

Research Article**Exploratory study to analyze the relationship of postpartum blues in females with mode of delivery and gender of the live birth at Tertiary care Centre****Pragna Sorani¹, Abhijit Khanna², Ankit Moga³, Dhaval Prajapati⁴, Kamlesh Patel⁵**¹Senior Resident, Department of Psychiatry, C.U. Shah Medical College, Surendranagar, Gujarat, India²Resident, Department of Psychiatry, C.U. Shah Medical College, Surendranagar, Gujarat, India³Senior Resident, Department of Psychiatry, C.U. Shah Medical College, Surendranagar, Gujarat, India⁴Resident, Department of Psychiatry, C.U. Shah Medical College, Surendranagar, Gujarat, India⁵Professor & Head, Department of Psychiatry, C.U. Shah Medical College, Surendranagar, Gujarat, India***Corresponding author**

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Abstract: It is an exploratory study to analyze the relationship of mode of delivery and gender of infant with depressive features in postpartum females. The study included 300 females who had live birth. The depression score was collected using HAM-D scale on the 1st day of delivery. Results show significant proportion of females having postpartum blues. Also women who had LSCS and female newborn showed more proportion of depressive features. From the result, it is advisable that screening and intervention should be carried out at the earliest.**Keywords:** Postpartum period, Postpartum blues, LSCS, female newborn.

INTRODUCTION

In India there is a paucity of studies on postpartum depression, and awareness levels in the community are also very low. This study aims to find out the risk factors of postpartum depression in our setting.

Postpartum period is distinct in three phases: first phase which lasts 6-12 hours postpartum, second phase which lasts 2-6 weeks, third phase which can last upto 6 months [1]. The most common constellation of mood symptoms experienced by women in the immediate postpartum period is typically referred to as the postpartum blues or baby blues [2]. Postpartum blues include transient symptoms and rapid mood shifts, including tearfulness, irritability, anxiety, insomnia and lack of energy, loss of appetite and the general experience of feeling of overwhelmed – particularly with regard to newborn care giving tasks [3].

Treatments of the postpartum blues include psychoeducation, validation of the mother's experience and careful monitoring for a worsening or prolongation of symptoms that may indicate the development of a major postpartum depression [2].

Approximately 50 to 80% of postpartum women experience the "blues" which are due to hormonal changes that take place within the first 48 hours after giving birth.

Ganraj Bhatt Sankapithilu [4] reported in the study that those women who had normal vaginal delivery had better general health than with Caesarian section (CS). There are other studies on the mode of delivery and correlation with Postpartum Depression (PPD) that did not find any association between CS and PPD [5,6,7,8]. Some studies have demonstrated that the mode of delivery affects maternal mood and depression. CS has been reported as a risk factor for PPD [9,10]. It seems that elective CS is not as traumatic to mothers as an emergency CS.

Many studies reported female gender of infant as predisposing factor for development of PPD [11-14,4]. Culturally in our male dominant Indian society, male children are preferred and this male bias is deeply rooted. When a girl child is delivered, the mother may be subjected to antipathy, criticism and even hostility from her spouse and extended family, leading her to major depression. If the father is dissatisfied with the girl child, postnatal depression is more likely to occur. Women who already had a girl child, faces greater stress because of social and family pressure to give birth to a male child and if the child is a girl again, the risk of postpartum depression is greater [12].

PPD usually resolves by self after a couple of months. But it may persist in up to 25 % cases one year after delivery if not treated. There is a 30-50 % risk of

relapse in future pregnancy [15]. PPD may have deleterious effects on women’s social and personal adjustment, marital and mother-infant relationship. There have been several prospective studies of samples of women with PPD and their children. They indicate a definite association between the maternal mood disorder and impaired infant cognitive development. In Cambridge a community sample of children of mothers who had depression, were found to perform significantly less well on cognitive level, at 18 months than did children of well mothers [16]. This effect still obtained when the children were 4-5 years old [17]. Poor emotional adjustment has been shown to be similarly associated with PPD. Thus most studies that have systemically examined infant attachment in the context of PPD have found a raised rate of insecure attachments [16].

OBJECTIVE

The objective of the study is to analyze the relationship of mode of delivery and gender of infant with depressive features in postpartum females on the 1st day of delivery in a tertiary centre at Surendranagar.

METHODOLOGY

The study was conducted at Department of Psychiatry, at C.U. Shah Medical College, Surendranagar. The subjects to be enrolled in the study

were the females who delivered and had live birth at C.U. Shah Medical College and Hospital, Obstetric department. The patients were informed about the study and procedure details and an informed consent was obtained. Each of them was assessed by Hamilton Rating Scale for Depression (HAM - D).

