

## A Comparative Study on Postpartum Specific Anxiety Among Mothers Underwent LSCS V/S Normal Delivery in HSK Hospital at Bagalkot

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### Abstract

### Original Research Article

**Background:** Pregnancy and child birth is a journey towards motherhood. Every woman enters in to labour with a certain amount of tension and anxiety. These experiences may vary from woman to woman. Therefore, individual care during labour and delivery is essential. During pregnancy, psychological transformation occurs in a woman's life. If the pregnant woman is unable to cope up with the present condition, pregnancy and child birth may cause extreme traumatic stress. Child birth is a moment of joy; at the same time, it is a time of pain and stress. **Aims:** To compare the mean postpartum specific anxiety scores between mothers who underwent LSCS and those who had normal vaginal delivery. **Methods and Material:** The Postpartum specific anxiety was assessed by using Centre for Post-partum specific anxiety scale from a purposive sample of postnatal mothers at HSK hospital of Bagalkot. Data were analysed using descriptive and inferential statistics. **Results:** There was a that most (53.33%) of postnatal mothers had mild or no clinically significant anxiety and remaining 46.66 percent of them had clinically significant anxiety in Normal Delivery. There was a most (70%) of postnatal mothers had clinically significant anxiety and remaining 30 percent of them had mild or no clinically significant anxiety in LSCS. There is a comparison between Normal delivery and LSCS scores was calculated with 'Unpaired t test'. The calculated t value is 1.3807 and the table value is 2.01 with the significance level of 0.05, it shows postpartum anxiety high in LSCS. The association between postpartum anxiety with their socio-demographic characteristics in Normal Delivery there was a significant association was found between postpartum anxiety with their age ( $\chi^2=7.3125$ ,  $P<0.025^*$ ). The association between postpartum anxiety with their socio-demographic characteristics in the LSCS there was a significant association was found between postpartum anxiety with their age ( $\chi^2=8.0302$ ,  $P<0.0361^*$ ) and age ( $\chi^2=8.4861$ ,  $P<0.0485^*$ ). **Conclusions:** The overall findings reveal that the postpartum anxiety is high in postnatal mother who have undergone LSCS compare to Normal Delivery.

**Keywords:** Socio-demographic, Postpartum Anxiety, LSCS, Normal Delivery.

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## INTRODUCTION

Becoming a mother in all societies has been considered as the most crucial role for women. Although some women avoid childbearing or defer it, becoming a mother is mostly inevitable. The birth of the first child despite being a happy event, puts the mother into crisis and lots of stress and faces her with new roles and responsibilities. The first year after childbirth is not only a vital period regarding the physical, emotional, and psychological development, but also a significant time for challenging first-time mothers' capacities in adjusting to their maternal roles.[1]

Pregnancy and child birth is a journey towards motherhood. Every woman enters in to labour with a certain amount of tension and anxiety. These experiences may vary from woman to woman. Therefore, individual care during labour and delivery is essential. During pregnancy, psychological transformation occurs in a woman's life. If the pregnant woman is unable to cope up with the present condition, pregnancy and child birth may cause extreme traumatic stress. Child birth is a moment of joy; at the same time, it is a time of pain and stress. Stress is a part of human life, and we are never completely free from stress. Many situations in our life can be stressful, such as period of development,

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marriage, child birth etc. Stress in one area can lead to stress in another.[2]

Cesarean birth imposes the physiologic stresses of anesthesia, a major surgical procedure, physical recovery, and postoperative complications.[3]

Global C-section rates have increased from about 7% in 1990 to 21% in 2021, with expectations for further rise over this decade. Similarly, India is also experiencing a rise in C - Section, particularly in private healthcare facilities. The rate increased from 2.9% in NFHS-1 (1992-93) to 17.2% in NFHS-4 and 22% in NFHS-5 (2019-2021).7,8 Private sector deliveries accounted for 48% of C-sections in NFHS-5, which was an increase from 41% in NFHS-4. Southern Indian states show high C-section prevalence, with Telangana at 60.7%, Tamil Nadu at 44.9%, Andhra Pradesh at 42.4%, Kerala at 38.9%, and Karnataka at 31.5%, while lower rates were observed in states such as Bihar (9.7%) and Madhya Pradesh (12.3%). [4]

