The Prevalence of Postpartum Depression and the Correlation of Perceived Social Support and Quality of Life with Postpartum Depression: A Longitudinal Study

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Objective: Postpartum depression (PPD) has negative effects on the mothers who experience it. The aims of the study described herein were to determine the prevalence of PPD and to determine the correlations between PPD and perceived social support, quality of life, and the risk factors for PPD.

Methods: Data were collected using a questionnaire prepared by the researchers and that included the Edinburgh Postnatal Depression Scale, the Beck Depression Scale, the Quality of Life scale, the Multidimensional Scale of Perceived Social Support, and questions regarding the sociodemographic characteristics and PPD risk factors of the mother.

Results: The prevalences of PPD were found to be 3.9% in the 4th week postpartum and 5.9% in the 6th week postpartum. Being a primary school (and no higher) graduate, being stressed in daily life, experiencing health problems during the delivery and the postpartum period, and not thinking of oneself as a good mother were all determined to be risk factors for PPD. Although the mean score for social support was higher in women with low PPD risks, this difference was not significant. According to a linear regression model, PPD negatively affected the social and psychological qualities of life of the mothers in the 4th week postpartum.

Conclusion: Along with a trend suggesting a correlation between high social support and low PPD risk in women, a correlation between low PPD risk and high quality of life was also found. [PR Health Sci J 2020;39:327-335]

Key words: Postpartum depression, Quality of life, Social support

The prevalence of depression in women in developing countries varies from 15% to 50% (1,2). For those who are parous or pregnant, the physiological, psychological, and social changes associated with their pregnancies or deliveries are usually manageable; some others, however, are prone to developing mild to severe mental illness (3). Postpartum depression (PPD) is a mental disorder that can have serious consequences for both the mother and the child (1,2,4–6). Untreated PPD can result in the occurrence of cognitive, behavioral, social, or psychological (or any combination of 2 or more of the previous) problems in the child (1,2,5,7).

In different countries, the prevalence of depression in PPD studies varies from 5.8% to 24.0%, depending on the measurement tools used in the study, the diagnostic criteria, and the week in which the postpartum measurement is performed (8–15). The PPD studies conducted in Turkey, in which studies the Edinburgh Postnatal Depression Scale (EPDS) was used, differed: Some were conducted in pregnant women, and some were conducted in parous women in different postpartum weeks (16–18). In the studies conducted in Turkey, the prevalence of PPD varied from 12.5% to 40.9% (5,17,19–29).

PPD can negatively affect the social life of the mother as well as her marital relationship, self-confidence in child care, and relationships with other children and individuals. In women with PPD, the symptoms can generally be seen within the first 12 weeks postpartum. If mothers with PPD are not treated, their depression may last for up to 1 year after they give birth (3). When PPD arises in a new mother, not only might the child or mother (or both) be affected but so might family members. Difficulties in the emotional relationship of the mother and child, in the mother’s learning to care for her infant, and with the parental role are among the possible manifestations of PPD (5,6,8). Being of low socioeconomic status, being single, having...
had an unplanned or undesired (or both) pregnancy, having a poor marital relationship, having low social support, the unstable mood of the mother, having low self-confidence, suffering from general stress, suffering from, childcare-related stress, and having had a high level of anxiety in the prenatal period can cause (or worsen existing) PPD in the mother (1,2,6,30).

Sometimes the particular social or physical (or both) problems of a postpartum mother make diagnosing PPD a challenge (4,30,31). Patients with PPD usually do not present at a psychiatry clinic. For this reason, primary care personnel have an important role in the diagnosis of PPD. Family physicians and family midwives and nurses are the health professionals who are most frequently visited by mothers in the postpartum period. Even if a mother does not go for herself, she usually visits the family physician 5 or 6 times a year to have her child vaccinated. The diagnosis and screening of the mother is important for community health and protection, as the mother is observed, questioned, and referred to a specialist when certain signs are recognized (4,7,10). According to the Postpartum Care Management Guide of the General Directorate of Mother and Child Care and Family Planning of the Ministry of Health in Turkey, the psychological state of the mother should be assessed in the 6th week postpartum. The guide states that in cases in which a mother has a known history of psychological disease, the mother should be referred to the relevant department, as there might be a possibility of a psychotic disorder (schizophrenia, bipolar disorder), psychotic depression, or suicide; in such cases, the EPDS should be used to measure risk (32). Paying attention to perinatal psychotic disorders in primary care settings and applying various screening and depression risk assessment tests, such as the EPDS, provides opportunities for the early treatment of depressed mothers (4,5,10).

