Prevalence of postnatal depression in primiparous women using Edinburgh postnatal depression scale

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Abstract

Background: Postnatal depression is the depression experienced by many of the mothers after having a baby. The disease manifests as sleep disorders, mood swings, changes in appetite, fear of injury, serious concerns about the baby, much sadness and crying, sense of doubt, difficulty in concentrating, lack of interest in daily activities, thoughts of death and suicide. Feelings of hopelessness in severe cases of illness can threaten life and lead to suicide.

Purpose: to study the rate of postnatal depression in primiparous women aged between 21 to 30yrs.

Methods: The observational study consist of 60 primiparous women with age between 21-30yrs

Sampling Method: purposive sampling method. Selection criteria – inclusion criteria: literate primiparous women aged between 21-30yrs with PNC period till 6 months. Exclusion criteria: women with history of miscarriage, immunosuppressive mothers & mothers who lost their child during delivery.

Results: The results of study showed that there was no significant depression rate in primiparous women.

Conclusion: the study concludes that prevalence of depression is less in primiparous women, the prevalence of depression is more in initial 2 weeks of delivery & also more in age group 25-30yrs as compare to 21-24yrs.

Keywords: postnatal depression, primiparous women

1. Introduction

Postnatal depression is the depression experienced by many of the mothers after having a baby. Many women feel a bit down, tearful or anxious in the first week after giving birth. The intensity feeling inability in suffering mothers is so high that some mothers with postpartum depression comment life as the death swamp while nondepressed mothers see their baby’s birth as the happiest stage of their life.

The disease manifests as sleep disorders, mood swings, changes in appetite, fear of injury, serious concerns about the baby, much sadness and crying, sense of doubt, difficulty in concentrating, lack of interest in daily activities, thoughts of death and suicide. Feelings of hopelessness in severe cases of illness can threaten life and lead to suicide.

It can be due to the lack of awareness in the people that are supposed to form the support system of a new mother about the biological, psychological and sociological changes that a woman goes through after childbirth.

In India, women who deliver at a health facility often stay for less than 48hrs after delivery. This leaves little opportunity for health personnel to counsel the mother and family members on the signs and symptoms of postpartum depression and when to seek care.

The global prevalence of postpartum depression has been estimated as 100-150 per 1000 births.

Postpartum depression can predispose to chronic or recurrent depression which may affect the mother -infant relationship and child growth and development.

Based on random effects model, the overall pooled estimate of the prevalence of postpartum depression in Indian mothers was 22% (95% confidence interval).

The Edinburgh postnatal depression scale is one of the most common tools for assessing depression in prevalent studies. The 10-question Edinburgh postnatal depression scale (EDPS) is a valuable and efficient way of identifying patients at risk for perinatal depression.
The scale indicates how the mother has felt during the previous week. It is a self-administered scale and easy to score.

2. **Problem Statement**
To study the prevalence of postnatal depression in primiparous women.

3. **Objective**
   1. The purpose of this study was to determine postpartum depression in primiparous women.
   2. To study the relation of age with postnatal depression.
   3. To study the relation of PNC period with depression.

4. **Methodology**
   Type of study- Observational study sampling technique- Purposive sampling
   Sample size- 60
   Study area- maternity hospital & paediatric clinic
   Study duration- 6 months
   Study material- Pen, Paper, Scale, Note pad

A. **Inclusion criteria**
   - Age group 21-30yrs
   - Primiparous women
   - PNC period till 6 months
   - Literate

B. **Exclusion criteria**
   - History of miscarriage
   - Immunosuppressive mothers
   - Mothers who lost their child during delivery

5. **Outcome Measures**
   Edinburgh postnatal depression scale

6. **Procedure**
   Ethical approval was taken from patients. Ethical approval was taken from the maternity and pediatric clinic. Patient consent was taken. Participants were explained about the scale and procedure. The EPND scale was given to the mothers. The prevalence rate was calculated based on the scores of the scale.

7. **Data Analysis**
   Data was collected using Edinburgh postnatal depression scale and total score was calculated. Total score of each participant was added to excel sheet out of 60 participants no. of women suffering from depression were calculated by using percentage and data was analyzed by Microsoft excel showed that 21 women were having depression and 39 women were not depressed. The results of the study were taken descriptive data analysis was done using percentage.

