



**Research Article**

**“LEVEL OF DEPRESSION, ANXIETY AND STRESS AMONG PRIMI POSTNATAL MOTHERS WITH LSCS ADMITTED IN MATERNITY WARD OF SELECTED HOSPITAL IN BELAGAVI, KARNATAKA”**

**Heikham GC and Belgundkar B**

Department of Obstetrics & Gynaecological Nursing, K.L.E University's Institute of Nursing Sciences, Belagavi, Karnataka, India

**ARTICLE INFO**

**Article History:**

Received 13<sup>th</sup> January, 2019  
Received in revised form 11<sup>th</sup> February, 2019  
Accepted 8<sup>th</sup> March, 2019  
Published online 28<sup>th</sup> April, 2019

**Key words:**

Depression, Anxiety, Stress, DASS, Primi postpartum mothers, LSCS.

**ABSTRACT**

A study was conducted to assess the level of depression, anxiety and stress among primi postnatal mothers with LSCS by using DAS Scale and to find out association between selected socio demographic variables and level of Depression, anxiety and stress among primi postnatal mothers with LSCS. Research approach used in this study was descriptive in nature. Non experimental descriptive research design was used. 30 primi postnatal mothers with LSCS admitted in maternity ward of selected hospital in Belagavi, Karnataka were included. Purposive sampling technique was used. The result of the study showed that Maximum (40%) of the primi postpartum mothers with LSCS are in the age group of 21-23 years and 13.4% are in the age group of 27-30 years. Most of the them (30%) had education upto SSLC level and only 3% was illiterate. Majority of them (83.33%) were Hindu and there were no Christian and other religion. Majority (73.33%) of them belongs to joint family and 26.67% belongs to nuclear family. Maximum (83.33%) of them were housewives and only 3.33% are farmer. Most (53.33%) of them had an income of 5000 to 10000 and non of them has income of 10000 to 15000. There were equal percentage (50% each) for both vegetarian and non vegetarian. The study revealed that 13.33% had mild Depression and 3.33% had extreme severe Depression. The study showed that 33.33% had severe Anxiety and 10% had mild anxiety. It was also found that 50% had moderate stress and 3.34% had extreme severe Stress. The obtained chi square value for the selected demographic variables in levels of depression revealed that only calculated chi square value for education is more than table value; which means that only education is associated with the levels of Depression. The obtained chi square value for the selected demographic variables in levels of Anxiety revealed that only calculated chi square value for diet is more than table value; which means that only diet is associated with the levels of Anxiety. The obtained chi square value for levels of stress revealed that none of the calculated chi square value for age, education, religion, type of family, occupation, income and diet is more than table value; which means that there is no association between the selected demographic variables with the levels of Stress.

Copyright©2019 **Heikham GC and Belgundkar B**. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**INTRODUCTION**

A postpartum period is the period that begins immediately after the childbirth and extends upto 6 weeks. It is the time after birth in which the mother's body, including hormone levels and uterus size returns to a non-pregnant state. Approximately 25-85% of postpartum women experience "blues" for few days and around 7-17% experience clinical depression.<sup>1</sup>

Many primi mothers become anxious after the first delivery of a baby. Some of them have excessive worries and suffers from severe level of anxiety. These mothers have difficulty in enjoying with their babies and are over concerned about minor

**\*Corresponding author: Heikham GC**

Department of Obstetrics & Gynaecological Nursing, K.L.E University's Institute of Nursing Sciences, Belagavi, Karnataka, India

Approximately 10 to 15% of women suffer from postpartum mood disorders including postpartum depression, postpartum anxiety and postpartum psychosis.<sup>3</sup>Children of mother suffering from postpartum depression are found to have higher rates of emotional problems, behavioral problems, psychiatric problems and hyperactivity.<sup>4</sup>Women commonly experience stress, sadness, anxiety, loneliness or tiredness after the childbirth. But among some women, 1 in 7 experiences a serious mood disorder i.e. postpartum depression. It doesn't go away on its own. If left untreated, it may last for many weeks or months. PPD can affect any of the women and most commonly among the women with easy pregnancies, problematic pregnancies, first time mothers, etc.<sup>5</sup>

