A study to determine the prevalence of postpartum depression among postnatal mothers at Venkatachalam Village, Nellore, Andhra Pradesh

Annarita Kajuju Mwenda, Lucy Gitonga and Kamweru PK

Abstract

Background: Mood disturbance represents the most frequent form of maternal psychiatric morbidity in the postpartum period. Maternal sadness affects approximately 50-80% of women in the puerperal period with about 20% of those women developing postpartum depression.

Aim: The aim of the study was to assess the prevalence of postpartum depression among postnatal mothers.

Objectives: 1. To determine the prevalence of postpartum depression among postnatal mothers. 2. To associate the prevalence of postpartum depression among postnatal mothers with their selected socio demographic variables.

Methodology: 100 postnatal mothers living in Venkatachalam Village, Nellore were selected by using Non-probability convenience sampling method.

Results: Regarding the prevalence of postpartum depression, among 100 samples, 52 (52%) had no depression, 30 (30%) had mild depression and 18 (18%) had moderate depression and no one had severe depression.

Keywords: Prevalence, postpartum depression, post-natal mothers

Introduction

Postpartum depression is mood disorder that begins after child birth and usually last beyond 6 weeks. The onset of postpartum depression terms to be gradual and may persist for many months following a pregnancy. Postpartum depression affects approximately 15% of all child bearing women. Mild to moderate cases are sometimes unrecognized by the women [1].

Mood disturbance represents the most frequent form of maternal psychiatric morbidity in the postpartum period. Maternal sadness affects approximately 50-80% of women in the puerperal period with about 20% of those women developing postpartum depression. In the first three months after child birth, approximately 14.5% of women may have a new episode of major or minor depression and 10-20% of mothers are believed to have postpartum blues [2].

Postpartum depression is more prevalent in women which may be related to biological, hormonal and psychosocial factors. If symptoms of postpartum blues persist beyond 6 weeks and seem to get worse, the mother may be experiencing postpartum psychosis, a major depressive episode associated with child birth. In many women hormonal imbalance especially the hormones, estrogen, cortisol fall dramatically within 48 hours after delivery, miscarriage or still birth [3].

The depression may solve spontaneously, but many women may still suffer from depression at one year of child birth. Untreated postpartum depression can have profound effect on the new mother, the spouse and other important psychosocial relationship. Women with mild to moderate depression illness or who are either reluctant or refuse to take antidepressant may be traded initially with non-pharmacologic intervention such as interpersonal therapy, cognitive therapy, behavioral therapy and counseling [4].

Need for the Study

World health organization revealed that increase in the case of postpartum depression in each year. It may occur from 2 weeks to 12 months after delivery but usually occurs within 6 months. The risk of postpartum depression is 10-15% but the rate is higher for people with a history of psychiatric disorder [5]. A study by National Health Service (NHS) refined that 15,66,280 postnatal mothers are present in the of total population of India.
However, only a small proportion of these women are identified as depressed by health care professionals [6]. In Andhra Pradesh is estimated that there are 26,877 postpartum women and they found that 22.77% were depressed. The study was conducted by Avinash.K Reddy (July 21.2011) at world mental health association. The problem is more prevalent in rural areas in Nellore. It is estimated that there are 0.12% mothers with postpartum depression [7]. A cross sectional study was conducted on postpartum depression among sample from five eastern provinces at Turkey. Among 2602 randomly selected women who gave birth within the last year was included. The Edinburgh postpartum depression scale was used for the evaluation of depression. The percentage of women who had high depression scores was 27.2%. Excess risk of depression was associated with several factors including unemployment, low education, poverty, poor family relations, low marital age, lack of medical services and mental health problems [8].

**Problem Statement**
A study to determine the prevalence of postpartum depression among postnatal mothers at Venkatachalam Village, Nellore, A.P.

**Objectives**
- To determine the prevalence of postpartum depression among postnatal mothers.
- To associate the prevalence of postpartum depression among postnatal mothers with their selected socio demographic variables.