Social support includes all kinds of material and moral support provided by the social circle of the individual. Social support in the postpartum period includes support for infant care and responsibility, support for domestic affairs, and the social and emotional support of the mother by her circle, including her husband, family, and friends (1,2,7,24). In studies on this topic, it has been observed that social support decreases the incidence of PPD by increasing maternal self-confidence (1,2,21,23,24).

PPD negatively affects the quality of life of the mother (7). Although there have been numerous studies in Turkey focusing on PPD and its risk factors (5,13,15–17,19–25,29), there are a limited number of studies examining the effect of PPD on quality of life (5). In this study, we aimed to determine the prevalence of PPD and to determine the correlations between PPD and perceived social support, quality of life, and risk factors.

Materials and Methods

In this prospective study, the 317 women who visited the obstetrics clinic of Balıkesir Atatürk State Hospital in the 3rd trimester of their pregnancies constitute the cohort group. A total of 4500 pregnant women were attended at the hospital in 2014 and were identified as the sample population. The smallest sample size for the study was calculated using the program OpenEpi, version 3 (33). In Turkey, in the study by Durukan et al. (5), the frequency of depression in women who did not have social support (spousal support) during pregnancy was 24.8%. Thus, the smallest sample size was determined to be 182 people at the level of 95% power and 95% confidence. In the 1-year period during which the study was conducted, 355 women who were at 38 weeks of gestation agreed to participate. Seventeen women with Beck depression scores above the cutoff point were excluded from the study. Nineteen pregnant women who were in the postpartum period and whose data were missing, 1 woman who had had a stillbirth, and 1 woman whose infant had died were excluded from the study. Thus, 317 women participated in the study.

Inclusion and Exclusion criteria

The study included pregnant women who were at 38 weeks of gestation and who could communicate properly, had volunteered to participate in the study, were literate, who had participated in the antenatal assessment, and who had agreed to take part in 4 follow-up assessments. Pregnant women who did not want to participate in the study; who had a Beck Depression Scale (BDS), Turkish version, score above 17; and who had experienced a stillbirth or an infant death or who suffered from mental retardation, a psychotic illness, or an organic illness were excluded from the study.

Data collection tools

Data were collected using a questionnaire intended to determine the sociodemographic characteristics of the mother and the infant and of the risk factors for PPD, the EPDS, the Multidimensional Scale of Perceived Social Support (MSPSS), the WHO-derived quality of life scale known as the WHOQOL-BREF, and the BDS. The women were evaluated 4 times: in the 38th week of gestation and in the 2nd, 4th, and 6th weeks postpartum. The data were collected using face-to-face interviews (Table 1).

Questionnaire

This questionnaire was developed by the researchers, based on the literature. The questionnaire elicited the sociodemographic characteristics of the mother and infant, information about the pregnancy and birth and any problems encountered by the mother, the mother’s history of psychiatric disease (if present), the mother’s perceptions and behaviors regarding infant care, and questions regarding antenatal and postnatal care services.

EPDS

This scale, developed by Cox and Holden, is used to measure the risk of depression and to measure its levels and the changes (when present) in its intensity during the postpartum period. It is a 4-point Likert-type self-assessment scale consisting of 10 items. The EPDS is not a diagnostic scale, but is used for
screening purposes (34). The cut-off point of the scale is 12 to 13 (35). The scale was translated into Turkish, and the validity and reliability tests were conducted by Engindeniz et al., and the Cronbach’s alpha coefficient of the scale was found to be .79 (35). In the study, the cut-off point was considered to be 13, with women scoring 13 points or more being considered at risk of PPD.