NICE warns that the health professionals should be aware that women may be unwilling to disclose symptoms of depression and other mental health problems or reluctant to engage which

may be due to fear of stigma, fear that baby may be taken into care, concern that they will be perceived as poor mother, etc.<sup>6</sup>

**MATERIAL AND METHODS**

The present study was conducted to assess the level of depression, anxiety and stress among primi postnatal mothers with LSCS by using DAS Scale and to find out association between selected socio demographic variables and level of Depression, anxiety and stress among primi postnatal mothers with LSCS. Research approach used in this study was descriptive in nature. Non experimental descriptive research design was used. 30 primi postnatal mothers with LSCS admitted in maternity ward of selected hospital in Belagavi, Karnataka were included. Purposive sampling technique was used. DAS Scale was used to collect the data. The tool used in the study consists of two parts:

1. Socio demographic data
2. DAS Scale

The data obtained was analyzed in terms of descriptive and inferential statistics.

**RESULTS**

**SECTION-A: Findings Related To Socio Demographic Variables.**

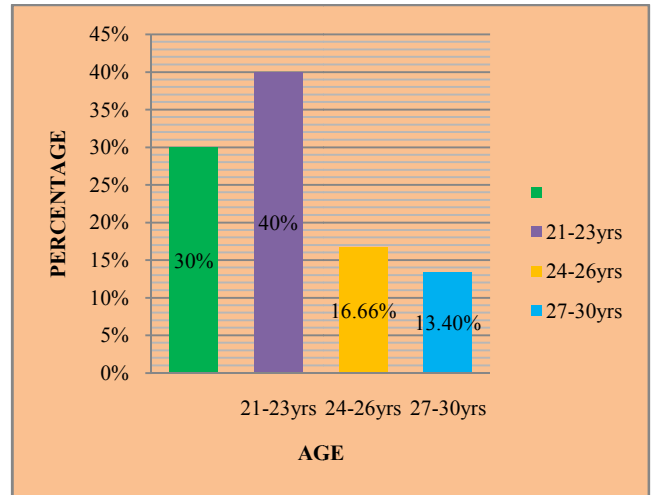
**Table 1** Frequency and percentage distribution of Primi Postpartum Mothers with LSCS according to socio-demographic variables: N=30

SL. NO.	SOCIO DEMOGRAPHIC VARIABLES	FREQUENCY (f)	PERCENTAGE (%)
1.	<b>Age in years</b>		
a.	18-20	9	30 (%)
b.	21-23	12	40 (%)
c.	24-26	5	16.66 (%)
d.	27-30	4	13.4 (%)
2.	<b>Education</b>		
a.	Illiterate	1	3 (%)
b.	Primary	5	16.7 (%)
c.	SSLC	9	30 (%)
d.	PUC	8	26.7 (%)
e.	Graduate	5	16.7 (%)
f.	Post Graduate	2	6.9 (%)
3.	<b>Religion</b>		
a.	Hindu	25	83.33 (%)
b.	Christian	5	16.67 (%)
c.	Muslim	0	0 (%)
d.	Others	0	0 (%)
4.	<b>Type of Family</b>		
a.	Joint Family	22	73.33 (%)
b.	Nuclear Family	8	26.67 (%)
1.	<b>Occupation</b>		
a.	Housewife	25	83.33 (%)
b.	Farmer	1	3.33 (%)
c.	Government job	2	6.67 (%)
d.	Private Job	2	6.67 (%)
e.	Business	0	0 (%)
f.	Others	0	0 (%)
2.	<b>Income</b>		
a.	Rs. 5000 below	12	40 (%)
b.	Rs.5000-10000	16	53.33 (%)
c.	Rs. 10000-15000	0	0 (%)
d.	Above Rs.15000	2	6.67 (%)
3.	<b>Diet</b>		
a.	Vegetarian	15	50 (%)
b.	Non-vegetarian	15	50 (%)