8. **Result and Interpretation**

<table>
<thead>
<tr>
<th>Prevalence Mothers Of Depression IN Primi</th>
<th>Subjects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressed</td>
<td>21</td>
<td>35%</td>
</tr>
<tr>
<td>Non-depressed</td>
<td>39</td>
<td>65%</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Chart 1: Postnatal Depression in Primiparous Women**

**Interpretation**
The diagram shows that out of 60 primiparous women 35% - females are having depression 65% - females are not having depression

<table>
<thead>
<tr>
<th>No. OF PNC Days</th>
<th>Total Subjects</th>
<th>Depressed</th>
<th>%</th>
<th>Non-Depressed</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-11days</td>
<td>34</td>
<td>11</td>
<td>32.35%</td>
<td>23</td>
<td>67.65%</td>
</tr>
<tr>
<td>12-15days</td>
<td>17</td>
<td>8</td>
<td>47.06%</td>
<td>9</td>
<td>52.94%</td>
</tr>
<tr>
<td>16-22days</td>
<td>9</td>
<td>2</td>
<td>22.22%</td>
<td>7</td>
<td>77.78%</td>
</tr>
</tbody>
</table>

**Chart 2: Depression % with PNC Days**
Interpretation
The diagram shows that
1. **Females within (8 - 11) PNC days** 52.38% are having depression 58.97% are not having depression
2. **Females within (12 - 15) PNC days** 38.10% are having depression 23.08% are not having depression
3. **Females within (16 - 22) PNC days** 9.52% are having depression 17.95% are not having depression

**Table 3: Depression % with Age**

<table>
<thead>
<tr>
<th>Subject</th>
<th>21-25years</th>
<th>Percentage</th>
<th>26-30years</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressed</td>
<td>26</td>
<td>43%</td>
<td>13</td>
<td>22%</td>
</tr>
<tr>
<td>Non - Depressed</td>
<td>7</td>
<td>12%</td>
<td>14</td>
<td>23%</td>
</tr>
</tbody>
</table>

![Chart 3: Depression % with Age](image)

Interpretation
The diagrams show that
1. **In age group 21-25yrs**
   12% females are having depression 43% females are not having depression
2. **In age group 26-30yrs**
   23% females are having depression 22% females are not having depression

9. Discussion
The present study was designed to assess postnatal depression in primiparous women. Postnatal depression is a complex mix of physical, emotional, and behavioral changes that happen in some women after giving birth. The overall study analyzed that among 60 population the 35 % females are of awareness in the people that are supposed to form the support system of a new mother about the biological, psychological and sociological changes that a women goes through after childbirth [1] and 65% females fall under no depression, a study done by Donna E. Stewart et al. Says that the impact of interventions such as antenatal classes, telephone counselling, interactive coaching, group interventions and massage therapy. Education, family support also play major role in preventing depression in mothers [3] on sub group analysis, we found a slightly higher proportion of postpartum depression in mothers who were aged ≥25 years compared to those aged ≤ 25 years
A study done by Ravi Prakash Upadhyay et al. Says that Older mothers may suffer more from depression because they lack peer support or because they have more obstetric complications or greater use of assisted reproductive technologies on the other hand, it is possible that depression among older mothers is simply a biological phenomenon [1].

On sub group analysis of PNC period, we found that within 2 weeks after delivery, mothers having postpartum depression is 52% this may be because of mothers are unable to get rest that they fully need to recover after having a baby. Hence constant sleep deprivation can lead to exhaustion, which in turn can contribute to symptoms of PPD [4].

10. Conclusion
As per the study we conclude that the prevalence of depression is less in primiparous women. The prevalence of depression is more in initial 2 weeks of delivery. The prevalence of depression is more in age group 25- 30yrs as compare to age group 21- 24yrs

11. Reference
1. Ravi Prakash Upadhyay et al., Postpartum depression in India: a systematic review and meta-analysis, bulletin of the WHO, Published online 2017, 95(10).
3. Mahvish Ahmed. Postpartum depression can’t be seen but it can destroy a new mother, Published on 30 June 2020, 4.