MSPSS
This scale was developed by Zimmet et al. It subjectively assesses the adequacy of social support, that support coming from 3 different sources (36). This scale consists of 12 items divided into 3 subscales: support from family, support from friends, and support from a significant other. Each subscale has 4 items. Each item is rated using a 7-point Likert-type scale. A high score indicates that the perceived social support is high (36,37,38). Eker et al. translated the scale into Turkish and conducted validity and reliability tests on it. The Cronbach’s coefficient of the MSPSS sub-scales ranged from .80 to .95 (37,38). WHOQOL-BREF. This scale developed by the WHO enables intercultural comparisons that assess an individual’s well-being and quality of life (39). The scale was translated into Turkish (WHOQOL-BREF-TR), and a validity and reliability study was conducted by Eser et al. The Cronbach’s coefficient of the 4 dimensions, namely, physical health, psychological health, social relationships, and environmental health, were .83, .66, .53, and .73, respectively. The original version of the scale consists of 26 items, and the Turkish version consists of 27 items (40). The WHOQOL-BREF scale includes 2 general questions that measure the general perceived quality of life and perceived health status and 4 subscale scores. Scores for the physical health subscale, psychological health subscale, social relations subscale, and environmental subscale are evaluated. Responses to the questions include close-ended answers in a 5-point Likert scale. The higher the scale score obtained, the better the quality of life (39,40).

BDS
This self-reporting tool was developed by Beck et al. and is the most widely used depression-measurement tool, worldwide (41). It was developed to measure the risk of depression, the level of depressive symptoms, and the change in intensity of depression in adults. A high total score indicates a high level of depression (41). The BDS was translated into Turkish by Hisli, and the reliability coefficient of that Turkish version was reported to be .74 (42). In the Turkish validity and reliability study of the BDS, the cut-off point was determined to be 17, as scores of 17 or more identify depression requiring treatment with an accuracy of 90% or more (42).

Data collection
The data were collected by the researchers from pregnant women who came to the antenatal clinic for their routine follow-ups. The participants were taken to the interview room, and the purpose of the study was explained to them by the researchers. Participants were informed that they were free to participate in the research and that their names and data would be kept confidential within the scope of that research. Pregnant women who agreed to participate in the study signed the informed consent form. While the participants were under observation, the questionnaires were filled out and—together with the researchers’ remarks about the process—collected, each questionnaire took approximately 10 minutes to complete. Additional data were collected in follow-up phone calls in the 2nd, 4th, and 6th weeks after birth. Nineteen participants could not be contacted by phone (3 tries); their uncollected responses were categorized as missing data.

Statistical analysis
Statistical analysis was performed using the SPSS 20.0 statistical package program. The correlations between PPD and the risk factors were assessed using the chi-square and Fisher’s exact tests, and the correlation between the MSPSS and the WHOQOL-BREF-TR subscale scores was assessed using
Mann–Whitney U tests. The correlations between the EPDS score and the WHOQOL-BREF and MSPSS subscales were determined using Pearson’s correlation analysis. A p-level of less than 0.05 was considered statistically significant.

Ethics

Approval to conduct the study was received from the Balıkesir University Faculty of Medicine Clinical Trials Ethics Committee (reference number: 2015-07). After the approval of the Ethics Committee was received, official permission were obtained from the institution where the study was conducted.

Results

A total of 317 women participated in the study. The average age of the women was 28.27 (±5.22) years; 78.5% were housewives and 42.3% were primary school (and no higher) graduates. When obstetric characteristics were assessed, 55% stated that they had had a vaginal delivery, 47% were nulliparous prior to their current pregnancy and birth, and 3.2% had had health-related problems during the delivery, the postpartum period, or both. In addition, 2.2% had been exposed to physical, emotional, or sexual (or a combination of any 2 or all 3) violence from their husbands (Table 2).

PPD prevalence in the 4th and 6th weeks postpartum

Antenatal-depression prevalence was found to be 5.4% (95% CI: 3.2–7.6). The prevalence of PPD was found to be 5.9% (95% CI: 3.3–8.5) in the 4th week and 3.9% (95% CI: 2.0–6.2) in the 6th week postpartum. Of the women whose score on the EPDS was 13 or more in the 4th week, 88.8% had a score under 13 by the 6th week. The percentage of women who were not determined to be at risk of PPD in the 4th week but were at risk in the 6th week was 83.3%. There was no significant difference in the PPD risk mean scores between the 4th week (mean±SD: 5.34±3.82) and 6th week (mean±SD: 5.36±3.27; p>0.05; data not shown).