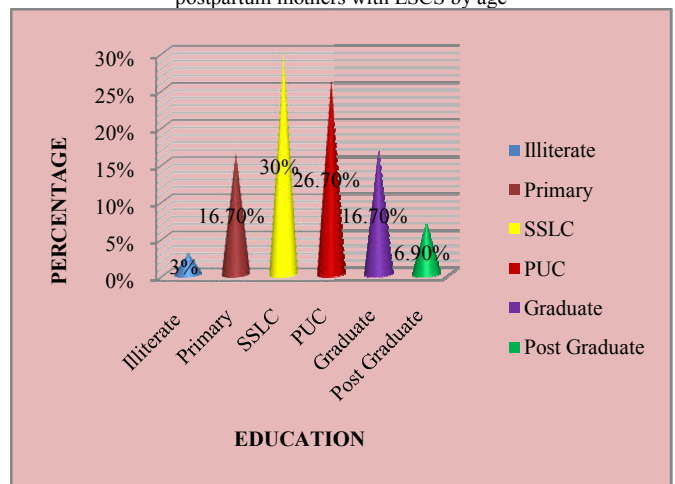
Demographic variables of the samples included in the present study were: age, education, religion, type of family, occupation, income and diet.

The above table showed that maximum (40%) of the primi postpartum mothers with LSCS are in the age group of 21-23 years and 13.4% are in the age group of 27-30 years. Most of

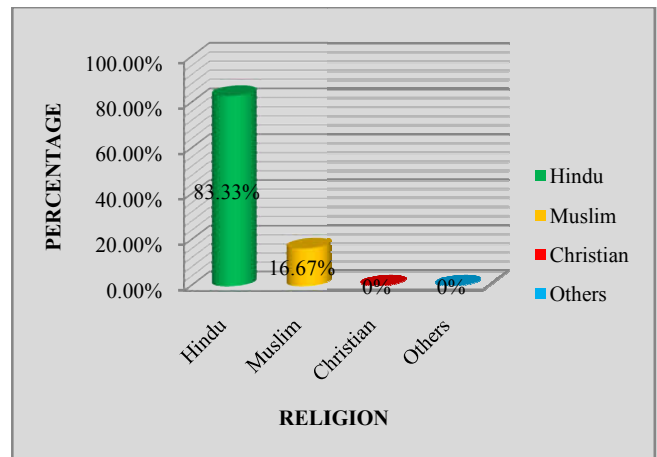
the them (30%) had education upto SSLC level and only 3% was illiterate. Majority of them (83.33%) were Hindu and there were no Christian and other religion. Majority (73.33%) of them belongs to joint family and 26.67% belongs to nuclear family. Maximum (83.33%) of them were housewives and only 3.33% are farmer. Most (53.33%) of them had an income of 5000 to 10000 and none of them has income of 10000 to 15000. There was equal percentage of both vegetarian and non vegetarian.



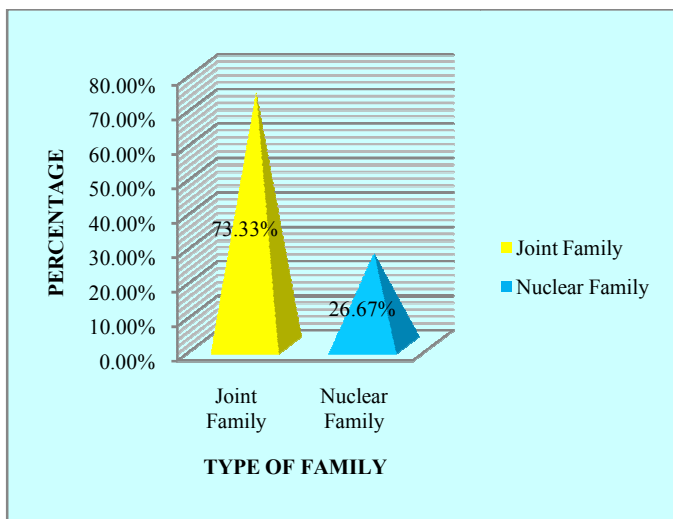
**Graph 1** A column graph showing percentage distribution of the primi postpartum mothers with LSCS by age