UNICEF's report that India's fight due to growing social inequalities and shortages in primary health care facilities and 80% of women suffer from the maternity blues which is merely a mild transitory form of moodiness where symptoms typically last from a few hours to several days and include tearfulness, irritability, hypochondriasis, sleeplessness, impairment of concentration, isolation and headache.[5]

## MATERIAL AND METHODS

### Study Design and Participants

Present study was a Comparative descriptive research study conducted between May 2025 to June 2025. Purposive sample of 60 postnatal mothers undergone LSCS and Normal delivery at HSK hospital of Bagalkot were selected for the study. Permission to conduct study was obtained from Medical Superintendent, HSK Hospital Bagalkot.

### Instruments

#### Post-partum specific anxiety scale

It consists of 51 statements; responses are recorded on a 5 points Likert scale [1 = Not at all to 5 = almost always]. Total score range between 51-204. If score is less than 112 considered as mild anxiety or no clinically significance. Scale was translated to Kannada and then back translated to English. For the present study reliability was calculated by administering post-partum specific anxiety scale to 10 postnatal mothers and Karl Pearson's coefficient obtained was 0.93.

#### Socio-demographic Variables and Clinical Characteristics

It includes information about age, religion, education status, occupation, family monthly income, parity, mode of delivery, gender of baby, days after

delivery, type of delivery, number of children, habits, previous bad experience on obstetrics history.

### Data Collection Procedures

Prior permission was taken from relevant hospitals before the beginning of data collection procedure. The study participants were identified during study period at HSK hospital of Bagalkote. Every postnatal mother who fulfilled the inclusion criteria was approached for data collection. Consent was obtained by the postnatal mothers. All the information collected was based on patient's self-report, but information related to anxiety by the data collection.

### Data Analysis

Data analysis was performed using SPSS v25. Descriptive statistics such as frequencies and percentages were used for socio demographic variables and clinical characteristics. Calculation of mean, Standard Deviation Anxiety scores. Comparison of anxiety among LSCS and Normal delivery was found using independent t test. Association between the socio-demographic with anxiety among LSCS and Normal delivery was found using chi square test.

## RESULTS

### Part I: Socio-demographic variables among postnatal mothers undergone Normal delivery and LSCS.

Postnatal mothers were equally distributed in all the age groups of normal delivery mothers with highest being above 32 years (46.66%). 60% of the postnatal mothers were belongs to Hindu religion and majority of postnatal mothers (43.33%) were completed the secondary education. Most of the postnatal mothers were spread out in variety of occupations with highest being (66.66%) housewives. Most of the postnatal mothers (66.66%) belongs to nuclear family. Most of the postnatal mothers (50%) had monthly family income between Rs 10,001 to Rs.20,000/-. 66.66% of the postnatal mothers were had primipara. Most of the postnatal mothers (60%) had female baby. Most of the postnatal mothers (83.33%) were less than 7 days after delivery. 70% of postnatal mothers were had mixed diet. 66.66% postnatal mothers had one child. All of the of postnatal mothers are not having any bad habits (100%). Most of the postnatal mothers were not having any bad experience (93.33%).

Postnatal mothers were equally distributed in all the age groups of LSCS mothers with highest being age between 18-22 years (50%). 80% of the postnatal mothers were belongs to Hindu religion and majority of postnatal mothers (46.66%) were completed the secondary education. Most of the postnatal mothers were spread out in variety of occupations with highest being (60%) housewives. Most of the postnatal mothers (63.33%) belongs to nuclear family. Most of the postnatal mothers (46.66%) had monthly family income between Rs 10,001 to Rs.20,000/-. 50% of the postnatal

mothers were had primipara and 50% of the postnatal mothers were had multipara. Most of the postnatal mothers (46.66%) had male baby. Most of the postnatal mothers (93.33%) were less than 7 days after delivery. 80% of postnatal mothers were vegetarian. 50% postnatal mothers had one child. All of the of postnatal mothers are not having any bad habits (100%). Most of the postnatal mothers were not having any bad experience (86.66%).