**Assumption**
Mother may undergo emotional changes following delivery.

**Delimitations**
- Postnatal mothers living in Venkatachalam Village, Nellore.
- Sample size of 100 postnatal mothers.

**Methodology**

**Research Approach:**
A quantitative approach was adopted to determine the research study.

**Research Design:**
The present study was conducted by using descriptive research design

**Setting of the Study:**
The study was conducted at Venkatachalam Village, Nellore.

**Target Population:**
The target population for the present study includes all postnatal mothers.

**Accessible Population:**
The accessible population for the present study was postnatal mothers living in Venkatachalam Village, Nellore and who fulfilled the inclusion criteria.

**Sample:**
The sample for the present study was postnatal mothers.

**Sample Size**
The sample for the present was 100 postnatal mothers.

**Sampling Technique**
Non-probability convenience sampling was adapted for the study.

**Criteria for Sampling Selection**

**Inclusion criteria**
- Postnatal mothers aged 18-35 yrs of age.
- Postnatal mothers living in Venkatachalam Village.

**Exclusion criteria**
- Postnatal mothers who are not willing to participate in the study.
- Postnatal mothers who are not present during the time of data collection.

**Variables of the Study**

**Research variable:** Prevalence of postpartum depression.

**Demographic variables:** It includes age, religion, educational qualification, occupation, type of family and family income, type of marriage and family history of mental illness.

**Description of the Tool**

**Part-I:** It deals with socio demographic variables.
**Part-II:** Edinburgh postpartum depression rating scale was used to assess the postpartum depression.

**Data Analysis and discussion**

**Table 1:** Frequency distribution of prevalence of postpartum depression among postnatal mothers. (N=100)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Prevalence of PCOD</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>No postpartum depression</td>
<td>52</td>
<td>52%</td>
</tr>
<tr>
<td>2.</td>
<td>Mild postpartum depression</td>
<td>30</td>
<td>30%</td>
</tr>
<tr>
<td>3.</td>
<td>Moderate postpartum depression</td>
<td>18</td>
<td>18%</td>
</tr>
</tbody>
</table>

![Fig 1: Percentage distribution of prevalence of postpartum depression among postnatal mothers.](image)

**Table 2:** Mean and Standard Deviation of prevalence of postpartum depression among postnatal mothers. (N=100)

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postnatal mothers</td>
<td>6.2</td>
<td>3.24</td>
</tr>
</tbody>
</table>
Table 3: Association between prevalence of postpartum depression among with demographic variables. (N=100)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Demographic Variables</th>
<th>No postpartum depression</th>
<th>Mild postpartum depression</th>
<th>Moderate postpartum depression</th>
<th>Chi-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>1.</td>
<td>Age in years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) 18-22</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>b) 23-28</td>
<td>13</td>
<td>13</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>c) 29-32yrs</td>
<td>28</td>
<td>28</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>2.</td>
<td>Type of family</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Nuclear</td>
<td>20</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>b) Joint</td>
<td>6</td>
<td>6</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>c) Extended</td>
<td>22</td>
<td>22</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>Type of delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Forceps delivery</td>
<td>24</td>
<td>24</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>b) Cesarean</td>
<td>13</td>
<td>13</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>c) Vaginal delivery</td>
<td>11</td>
<td>11</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

Major Findings of the Study
- Regarding the prevalence of postpartum depression, among 100 samples, 52(52%) had no depression, 30 (30%) had mild depression and 18 (18%) had moderate depression and no one had severe depression.
- The mean score prevalence of PCOD was 6.2 and standard deviation was 3.24
- Regarding association, among all the demographic variables, age, type of family and type of delivery had significant association with prevalence of postpartum depression at $P<0.05$ level.

Conclusion
The study concluded that half of the postnatal mothers 52(52%) had no depression and 30 (30%) had mild depression. Since mood changes are common for all mothers following delivery, necessary measures to be taken to impart knowledge for postnatal mothers regarding prevention of postpartum depression.

References
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