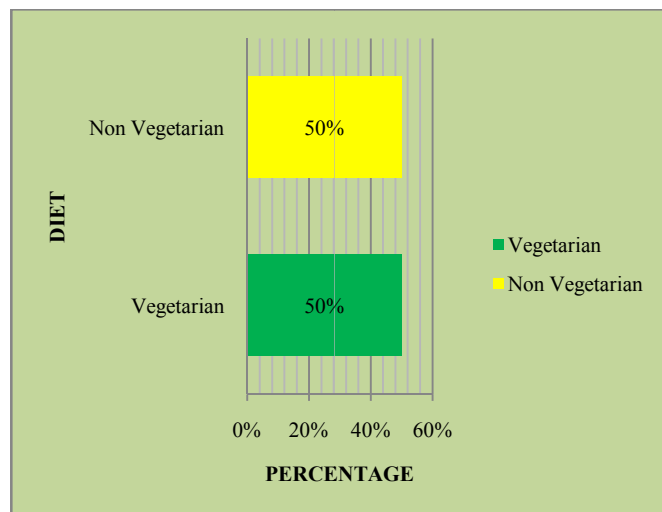
**Graph 2** A conical graph showing percentage distribution of the primi postpartum mothers with LSCS by education.



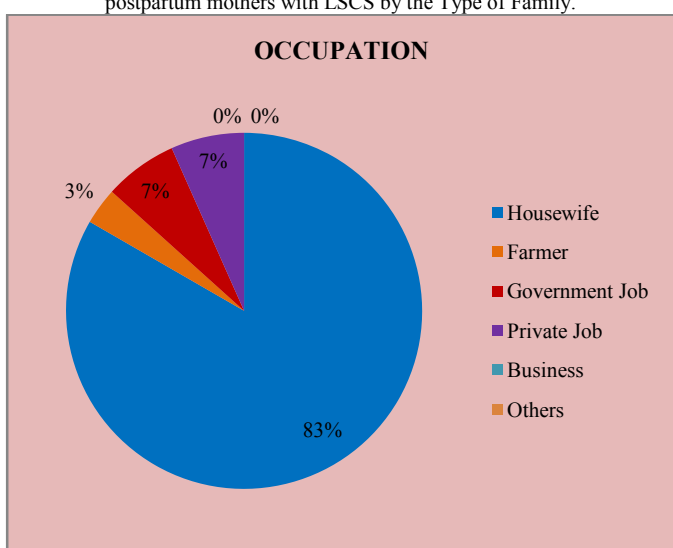
**Graph 3** A cylindrical graph showing percentage distribution of the primi postpartum mothers with LSCS by religion.



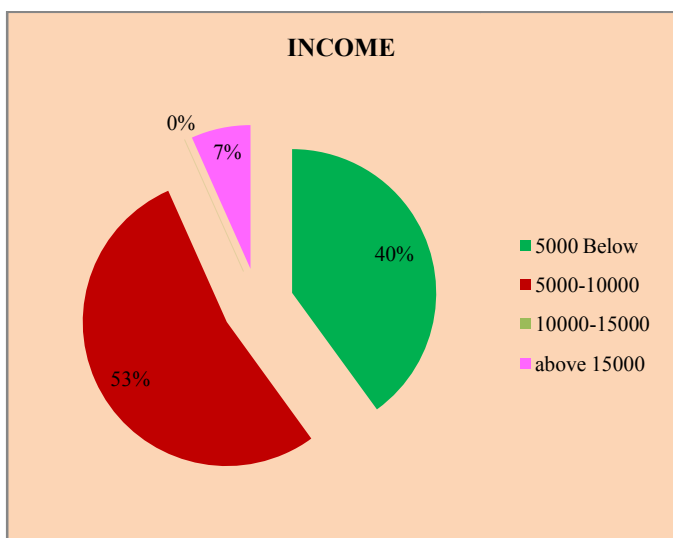
**Graph 4** A Pyramid graph showing percentage distribution of the primi postpartum mothers with LSCS by the Type of Family.