**Part-II: Assessment of anxiety among mothers undergone normal delivery.**

Findings reveal that related to distribution of postnatal mothers on the basis of Level of postpartum anxiety was done as follows: Scores 51-111 mild or no clinically significant of anxiety, scores 112-204 clinically significant of anxiety. (Table 1)

**Table 1: Levels of Postpartum anxiety among postnatal mother. N=60**

Levels of Anxiety	Scores	Frequency	Percentage
Mild or no Clinically significant	51-111	16	53.33%
Clinically significant	112-204	14	46.66%

**Part-III: Assessment of anxiety among mothers undergone LSCS.**

Findings reveal that related to distribution of postnatal mothers according to their level of postpartum

anxiety. It shows that most (70%) of postnatal mothers had clinically significant anxiety and remaining 30 percent of them had mild or no clinically significant anxiety (Table 2).

**Table 2: Levels of Postpartum anxiety among postnatal mother. N=60**

Levels of Anxiety	Scores	Frequency	Percentage
Mild or no Clinically significant	51-111	21	70%
Clinically significant	112-204	09	30%

**Part IV: Compare the mean postpartum specific anxiety scores between mothers who underwent LSCS and those who underwent normal vaginal delivery.**

Findings reveal that comparison between Normal delivery and LSCS scores was calculated with ‘Unpaired t test’. The calculated t value is 1.3807 and the table value is 2.01 with the significance level of 0.05. (Table 3).

**Table 3: Compare the mean postpartum specific anxiety scores between mothers who underwent LSCS and those who had normal vaginal delivery. N=60**

Experimental	Total sample	Mean	Standard Deviation	T value	T table value	Significance
Normal delivery	60	104.87	18.17	1.3807	2.01	Not Significant
LSCS		112.23	22.89			

\* Significant P<0.05

**Part-V: Association between postpartum specific anxiety and selected socio-demographic variables.**

The chi square test carried out to find the association between postpartum anxiety with their socio-demographic characteristics reveals that there was a significant association was found between postpartum

anxiety with their age ( $\chi^2=7.3125$ ,  $P<0.025^*$ ). Whereas there was no significant association was found between postpartum anxiety and other socio-demographic of postnatal mothers. (Table 4).

**Table 4: Association between postpartum specific anxiety and selected socio-demographic variables in mothers underwent normal vaginal delivery. N=60**

Sl/No	Variables	Df	Chi- Square Value	P Value	Significance
1	Age	1	7.3125	0.025**	Significant
2	Religion	1	0.0056	0.940	Not Significant
3	Education status	1	1.8431	0.174	Not Significant
4	Occupation	1	0.0574	0.810	Not Significant
5	Type of Family	1	0.0167	0.897	Not Significant
6	Family monthly income	1	0.0167	0.897	Not Significant
7	Parity	1	0.418	0.517	Not Significant
8	Gender of baby	1	0.0893	0.765	Not Significant
9	Days after Delivery	1	0.0268	0.869	Not Significant
10	Type of diet	1	1.0778	0.299	Not Significant
11	Number of children	1	0.6696	0.413	Not Significant
12	Previous bad experience on obstetrics history	1	0.0149	0.902	Not Significant

\*P&lt;0.05 (Significant)

Df- Degree of freedom

The chi square carried out to find the association between postpartum anxiety with their socio-demographic characteristics reveals that there was a significant association was found between postpartum anxiety with their age ( $\chi^2=8.0302$ ,  $P<0.0361^*$ ) and age

( $\chi^2=8.4861$ ,  $P<0.0485^*$ ). Whereas there was no significant association was found between postpartum anxiety and other socio-demographic of postnatal mothers. (Table 5).