Hamilton Rating Scale for Depression (HAM - D) [18]

HAM – D provides an indication for depression and over time, guide to recovery. It is one of the most commonly used and accepted outcome measures for evaluating the severity of depression symptoms. The HAM – D was designed to be administered by a trained professional using a semi-structured interview. Even though Hamilton provides no specific guideline for the administration and scoring of the scale or any standardized questions for eliciting information from the patients, high inter-rater reliability has been observed [19]. It takes about 20-30 minutes to complete the interview and score the results. Ten items are scored on a 5 point scale ranging from 0 = not present to 4 = severe. Two items are scored from 0-3, and nine items are scored from 0-2. Sum the total to arrive at a conclusion.

RESULTS

Table-1

	LSCS Frequency (%)	Vaginal Delivery Frequency (%)	Total Frequency (%)
Depressed	68 (81.93)	122 (56.22)	190 (63)
Not depressed	15 (18.07)	95 (43.78)	110 (37)
Total	83 (27.67)	217 (72.33)	300 (100)

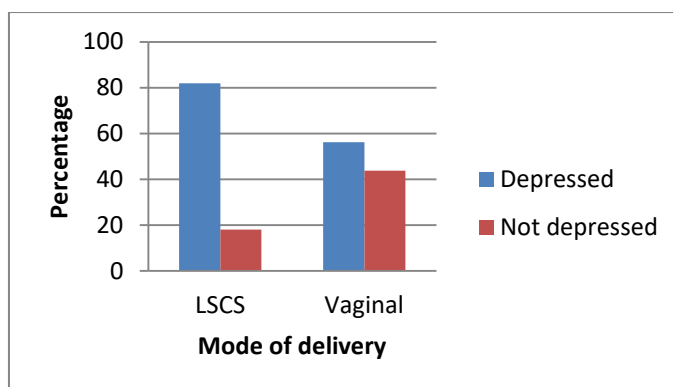


Fig-1: Percentage of females having postpartum blues and its relationship with mode of delivery

Table-2

	Female Child Frequency (%)	Male Child Frequency (%)	Total Frequency (%)
Depressed	105 (66.04)	85 (60.28)	190 (63)
Not depressed	54 (33.96)	56 (39.72)	110 (37)
Total	159 (53)	141 (47)	300 (100)

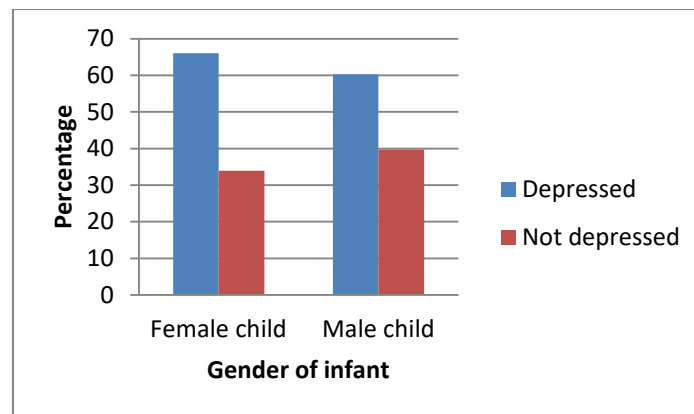


Fig-2: Percentage of females having postpartum blues and its relationship with gender of infant

DISCUSSION

Women who had LSCS (81.93%) were more depressed compared to women who had vaginal delivery (56.22%). Thus, mode of delivery was found to have relationship with postpartum blues (Table: 1, Figure: 1). This corroborates with the previous studies [4,9,10]. The factors explaining the higher risk of depression after CS suggested are that the mother is less likely to see the new born immediately after delivery, the partner may not be present to support her during the delivery, emergency CS is very unexpected and stressful to both parents, infants may have more postnatal problems, mothers with CS may have more complications, like wound infection or postoperative pain than mothers with vaginal delivery.

Women who had female new born (66.04%) were more depressed compared to women who had male new born (60.28%) on 1st day of delivery. Thus, gender of infant was found to have relationship with postpartum blues (Table 2, Figure 2). And this corroborates with the previous studies [4, 11-14].

Various epidemiological studies have come up with data suggesting that the major etiological factors are largely of social nature [20,21], especially important are lack of support from spouse and family, and stressful life events [7]. Social support consists both of practical support (e.g. baby sitting, house work) and emotional support. It shows the importance of support for all mothers.

In two separate studies a close association between maternity blues and PPD was found, where blues at one week increased the risk of maternal depressive symptoms at 6 and 12 weeks postpartum [22,23]. Risk factors for the development of postpartum depression include a personal or family history, as well as previous history of premenstrual dysphoric disorder or previous postpartum depressions¹.

In summary, various explanatory models on the etiology and causal factors of PPD have been proposed and it's probable that illness is ordinarily a result of an interaction between genetic vulnerability,

hormonal changes, various sociodemographic factors and environmental stress and major life events.

CONCLUSION

Women who had LSCS showed more depressive features in comparison with those who underwent vaginal delivery on the 1st day of delivery and those women who had female newborn too showed slightly more depressive features than those women who had male new born on 1st day of delivery.

The limiting factor for present study was its smaller sample size.

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