**Graph 7** A Bar diagram showing percentage distribution of the primi postpartum mothers with LSCS by the Diet.



**Graph 5** A Pie diagram showing percentage distribution of the primi postpartum mothers with LSCS by the Occupation.



**Graph 6** A Pie diagram showing percentage distribution of the primi postpartum mothers with LSCS by the Income.

**SECTION-B: Findings Related To Association Between Demographic Variables And Level Of Depression, Anxiety And Stress Among Primi Postnatal Mothers With Lscs.**

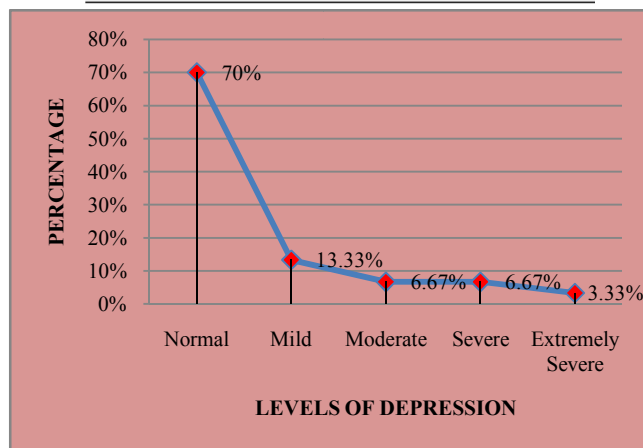
**Table 2 Mean and Standard Deviation**

Sl. No.	Variables	Mean	SD
1.	Depression	9	6.83
2.	Anxiety	14	5.85
3.	Stress	21	7.15

**Table 3** Frequency and percentage distribution of level of depression by using DAS Scale among Primi Postpartum mothers with LSCS.

**Table 3** revealed that 13.33% had mild Depression and 3.33% had extreme severe Depression. N=30

Level of Depression	Frequency	Percentage
Normal	21	70%
Mild	4	13.33%
Moderate	2	6.67%
Severe	2	6.67%
Extremely Severe	1	3.33%

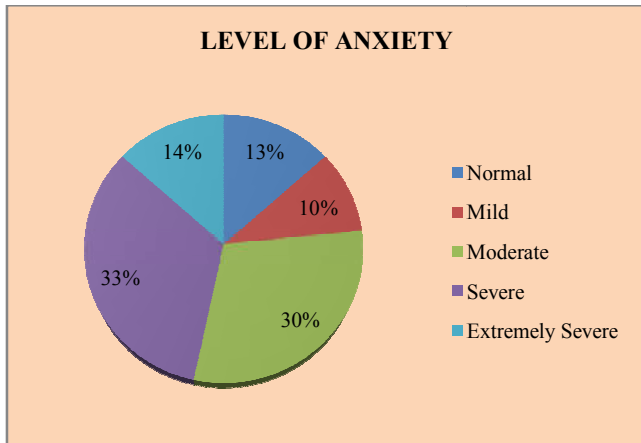


**Graph 8** A Line graph showing levels of Depression among Primi postpartum Mothers with LSCS

**Table 4** Frequency and percentage distribution of level of Anxiety by using DAS Scale among Primi Postpartum mothers with LSCS. N=30

Level of Anxiety	Frequency	Percentage
Normal	4	13.33%
Mild	3	10%
Moderate	9	30%
Severe	10	33.33%
Extremely Severe	4	13.34%

**Table 4** revealed that 33.33% had severe Anxiety and 10% had mild anxiety.

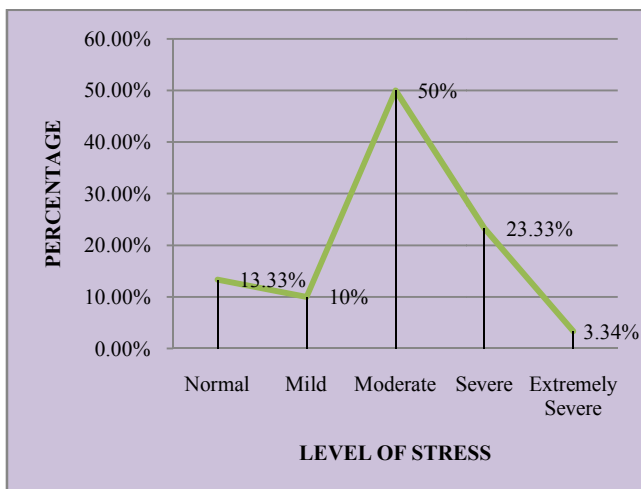


**Graph 9** A Pie Diagram showing levels of Anxiety among Primi postpartum Mothers with LSCS.

**Table 5** Frequency and percentage distribution of level of Stress by using DAS Scale among Primi Postpartum mothers with LSCS. N=30