**Table 5: Association between postpartum specific anxiety and selected socio-demographic variables in mothers underwent LSCS.**

Sl/No	Variables	Df	Chi- Square Value	P Value	Significance
1	Age	1	8.0302	0.0361**	Significant
2	Religion	1	0.0893	0.765	Not Significant
3	Education status	1	0.065	0.675	Not Significant
4	Occupation	1	0.1786	0.672	Not Significant
5	Type of Family	1	0.0273	0.868	Not Significant
6	Family monthly income	1	0.4375	0.4375	Not Significant
7	Parity	1	0.342	0.453	Not Significant
8	Gender of baby	1	0.0574	0.810	Not Significant
9	Days after Delivery	1	0.2822	0.595	Not Significant
10	Type of diet	1	8.4861	0.0485**	Significant
11	Number of children	1	0.142	0.706	Not Significant
12	Previous bad experience on obstetrics history	1	0.234	0.531	Not Significant

\*P&lt;0.05 (Significant)

Df- Degree of freedom

## DISCUSSION

The main objective of the present study was to assess the prevalence and factors associated with depression and anxiety among patients with CKD. This comparative descriptive cross-sectional study included a sample of 60 postnatal mother undergone Normal delivery and LSCS at HSK hospitals of Bagalkot. Highest percentage (53.33%) of postnatal mothers had mild or no clinically significant anxiety in normal delivery. And Highest percentage (70%) of postnatal mothers had clinically significant anxiety in LSCS.

Similar findings were found consistent with the study conducted by Sandra Nakić Radoš, Meri Tadinac, Radoslav Herman. The majority of the postnatal mothers 44.7% were also anxious in the late postpartum.[6]

Similar findings were found inconsistent with the study conducted by María Antonia Díaz Ogallar, Sergio Martínez Vázquez, Antonio Hernández Martínez. The majority of the postnatal mothers 47% were also anxious in the late postpartum.[7]

The comparison between Normal delivery and LSCS scores was calculated with 'Unpaired t test'. The calculated t value is 1.3807 and the table value is 2.01 with the significance level of 0.05.

Similar findings were found inconsistent with the study conducted by Kamber Kasali, Gamze Nur Cimilli Senocak, Aysenur Dostbil. The postpartum anxiety not significant ( $Z=-0.107$ ,  $p=0.914$ ).[8]

The association between postpartum anxiety with their socio-demographic characteristics reveals that there was a significant association was found between postpartum anxiety with their age ( $\chi^2=7.3125$ ,  $P<0.025^*$ ). Whereas there was no significant association was found between postpartum anxiety and other socio-demographic of postnatal mothers.

Similar findings were found inconsistent with the study conducted by Loredana Cena, Antonella Gigantesco, Fiorino Mirabella. The significantly higher risk of anxiety in mothers who had depression or anxiety during pregnancy ( $p < 0.001$ ), lack or enough psychological support from the partner ( $p < 0.001$ ), and high educational level (university degree or above) ( $p < 0.05$ ). [9]

The association between postpartum anxiety with their socio-demographic characteristics reveals that there was a significant association was found between postpartum anxiety with their age ( $\chi^2=8.0302$ ,  $P<0.0361^*$ ) and age ( $\chi^2=8.4861$ ,  $P<0.0485^*$ ). Whereas there was no significant association was found between postpartum anxiety and other socio-demographic of postnatal mothers.

Similar findings were found inconsistent with the study conducted by Dikshita Garg, Suprakash Chaudhury, Daniel Saldanha, Santosh Kumar. The significantly associate with socio economic status ( $p < 0.001$ ), gender of baby ( $p < 0.001$ ).[10]

**Limitations**

Although present study mothers undergone LSCS or normal vaginal delivery. Mothers are able to understand Kannada or English. Those who are able to provide essential information on questionnaires.

**Recommendations**

Interventions can be included to reduce the postpartum anxiety among postnatal mothers. Community-based workers and health professionals should provide education to postnatal care for reducing the anxiety.

**Conclusions**

The study is helpful to assess the postpartum anxiety among postnatal mothers undergone Normal delivery and LSCS. And postpartum anxiety was high in mothers who went the LSCS compare to Normal delivery. Future researches can investigate the effect of various psychological measures to reduce the level of anxiety of CKD patients.

**Ethical Clearance**

Ethical clearance was obtained from the institutional ethical committee of BVVS Sajjalashree Institute of Nursing Sciences, Bagalkot.

**Source of funding:** Self

**Conflict of Interest:** Nil

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