Factors affecting postpartum depression in Diyarbakır

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Abstract

Objective: The aim of this study is to investigate the factors affecting postpartum depression (PPD) according to age groups in Diyarbakır city located on the southeastern part of Turkey.

Methods: The questions of Edinburgh postpartum depression scale (EPDS) were asked to 495 women who referred to our clinic at their postpartum periods. A separate statistical analysis was carried out for 51 adolescent women (below 18-year-old) and 72 puerperant women over 35-year-old. Score 13 according to EPDS score result was determined as cut-off value.

Results: In 101 out of 495 (20.4%) patients, EPDS score was 13 and above. This rate was 27.4% in adolescent puerperant women, and 19.4% in puerperant women over 35-year-old. It was found that depression history was a significant variable affecting postpartum depression (p<0.005).

Conclusion: Postpartum depression is a significant disease possible to overlook which affects the health of mother and baby. This is risky especially during adolescent period. Depression history is an important variable in the etiology of postpartum depression. This period can be screened for postpartum depression. The greatest factor limiting postpartum depression in Southeastern Anatolia Region which has the highest reproduction rate in Turkey can be the support provided to the puerperant women by relatives and friends during puerperal period.

Keywords: Postpartum period, postpartum depression.

Introduction

Gestation is a period when a woman has her physiological, psychological and social changes. Prenatal and postnatal changes, newborn care, breast feeding problems, new environment, and changes in social status may cause the health of pregnant woman to deteriorate. A peak in

Özet: Diyarbakır’dan postpartum depresyonu etkileyen faktörler

Amaç: Bu çalışmanın amacı Türkiye’nin güneydoğusunda yer alan Diyarbakır ilinde postpartum depresyonu (PPD) etkileyen faktörleri yaş gruplarına göre inceléktir.

Yöntem: Klinikimize başvuran 495 postpartum dönemindeki kadına Edinburgh postpartum depresyon skoru (EPDS) anket soruları soruldu. Elli bir adölesan (18 yaş altı) ve 35 yaş üstü olan 72 lohusa için ayrı ayrı istatistiksel inceleme yapildı. EPDS skor sonucuna göre 13 puan cut-off değer olarak belirlendi.

Bulgular: Toplam 495 hastanın 101’inde (%20.4) EPDS skor 13 ve üzerinde idi. Adölesan lohusalarda bu oranı %27.4, 35 yaş üstü lohusalarda ise %19.4 idi. Geçirilmiş depresyon öyküsünün postpartum depresyonu etkileyen önemli bir değişken olduğu bulundu (p<0.005).


Anahtar sözcükler: Postpartum dönem, postpartum depresyon.
the depression rate was reported at postpartum fourth and eighth weeks. In a meta-analysis, it was reported that postpartum depression rate in the first three postpartum months was 14.5%, and major depression criteria were satisfactorily met in 6.5% of postpartum women, and this was at higher levels especially in nullipara population. Changes during pregnancy may bring along many problems and cause stress. The period after pregnancy is 3–4 times more risky in terms of mental illnesses than gestational period. Therefore, possible postpartum depression may constitute a significant health problem.

According to Diagnostic and Statistical Manual of Mental Disorders (DSM), having 5 or more of the criteria for at least two weeks is defined as postpartum depression (PPD). These are insomnia-hypersomnia, psychomotor agitation or retardation, fatigue, unhappiness or sense of guilt, decreased concentration, changes in appetite and suicide ideation. These episodes begin within postpartum four weeks and ends within 1 year. According to DSM, PPD is described as non-psychotic major depression.

Identifying and preventing postpartum depression in advance is significant in terms of the health of baby and mother. Edinburgh Postpartum Depression Scale (EPDS) can be used to investigate postpartum depression. Although this scale is not diagnostic, sensitivity of PPD is 61.5% and specificity of PPD is 77.4% for those scoring 13 and above.

Methods
Our study was carried out on 495 puerperant women who referred to Diyarbakır Maternity and Pediatrics Hospital between September 2012 and May 2013. The approval of the Ethics Committee of Okmeydani Training and Research Hospital was obtained. Patient consent forms were received from all participants. Women who delivered term babies (at 37 weeks and above) were included in the study. The exclusion criteria included multiple pregnancy, pregnancy by assisted reproductive techniques, history of mental disease diagnosis, antenatal fetal anomaly and mother or baby being in the intensive care unit.

All puerperant women included in the study on postpartum 8 weeks were asked EPDS questions and factors that may affect postpartum depression. EPDS is a questionnaire with 10 items, each having 4 options where each option is scored between 0 and 3 and maximum total score is 30.

The study was separated into 3 groups according to the age groups which are adolescents, puerperant women who are over 35-year-old and all puerperant women. Statistical analysis was performed by SPSS 15.0 (SPSS Inc., Chicago, IL, USA) and definitive statistics and chi-square test were used.

Results
The factors affecting postpartum depression were investigated by categorizing 495 puerperant women in the study according to their age groups, which were adolescent puerperant women and puerperant women over 35-year-old. As risk factors, their ages, number of their living children, financial status, educational status, delivery type, if they had any emesis problem, gender of baby, depression history and if the pregnancy was intended were asked. Among all the age groups, it was found that only depression history affected PPD (p<0.001).

In 101 out of 495 (20.4%) patients, EPDS score was 13 and above. In the factors investigated, it was found that only the depression history was a significant factor affecting postpartum depression in puerperant women (Table 1).