Level of Stress	Frequency	Percentage
Normal	4	13.33%
Mild	3	10%
Moderate	15	50%
Severe	7	23.33%
Extremely Severe	1	3.34%

**Table 5** revealed that 50% had moderate stress and 3.34% had extreme severe Stress.



**Graph 10** A Line graph showing levels of Stress among Primi postpartum Mothers with LSCS.

**Table 6** revealed that only calculated chi square value for education is more than table value; which means that only education is associated with the levels of Depression.

## DISCUSSION

The findings of the study have been discussed under the following headings:

### Findings Related To Socio Demographic Variables

#### Age

Maximum (40%) of the primi postpartum mothers with LSCS are in the age group of 21-23 years and 13.4% are in the age group of 27-30 years.

#### Education

Most of the them (30%) had education upto SSLC level and only 3% was illiterate.

#### Religion

Majority of them (83.33%) were Hindu and there were no Christian and other religion.

#### Type of family

Majority (73.33%) of them belongs to joint family and 26.67% belongs to nuclear family.

#### Occupation

Maximum (83.33%) of them were housewives and only 3.33% are farmer.

#### Income

Most (53.33%) of them had an income of 5000 to 10000 and none of them has income of 10000 to 15000.

#### Diet

There were equal percentage (50% each) for both vegetarian and non vegetarian.

The present study is supported by the study conducted by Kole U and Devulkar N. to assess the level of depression, anxiety, stress among primi postnatal mothers in a view to develop health education pamphlet.

**Table 7** revealed that only calculated chi square value for diet is more than table value; which means that only diet is associated with the levels of Anxiety.

**Table 8** revealed that none of the calculated chi square value for age, education, religion, type of family, occupation, income and diet is more than table value; which means that there is no association between the selected demographic variables with the levels of Stress.

The study revealed that majority 60% were in the age group of 21-30yrs, 100% had primary education, 86% of them were Hindus and 62% of the subjects had income of Rs.4000-6000 monthly.

### Findings Related To Association Between Demographic Variables And Level of Depression, Anxiety And Stress Among Primi Postnatal Mothers With Lscs

The study revealed that 13.33% had mild Depression and 3.33% had extreme severe Depression. The study showed that 33.33% had severe Anxiety and 10% had mild anxiety.

**Table 6** Association between demographic variables and level of Depression among Primi postpartum mothers with LSCS.

SN.	Demographic variable	Normal	Mild	Moderate	Severe	Extremely Severe	Cal. Val	Tab Val	Df
1.	Age								
	18-20yrs	6	2	0	1	0			
	21-23yrs	10	1	0	1	0	16.254	21.026	12
	24-26yrs	3	1	1	0	0			
	27-30yrs	2	0	1	0	1			
2.	Education								
	Illiterate	0	0	0	1	0			
	Primary	4	1	0	0	0			
	SSLC	7	1	0	1	0	50.596	31.410	20
	PUC	6	1	1	0	0			
	Graduate	3	1	1	0	0			
	Postgraduate	1	0	0	0	1			
3.	Religion								
	Hindu	17	3	2	2	1			
	Muslim	4	1	0	0	0	0.612	21.026	12
	Christian	0	0	0	0	0			
	Others	0	0	0	0	0			
4.	Type of Family								
	Joint Family	14	4	1	2	1	3.536	9.488	4
	Nuclear Family	7	0	1	0	0			
5.	Occupation								
	House wife	17	4	1	2	1			
	Farmer	1	0	0	0	0			
	Government Job	2	0	0	0	0	9.318	31.410	20
	Private Job	1	0	1	0	0			
	Business	0	0	0	0	0			
	Others	0	0	0	0	0			
6.	Income								
	Below Rs. 50000	6	3	1	2	0			
	Rs.50000-10000	14	1	0	0	1	17.373	21.026	12
	Rs.10000-15000	0	0	0	0	0			
	Rs.15000 above	1	0	1	0	0			
7.	Diet								
	Vegetarian	8	3	1	2	1	5	9.488	4
	Non Vegetarian	13	1	1	0	0			