There was a significant correlation between EPDS and the perception of stress in daily life at the end of the 4th week postpartum (p<0.002). In the 6th week postpartum, the women who had primary school educations, only; had experienced health problems during the birth, the postpartum period, or both; and had low self-perceived levels of parental competency had significantly higher PPD risks (p<0.05). No significant relationships were found between PPD and the gender of the infant, the delivery method, the number of deliveries, the method of infant feeding, or having a history of psychiatric disease (Table 3). Together with the variables given in Table 3, correlations between monthly salary; marital satisfaction; husband-inflicted violence (if applicable); the self-perception of familial relationships; the pregnancy’s having been planned (or not); the mother’s having received qualified antenatal care; the mother’s having a history of chronic or acute disease; the length of time between deliveries (for multiparous women); the presence of adequate infant care; the mother’s receiving or having received psychiatric treatment; the mother’s having had mental problems during previous deliveries; and whether the infant had any health problems were also considered. However, there were no significant correlations between these variables and PPD risk.

When the correlations between the EPDS score and the subscale scores of quality of life were assessed, a negative, low, and significant correlation was found between the social quality of life (r = -0.16; p = 0.003) and psychological quality of life (r = -0.13; p = 0.017) subscales in the 4th week postpartum. No significant correlation was found between MSPSS and the PPD risk, as measured in the 4th week postpartum. A negative, low, and significant correlation was found for the friend subscale of MSPSS and PPD in the 6th week postpartum (r = -0.15; p = 0.017) subscales in the 4th week postpartum. No significant correlations between these variables and PPD risk.

Despite the low level of perceived social support in the group at risk for PPD, this difference was not significant (Table 4). The mean score of perceived quality of life in the group at risk
for PPD was observed to be lower, in general. However, no significant difference was found between the WHOQOL-BREF-TR quality of life mean score and the PPD score (Table 5).

When the distribution of MSPSS subscale scores was examined across the 2nd, 4th, and 6th weeks postpartum, the MSPSS family subscale mean score was higher than those of the other subscales (25.68 in the 2nd week, 24.78 in the 4th week, and 24.81 in the 6th week; Figure 1).

Discussion

In the world, 13% of women suffer from a psychiatric disorder, especially depression, during the postpartum period. The incidence of depression in the postpartum period is 20% higher in developing countries (43). The incidences of PPD in this study were found to be 3.9% and 5.9%, respectively, via 2 separate evaluations made in postpartum weeks 4 and 6. In this study, the prevalence of PPD was low compared to those described in the WHO data and found by other studies conducted in Turkey (5,43,44). In the study of Ogbo et al., the PPD prevalence in postpartum week 6 was

Table 3. The relationships between the risk factors and prenatal depression (EPDS) score

<table>
<thead>
<tr>
<th>Variable</th>
<th>PPD at 4th Week</th>
<th></th>
<th>PPD at 6th Week</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤12</td>
<td>≥13</td>
<td>p</td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Level of education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary/Primary</td>
<td>123</td>
<td>91.8</td>
<td>11</td>
<td>8.2</td>
</tr>
<tr>
<td>High school/Secondary</td>
<td>176</td>
<td>96.2</td>
<td>7</td>
<td>3.8</td>
</tr>
<tr>
<td>and college/University</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender of the baby</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>157</td>
<td>94.0</td>
<td>10</td>
<td>6.0</td>
</tr>
<tr>
<td>Female</td>
<td>142</td>
<td>94.7</td>
<td>8</td>
<td>5.3</td>
</tr>
<tr>
<td>Type of delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal</td>
<td>165</td>
<td>93.8</td>
<td>11</td>
<td>6.2</td>
</tr>
<tr>
<td>Caesarean section</td>
<td>134</td>
<td>95.0</td>
<td>7</td>
<td>5.0</td>
</tr>
<tr>
<td>Number of deliveries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primaparous</td>
<td>159</td>
<td>95.8</td>
<td>7</td>
<td>4.2</td>
</tr>
<tr>
<td>Multiparous</td>
<td>140</td>
<td>92.7</td>
<td>11</td>
<td>7.3</td>
</tr>
<tr>
<td>Infant feeding method</td>
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<td></td>
<td></td>
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<tr>
<td>Breastfeeding</td>
<td>256</td>
<td>93.4</td>
<td>18</td>
<td>6.6</td>
</tr>
<tr>
<td>Breastfeeding supplemented with formula</td>
<td>43</td>
<td>100.0</td>
<td>0</td>
<td>0.0</td>
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<tr>
<td>History of psychiatric disease</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>80.0</td>
<td>2</td>
<td>20.0</td>
</tr>
<tr>
<td>No</td>
<td>291</td>
<td>94.8</td>
<td>8</td>
<td>80.0</td>
</tr>
<tr>
<td>Perceives herself to be stressed in daily life</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>82</td>
<td>88.2</td>
<td>11</td>
<td>11.8</td>
</tr>
<tr>
<td>No</td>
<td>217</td>
<td>96.9</td>
<td>7</td>
<td>3.1</td>
</tr>
<tr>
<td>Experienced health problem during birth and in the postpartum period</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>285</td>
<td>94.4</td>
<td>17</td>
<td>5.6</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>87.5</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>Thinks of herself as a good mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>281</td>
<td>94.3</td>
<td>17</td>
<td>5.7</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>85.7</td>
<td>1</td>
<td>14.3</td>
</tr>
</tbody>
</table>

