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Original Research Article

A clinical study of postpartum depression and its association with postnatal factors

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ABSTRACT

Background: The postpartum period is a time of tremendous emotional and physical change for most women as they adapt to new roles and alteration in their physiology. Postpartum depression has seen its rise lately. Multiple factors might be responsible for causation. Symptoms include depression, tearfulness, emotional lability, guilt, anorexia, sleep disorders, feeling inadequate, detachment from the baby, poor concentration, forgetfulness, fatigue, and irritability.

Methods: We have conducted a study in 225 postpartum females and assessed them for depression and associated postnatal depression. The 10-question Edinburgh Postnatal Depression Scale (EPDS) was used for assessing depression.

Results: Depression was evaluated as 6%. It was also found that 2% mothers with IUD babies developed postnatal depression. 1.33% cases with babies having congenital anomaly developed postnatal depression. 1.33% cases with babies having nursery admission developed postnatal depression. This has been correlated with many other studies.

Conclusions: It is found that perinatal factors do affect postnatal depression as it is found in mothers who have an adverse perinatal outcome. Further research is implicated in this field.

Keywords: Physiology, Perinatal factors, Postpartum depression

INTRODUCTION

The postpartum period is a time of tremendous emotional and physical change for most women as they adapt to new roles and alteration in their physiology. Women have been silently suffering from this depression for years, carrying with it the guilt of not feeling the expected joy of giving birth that our culture expects, without recognition, diagnosis, or treatment.¹

Children of depressed women have been found to have attachment problems, higher rates of behavioural problems, and lower vocabulary skills. At the extreme end of the spectrum, women who develop postpartum psychosis have, rarely, committed suicide and infanticide.^{2,3} There are no clear predictors of which mothers will develop postpartum depression.

However, there are some women who are at increased risk including those with low social support including low spousal support, a previous history of depression or other mental problems, stressful life events including an unplanned pregnancy, and daily stressors including financial problems.⁴

Some women progress from baby blues into postpartum depression while others feel good immediately following the birth of their child with depressive symptoms gradually developing over time. Symptoms include depression, tearfulness, emotional lability, guilt, anorexia, sleep disorders, feeling inadequate, detachment from the baby, poor concentration, forgetfulness, fatigue, and irritability.⁵

Postpartum depression typically lasts several months and is usually resolved within a year. Unfortunately, women

who have suffered from postpartum depression are 50% more likely to experience depression later in life, especially following delivery of another child.⁵

Steiner (1998) suggests that women who suffer from postpartum psychosis may have had a sharp decline in estrogen concentrations after delivery. Epperson (1999) encourages testing postpartum women with depressive symptoms for thyroid function to ensure that this possible biological cause is ruled out.

Contrary to the findings of Steiner, Epperson, Hayes, Roberts, and Davare found that there was not sufficient evidence in any studies as of 2000 to link levels of estrogen, progesterone, thyroid hormones, and prolactin to the occurrence of postpartum depression.⁶

Borrill notes that it is important to realize that childbirth does not only affect women physically. Psychologically, childbirth causes many changes in women's roles as both women and mothers.

Beck, analyzed 84 studies published in the 1990's to determine relationships between postpartum depression and the various factors contributing to it. Hall, Kotch, Browne, and Rayens discuss a variety of psychosocial variables linked with postpartum depression, including the mother experiencing stressful life events either during pregnancy or postpartum.⁷ The Edinburgh Postnatal Depression Scale (EPDS) is the most commonly-used screening tool to determine the degree of postpartum depression. The scale consists of ten questions posed to the mother relating to her mood.

The mother then chooses an answer that best describes how she was feeling in the past week and those answers are assigned a number score (ranging from 0 to 3) and the total is calculated. Women scoring above 12 (of a maximum of 30) are likely to be suffering from a depressive illness.⁸⁻⁹

METHODS

The present study of evaluation of postnatal depression carried out in the department of Obstetrics and Gynecology, M.G.M. Medical College and M.Y. Group of Hospital, Indore.