**Table 7** Association between demographic variables and level of Anxiety among Primi postpartum mothers with LSCS

SN.	Demographic variable	Normal	Mild	Moderate	Severe	Extremely Severe	Cal. Val	Tab Val	Df
1.	Age								
	18-20yrs	1	2	0	3	3			
	21-23yrs	1	1	5	4	1	16.355	21.026	12
	24-26yrs	2	0	2	1	0			
	27-30yrs	5	3	8	9	5			
2.	Education								
	Illiterate	0	0	0	0	1			
	Primary	1	0	1	3	0			
	SSLC	2	1	1	3	2	14.292	31.410	20
	PUC	1	1	3	2	1			
	Graduate	1	1	2	1	0			
	Postgraduate	0	0	1	0	1			
3.	Religion								
	Hindu	0	0	2	3	0			
	Muslim	5	3	6	6	5	6.368	21.026	12
	Christian	0	0	0	0	0			
	Others	0	0	0	0	0			
4.	Type of Family								
	Joint Family	3	2	6	6	5	3.353	9.488	4
	Nuclear Family	2	1	2	3	0			
5.	Occupation								
	House wife	3	3	7	7	5			
	Farmer	0	0	0	1	0			
	Government Job	1	0	1	0	0	8.467	31.410	20
	Private Job	1	0	0	1	0			
	Business	0	0	0	0	0			
	Others	0	0	0	0	0			
6.	Income								
	Below Rs. 50000	2	3	1	2	4			
	Rs.50000-10000	3	0	6	6	1	12.141	21.026	12
	Rs.10000-15000	0	0	0	0	0			
	Rs.15000 above	0	0	1	1	0			
7.	Diet								
	Vegetarian	2	2	3	3	5	74.076	9.488	4
	Non Vegetarian	3	1	5	6	0			

**Table 8** Association between demographic variables and level of Stress among Primi postpartum mothers with LSCS.

SN.	Demographic variable	Normal	Mild	Moderate	Severe	Extremely Severe	Cal. Val	Tab Val	Df
1.	Age								
	18-20yrs	1	1	4	3	0			
	21-23yrs	1	0	8	3	0	14.955	21.026	12
	24-26yrs	0	1	2	1	1			
27-30yrs	1	1	2	0	0				
Education									
2.	Illiterate	0	0	0	1	0			
	Primary	1	0	1	1	0	18.39	31.410	20
	SSLC	1	0	8	0	0			
	PUC	1	1	4	3	1			
	Graduate	1	2	0	2	0			
Postgraduate	0	0	2	0	0				
3.	Religion								
	Hindu	4	3	12	6	0	7.47	21.026	12
	Muslim	0	1	3	0	1			
	Christian	0	0	0	0	0			
Others	0	0	0	0	0				
4.	Type of Family								
	Joint Family	3	3	13	3	0	8.570	9.488	4
Nuclear Family	1	0	2	4	1				
5.	Occupation								
	House wife	2	3	13	6	1	9.773	31.410	20
	Farmer	0	0	1	0	0			
	Government Job	1	0	1	0	0			
	Private Job	1	0	0	1	0			
Business	0	0	0	0	0				
6.	Income								
	Below Rs. 50000	2	2	4	4	0	6.57	21.026	12
	Rs.50000-10000	2	0	9	3	1			
	Rs.10000-15000	0	0	0	0	0			
Rs.15000 above	0	1	2	0	0				
7.	Diet								
	Vegetarian	2	3	6	4	0	6.058	9.488	4
Non Vegetarian	2	0	9	3	1				

It was also found that 50% had moderate stress and 3.34% had extreme severe Stress.

The obtained chi square value for the selected demographic variables in levels of depression revealed that only calculated chi square value for education is more than table value; which means that only education is associated with the levels of Depression.