*p Fisher’s exact test

Table 4. The relationship between perceived social support (MSPSS) and prenatal depression (EPDS)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Risk of PPD at 4th Week</th>
<th>Risk of PPD at 6th Week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤12 Mean (SD)</td>
<td>≥13 Mean (SD)</td>
</tr>
<tr>
<td></td>
<td>p*</td>
<td>≤12 Mean (SD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>≥13 Mean (SD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>p*</td>
</tr>
<tr>
<td>Family support</td>
<td>24.87 (3.79)</td>
<td>23.22 (4.76)</td>
</tr>
<tr>
<td>Friend support</td>
<td>21.91 (5.36)</td>
<td>20.05 (6.22)</td>
</tr>
<tr>
<td>Significant other</td>
<td>20.82 (6.76)</td>
<td>20.33 (6.87)</td>
</tr>
<tr>
<td>Total</td>
<td>67.60 (33.33)</td>
<td>63.61 (15.02)</td>
</tr>
</tbody>
</table>

*Mann–Whitney U test

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found to be 3.3% (45). The variances in the PPD incidences specified in the literature are caused by the study design being used, the time of the assessment (i.e., performed in different postpartum periods), the sample volume and population differences, the unwillingness of some mothers to admit to experiencing depressive symptoms to healthcare providers, and the differences in the measurement of depressive symptoms. The “baby blues,” often seen in the first week postpartum, can be confused with PPD and may lead to misleading results; the EPDS was given in the 4th postpartum week. The difference between the PPD incidence result of this study and the results of other studies conducted in Turkey may be caused by the study design being specified in the literature are caused by the study design being used, the time of the assessment (i.e., performed in different postpartum periods), the sample volume and population differences, the unwillingness of some mothers to admit to experiencing depressive symptoms to healthcare providers, and the differences in the measurement of depressive symptoms. The “baby blues,” often seen in the first week postpartum, can be confused with PPD and may lead to misleading results; the EPDS was given in the 4th postpartum week. The difference between the PPD incidence result of this study and the results of other studies conducted in Turkey may be caused by the inclusion by the other studies of the first 2 postpartum weeks.

In this study, it was found that the social-support mean score was higher in women with low PPD risk. Even though the social-support mean score in the second week was quite low compared with that of other weeks, the social-support mean scores in the 4th and 6th weeks did not change. In general, it was seen that the perceived social support in women after delivery is high and constant. High perceived social support is thought to have a positive effect on psychological health and reduces stress such as that associated with delivery, infant care, and postpartum follow-up visits. The high perceived social-support mean scores in this study are an important finding that supports the literature.

Quality of life (physical, social, and psychological) in women is highly related to perinatal health (5). In this study, when the correlation between quality of life and PPD was examined, the social health score, physical health score, psychological health score, and environmental quality of life score all decreased as the mean EPDS score increased in postpartum week 4. When evaluated using a the linear regression model, PPD was determined to affect the social and psychological quality of life of the mothers in a negative way. In postpartum week 6, the score of the social health subscale and score of the psychological health subscale were low in women with high depression risk. In women with high PPD risk, no significant correlation was found in quality of life compared to in women with low PPD risk. It has been found that the quality of life of mothers suffering from PPD is significantly lower (5,50).