This is an observational study. Cross sectional information was taken from post-partum patients attending the OPD and also from the inpatients. 225 patients were included in the study and were assessed for postpartum depression by Edinburgh Postnatal Depression Scale (EPDS). Results were computed and as this is an observational study, no statistical method was used for analysis.

Edinburgh Postnatal Depression Scale Postpartum depression is the most common complication of childbearing. The 10-question Edinburgh Postnatal Depression Scale (EPDS) is a valuable and efficient way

of identifying patients at risk for "perinatal" depression.¹⁰ Mothers who score above 13 are likely to be suffering from a depressive illness of varying severity. The EPDS score should not override clinical judgment. A careful clinical assessment should be carried out to confirm the diagnosis. The scale indicates how the mother has felt during the previous week.

In doubtful cases it may be useful to repeat the tool after 2 weeks. The scale will not detect mothers with anxiety neuroses, phobias or personality disorders. The Edinburgh Postnatal Depression Scale (EPDS) is a 10-item questionnaire that was developed to identify women who have postpartum depression. Items of the scale correspond to various clinical depression symptoms, such as guilt feeling, sleep disturbance, low energy, anhedonia, and suicidal ideation.

Overall assessment is done by total score, which is determined by adding together the scores for each of the 10 items. Higher scores indicate more depressive symptoms.

SCORING

- Questions 1, 2, and 4 (without an *) Are scored 0, 1, 2 or 3 with top box scored as 0 and the bottom box scored as 3.
- Questions 3, 5-10 (marked with an *) Are reverse scored, with the top box scored as a 3 and the bottom box scored as 0.
- Maximum score: 30; Possible depression: 10 or greater; Always look at item 10 (suicidal thoughts)

RESULTS

In the present study, postnatal depression was found in 6.00% of cases. It is found that 2% mothers with IUD babies developed postnatal depression.

Table 1: Association of Postnatal Depression.

	Cases with Postnatal Depression	Outcome		Percentage
		Male	Female	
LSCS	2	1	1	1.33
Vagina 1	5	5	-	3.33
Total	7	6	1	4.66

1.33% cases with babies having congenital anomaly developed postnatal depression. 1.33% cases with babies having nursery admission developed postnatal depression. In the present study, it was found that 2% mothers with IUD babies developed postnatal depression. 1.33% cases with babies having congenital anomaly developed postnatal depression. 1.33% cases with babies having nursery admission developed postnatal depression. This has been correlated with many other studies.

Table 2: Perinatal factors influencing postnatal depression

Factors	Male		Female	
	No.	%	No.	%
IUD	6	4	1	0.66
Congenital Anomaly	2	1.33	-	
Nursery Admission	6	4	2	1.33
Total	14	9.33	3	2

DISCUSSION

It is found that 2% mothers with IUD babies developed postnatal depression. 1.33% cases with babies having congenital anomaly developed postnatal depression. 1.33% cases with babies having nursery admission developed postnatal depression. A study showed an incidence of between 60% and 85% of women who gave birth suffer from baby blues, another 10%-15% of new mothers suffers from postpartum depression, less than 2 in 1000 new mothers develop postpartum psychosis.¹¹ There are several treatment options available for treating postpartum depression. Support groups and other forms of support have been successful for some women, while others need counselling and/or antidepressant medication. These options should be arranged based on the specific needs of each mother. Sex of child Studies conducted within western societies have found no association between the sex of child and postpartum depression. Studies provide evidence from India and China which suggest that spousal disappointment with the sex of the baby, specifically if the baby is girl associated with developing postpartum depression.¹²

Postpartum depression was shown to be associated with fear of childbirth (OR 2.71, 95% CL), caesarean section birth (OR 1.38, 95% CL) and major congenital anomaly (OR 1.67, 95% CL). Supported by population-based analysis in Finland. (Raisanen et al., BMJ Open 2013). Another study further evidence of higher postpartum depression rates, with 39% of mothers meeting criteria for postpartum depression, and an additional 16.9% showing symptoms of subsyndromal postpartum depression 30 days after nursery admission.¹³

CONCLUSION

It is found that perinatal factors do affect postnatal depression as it is found in mothers who have adverse perinatal outcome. Further research is implicated in this field.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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