the accessibility to physical resources that will affect life quality and self-care ability positively may increase with the increase of income level. There are studies in the literature demonstrating that the rising income level affects the life quality and self-care ability positively. Bodhare et al. expressed that there has been a positive relationship between socio-economic status and life quality on an important level according to the studies conducted on 274 mothers who are in the 6th or 8th week of the post-partum period.<sup>25</sup> Similar to our findings, another study found that the self-care ability also increases with the rising income level.<sup>12</sup> In their study

conducted on elder people, Bilgili and Arpacı determined that the people who do not have economic problems have a much higher life quality score than the people who have economic problems.<sup>26</sup> Zengin et al. revealed that as the income level increases, so does the life quality according to their studies in which life qualities of haemodialysis patients have been evaluated.<sup>24</sup> Muz and Eglence concluded that the mean scores of self-care ability scale increase as the income level of haemodialysis patients rise.<sup>22</sup>

In the current study, the mean scores of MPQOL and self-care ability were found to be higher among participants living in elementary families in comparison with those living in extended families. In a similar manner, both life quality and self-care ability points of the women living in elementary families were higher than those living in extended families.

A substantial difference was found between maternal post-partum week, the point averages of MPQOL and self-care ability power. With respect to MPQOL and self-care ability scale, this difference resulted from the comparison of mothers who are in the fourth week of the post-partum period and those who are in the fifth or sixth week of the post-partum period. This is perhaps due to the increasing workload on each passing day, their further participation in child and home care and the fact that the social support received from outside reduces as the birth week passes. Sis Celik et al. found that mean scores of life quality in the fourth post-partum week were higher in comparison with the 5th and 6th week, though there was no substantial difference between them.<sup>8</sup>

## Conclusion

((The self-care ability and post-partum life quality were substantially affected by the educational status, economic condition, family type and post-partum week. A positive relationship was found between self-care ability and MPQOL.

It is recommended that future studies should identify the factors affecting life quality and self-care abilities of women, offer services aimed at increasing the life quality and self-care of women in the post-partum period, and include different groups apart from our inclusion criteria.

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