Despite the severity of the symptoms of depression that a given individual might have, social support may serve as a protective buffer between that individual and stress, thus improving his or her perception of his or her quality of life (53). According to the findings of this study, it is thought that a high social-support score may have a correlation with a better quality of life. A given mother’s being a primary school (and no higher) graduate, perceiving herself to be stressed in daily life, experiencing health problems during delivery and in the postpartum period, and not thinking herself to be a good parent were determined, in the present study, to be PPD risk factors.

Similar to what has been described in the literature, depression was found to be high in women with low educational levels. High educational levels were a protective factor, in terms of other studies conducted in Turkey may be caused by the study design being specified in the literature are caused by the study design being used, the time of the assessment (i.e., performed in different postpartum periods), the sample volume and population differences, the unwillingness of some mothers to admit to experiencing depressive symptoms to healthcare providers, and the differences in the measurement of depressive symptoms. The “baby blues,” often seen in the first week postpartum, can be confused with PPD and may lead to misleading results; the EPDS was given in the 4th postpartum week. The difference between the PPD incidence result of this study and the results of other studies conducted in Turkey may be caused by the inclusion by the other studies of the first 2 postpartum weeks.

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Despite the severity of the symptoms of depression that a given individual might have, social support may serve as a protective buffer between that individual and stress, thus improving his or her perception of his or her quality of life (53). According to the findings of this study, it is thought that a high social-support score may have a correlation with a better quality of life. A given mother’s being a primary school (and no higher) graduate, perceiving herself to be stressed in daily life, experiencing health problems during delivery and in the postpartum period, and not thinking herself to be a good parent were determined, in the present study, to be PPD risk factors.

Similar to what has been described in the literature, depression was found to be high in women with low educational levels. High educational levels were a protective factor, in terms of other studies conducted in Turkey may be caused by the study design being specified in the literature are caused by the study design being used, the time of the assessment (i.e., performed in different postpartum periods), the sample volume and population differences, the unwillingness of some mothers to admit to experiencing depressive symptoms to healthcare providers, and the differences in the measurement of depressive symptoms. The “baby blues,” often seen in the first week postpartum, can be confused with PPD and may lead to misleading results; the EPDS was given in the 4th postpartum week. The difference between the PPD incidence result of this study and the results of other studies conducted in Turkey may be caused by the inclusion by the other studies of the first 2 postpartum weeks.

In this study, it was found that the social-support mean score was higher in women with low PPD risk. Even though the social-support mean score in the second week was quite low compared with that of other weeks, the social-support mean scores in the 4th and 6th weeks did not change. In general, it was seen that the perceived social support in women after delivery is high and constant. High perceived social support is thought to have a positive effect on psychological health and reduces stress such as that associated with delivery, infant care, and postpartum follow-up visits. The high perceived social-support mean scores in this study are an important finding that supports the literature.

Quality of life (physical, social, and psychological) in women is highly related to perinatal health (5). In this study, when the correlation between quality of life and PPD was examined, the social health score, physical health score, psychological health score, and environmental quality of life score all decreased as the mean EPDS score increased in postpartum week 4. When evaluated using a the linear regression model, PPD was determined to affect the social and psychological quality of life of the mothers in a negative way. In postpartum week 6, the score of the social health subscale and score of the psychological health subscale were low in women with high depression risk. In women with high PPD risk, no significant correlation was found in quality of life compared to in women with low PPD risk. It has been found that the quality of life of mothers suffering from PPD is significantly lower (5,50).

Despite the severity of the symptoms of depression that a given individual might have, social support may serve as a protective buffer between that individual and stress, thus improving his or her perception of his or her quality of life (53). According to the findings of this study, it is thought that a high social-support score may have a correlation with a better quality of life. A given mother’s being a primary school (and no higher) graduate, perceiving herself to be stressed in daily life, experiencing health problems during delivery and in the postpartum period, and not thinking herself to be a good parent were determined, in the present study, to be PPD risk factors.
of PPD (5,48,50,51). In this study, the mothers themselves increased their PPD risk by allowing themselves to regularly experience "stressful perceptions in daily life." Having a history of traumatic delivery, experiencing stressful life events during pregnancy and the early postpartum period, having problems with breastfeeding, and suffering reproductive health and general health problems are risk factors for PPD (5,44–51). Experiencing health problems during the delivery and the postpartum period tends to increase PPD risk; that is, it is thought that health problems experienced during the delivery and postpartum period negatively affect the mother’s adaptation, infant care, and breastfeeding, as well as increasing the risk of depression. Mothers with a high risk of PPD are more concerned about the health or eating habits of the infant and may see themselves as "bad," “inadequate,” or “unloving” mothers (54). In this study, supporting this opinion, PPD risk is found to be high in women who perceive themselves to be bad mothers.