Table 1. Statistical analysis of 495 patients.

<table>
<thead>
<tr>
<th></th>
<th>No depression (n=394)</th>
<th>Depression exists (n=101)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean: 26.7±6.6 (14–52)</td>
<td>26.7±6.5</td>
<td>26.5±7.1</td>
<td>0.7540</td>
</tr>
<tr>
<td><strong>Number of living children</strong></td>
<td>2.2 (0–10)</td>
<td>3.8 (0–11)</td>
<td>0.115</td>
</tr>
<tr>
<td><strong>Financial status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600 TL and below</td>
<td>78.4</td>
<td>72.3</td>
<td>0.162</td>
</tr>
<tr>
<td>600–1500 TL</td>
<td>19.3</td>
<td>22.8</td>
<td></td>
</tr>
<tr>
<td>1500–5000 TL</td>
<td>2.3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>36.3</td>
<td>35.6</td>
<td>0.718</td>
</tr>
<tr>
<td>Literate</td>
<td>23.4</td>
<td>23.8</td>
<td></td>
</tr>
<tr>
<td>Primary school</td>
<td>23.9</td>
<td>19.8</td>
<td></td>
</tr>
<tr>
<td>Secondary school</td>
<td>7.1</td>
<td>9.9</td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>6.6</td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>2.8</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Delivery type (C/S)</strong></td>
<td>207</td>
<td>54</td>
<td>0.602</td>
</tr>
<tr>
<td>Emesis (present)</td>
<td>64</td>
<td>17</td>
<td>0.887</td>
</tr>
<tr>
<td>Depression history (exists)</td>
<td>6</td>
<td>16</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Gender of baby (male)</td>
<td>198</td>
<td>55</td>
<td>0.452</td>
</tr>
<tr>
<td>Planned pregnancy (exists)</td>
<td>41</td>
<td>14</td>
<td>0.325</td>
</tr>
</tbody>
</table>
It was seen in 495 patients who were analyzed that age, number of living children, educational status, financial status, delivery type, emesis problem, if the pregnancy was intended or not and gender of baby were not significant factors in terms of postpartum depression.

Postpartum depression was identified in 51 patients, of which 14 cases (27.4%) were adolescent puerperant women below 18-year-old (Table 2). None of the factors analyzed had a significant effect on postpartum depression.

Postpartum depression was identified in 14 (19.4%) out of 72 patients who were puerperant women above 35-year-old (Table 3). None of the factors had any effect on postpartum depression.

### Discussion

Even though the pregnancy and delivery are physiological, they may affect the health of mother and baby in a negative way. While most of the women can adapt to physiological, psychological and social changes occurring during pregnancy and delivery, some women may suffer mental illnesses at different levels. It has been shown that PPD constitutes a risk in mother-infant relationship, and affects cognitive and emotional development of baby. Verbal and visual communication problems of baby and disorders in emotional, cognitive, verbal and social abilities are the negative effects of PPD.

In our study, we found that number of living children, financial status, educational level, delivery type, presence of emesis during pregnancy, whether pregnancy being intended or not and gender of baby did not affect postpartum depression. It was observed that only depression history affected postpartum depression. It has been already shown in many studies that depression history is a significant factor affecting postpartum depression.  

In our study, we found that the rate of postpartum depression at postpartum 8 weeks in Diyarbakır city and nearby regions was 20.4% (according to EPDS, cut-off was 13 and above). The study carried out in Trabzon found PPD rate as 28.1%. However, other studies performed in Turkey found PPD rate as 14.0%, 16.8% and 14.0%, respectively. We found PPD rate during adolescent period as 27.4% which was the highest result among the age groups. There are contradictory results among age groups for PPD. Some studies found that being below 25-year-old is a significant factor for PPD. Some other studies showed that postpartum depression presented no difference among age groups.

The prevalence of postpartum depression during the test period may differ according to population size,

### Table 2. Statistical analysis of puerperant women below 18-year-old.

<table>
<thead>
<tr>
<th></th>
<th>No depression (n=37)</th>
<th>Depression exists (n=14)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of living children</td>
<td>5 (0–10)</td>
<td>5 (0–11)</td>
<td>0.835</td>
</tr>
</tbody>
</table>

### Table 3. Statistical analysis of puerperant women above 35-year-old.

<table>
<thead>
<tr>
<th></th>
<th>No depression (n=58)</th>
<th>Depression exists (n=14)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of living children</td>
<td>5 (0–10)</td>
<td>5 (0–11)</td>
<td>0.835</td>
</tr>
</tbody>
</table>

### Table 3. Statistical analysis of puerperant women above 35-year-old.
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study design, test type and cut-off value. Mostly, the negative results of this situation which cannot be detected by healthcare professionals on health of mother and baby should be known and it should be on the alert against this mood disorder in puerperant women especially with depression history.

Routine screening is performed for postpartum depression diagnosis in some countries such as Australia and the USA. Such screening procedures may also be helpful in Turkey to detect such a complicated condition for baby and mother.

The depression rate is correlated with other regions in Anatolia region which has the highest fertility rate in Turkey, and in Diyarbakır which on the 10th rank for fertility rate. The reason for this situation can be explained with the support from relatives and friends during postpartum period.

Conclusion

Although postpartum depression is usually overlooked, it is a significant mood disorder, which should be diagnosed and treated, and it affects maternal health and development of baby.

Conflicts of Interest: No conflicts declared.

References