In this study, no significant correlations were found between PPD risk and maternal age, parity, type of delivery, breastfeeding status of the infant, psychiatric disease history, or the gender of the infant. While some studies have reported there to be no significant correlations between these variables and PPD risk, others have reported the contrary (2,43,48,52–54).

In our study (which took place in Turkey), a maternal mental health assessment was performed on each participant during 4 follow-up evaluations, up to 6 weeks after she gave birth. Our study has demonstrated the importance of determining the mental health of women, the risk of PPD, and risk factors (for PPD) using appropriate screening tools in antenatal and postnatal monitoring. The routine use of the BDS and EPDS in routine services in the healthcare system has been demonstrated to protect and improve maternal mental health. The study contributes to the literature by describing the relationships between social support, quality of life, and PPD in Turkey. The findings of the study may contribute to the development of hypotheses for future studies. In addition, it is thought that research on maternal mental health services will contribute to the development and improvement of monitoring, evaluation, and strategy.

The most important limitation of this study is that the presence of depressive symptoms and their cause and effect relationship with quality of life cannot be exactly assessed because the data were collected using a self-report questionnaire. However, by collecting additional data over a series of 4 assessments and by using both the DPS and the EPDS at different times, we ensured that our study had a strong direction.

As a result, the prevalence of PPD in this study was found to be low. In general, it was observed that women with low PPDs had high social-support and quality of life scores. During the antenatal period, pregnant women should be monitored for PPD symptoms and the risk factors evaluated. An examination of the formal and informal social support system of the mother—and its strengthening, if necessary—would be a beneficial and protective approach, in terms of PPD.

Based on the findings of our study, recommendations were developed. According to our study, pregnant women with PPD risk factors (being no more than primary school graduates, regularly perceiving stress in their daily lives, having health problems in the postpartum period, and not thinking that they are good mothers) should be evaluated more carefully by their attending midwives and physicians during antenatal appointments and postpartum follow-up visits. It is important that healthcare professionals determine the risk of PPD with appropriate screening tools at every follow-up and refer high-risk women for further diagnosis and treatment. In women with high social support, social support systems should be strengthened before and during the postpartum period, as these individuals’ risk of PPD is low. In antenatal monitoring, the spouse, friends, or family members should take part in the follow-up during or after the birth. They should be given training on PPD and their awareness raised. In health institutions, preparing and distributing brochures about PPD and social support would be useful for informing pregnant women and their families of the disorder. We recommend planning studies on training and developing consultancy services to increase the quality of life of pregnant women, thereby reducing their PPD risk.

**Resumen**

Objetivo: La depresión posparto (DPP) tiene efectos negativos en la madre. Este estudio tuvo como objetivos determinar la prevalencia de DPP y determinar la relación entre el apoyo social percibido, la calidad de vida y los factores de riesgo con la depresión posparto. Método: Los datos han sido recopilados a través de un cuestionario preparado por los investigadores sobre las características sociodemográficas de la madre y los factores de riesgo de DPP, la Escala de Depresión Postnatal de Edimburgo, la Escala de depresión de Beck, la Escala de Calidad de Vida y la Escala Multidimensional de Apoyo Social Percibido. Resultados: La frecuencia de DPP ha sido determinada como 3.9% en la cuarta semana de posparto y 5.9% en la sexta semana. Han sido determinados como factores de riesgo de DPP ser un graduado de la escuela primaria, percibir el estrés en la vida diaria, tener problemas de salud durante el parto y en el periodo posparto y no creer que sea una buena madre. Aunque el puntaje promedio de apoyo social es más alto en mujeres con riesgo bajo de DPP, esta diferencia observada no es significativa. De acuerdo con el modelo de regresión lineal; DPP en la cuarta semana afecta negativamente la calidad de vida en las áreas sociales y psicológicas de las madres. Conclusión: Han sido observada una relación entre el alto apoyo social con el riesgo bajo de DPP y el riesgo bajo de DPP con la alta calidad de vida en las mujeres.

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References