The obtained chi square value for the selected demographic variables in levels of Anxiety revealed that only calculated chi square value for diet is more than table value; which means that only diet is associated with the levels of Anxiety.

The obtained chi square value for levels of stress revealed that none of the calculated chi square value for age, education, religion, type of family, occupation, income and diet is more than table value; which means that there is no association between the selected demographic variables with the levels of Stress.

The present study is supported by the study conducted by Kole U and Devulkar N. to assess the level of depression, anxiety, stress among primi postnatal mothers in a view to develop health education pamphlet. The study revealed that 44% had moderate depression, 3% had extremely severe level of depression. Thirty percent had moderate level of anxiety and 10% had mild level of anxiety. Twenty four percent had mild stress and 21% had moderate level of stress. There was significant association between demographic variables and level of depression, anxiety and stress among primi postnatal mothers.<sup>7</sup>

## CONCLUSION

Based on the findings of the study, the following conclusions were drawn:

1. Maximum (40%) of the primi postpartum mothers with LSCS are in the age group of 21-23 years and 13.4% are in the age group of 27-30 years.
2. Most of the them (30%) had education upto SSLC level and only 3% was illiterate.
3. Majority of them (83.33%) were Hindu and there were no Christian and other religion.
4. Majority (73.33%) of them belongs to joint family and 26.67% belongs to nuclear family.
5. Maximum (83.33%) of them were housewives and only 3.33% are farmer.
6. Most (53.33%) of them had an income of 5000 to 10000 and none of them has income of 10000 to 15000.
7. There were equal percentage (50% each) for both vegetarian and non vegetarian.
8. The study revealed that 13.33% had mild Depression and 3.33% had extreme severe Depression. The study showed that 33.33% had severe Anxiety and 10% had mild anxiety. It was also found that 50% had moderate stress and 3.34% had extreme severe Stress.
9. The obtained chi square value for the selected demographic variables in levels of depression revealed that only calculated chi square value for education is more than table value; which means that only education is associated with the levels of Depression.
10. The obtained chi square value for the selected demographic variables in levels of Anxiety revealed that only calculated chi square value for diet is more

than table value; which means that only diet is associated with the levels of Anxiety.

The obtained chi square value for levels of stress revealed that none of the calculated chi square value for age, education, religion, type of family, occupation, income and diet is more than table value; which means that there is no association between the selected demographic variables with the levels of Stress.

## References

1. Postpartum period. Wikipedia, the free encyclopedia. Available from URL: [https://en.wikipedia.org/wiki/Postpartum\\_period](https://en.wikipedia.org/wiki/Postpartum_period)
2. Roberta Anniverno, Alessandra Bramante, Claudio Mencacci and Federico Durbano. Anxiety disorder in pregnancy and the postpartum period. Available from URL: <http://cdn.intechopen.com/pdfs-wm/43758.pdf>
3. Stone K. How Many Women Get Postpartum Depression? The Statistics on PPD. Postpartum progress. Available from URL: <http://www.postpartumprogress.com/how-many-women-get-postpartum-depression-the-statistics-on-ppd>
4. "Filicide in offspring of parents with severe psychiatric disorders: a population-based cohort study of child homicide." *J Clin Psychiatry* **72** (5): 698–703. May 2011. doi:10.4088/jcp.09m05508gre. PMID 21034682.
5. Postpartum Depression. American Psychological Association. Available from URL: <http://www.apa.org/pi/women/resources/reports/postpartum-dep.aspx>
6. Antenatal and postnatal mental health: clinical management and service guidance; NICE Clinical Guidelines. December 2014
7. Kole U, Devulkar N. Depression, anxiety, stress among primi postnatal mothers in a view to develop health education pamphlet. Available from URL: <http://www.ujponline.com/?urjms-journal=depression-anxiety-stress-among-primi-postnatal-mothers-in-a-view-to-develop-health-education-pamphlet>

### How to cite this article:

Heikham GC and Belgundkar B (2019) 'Level of Depression, Anxiety and Stress Among Primi Postnatal Mothers with Lscs Admitted in Maternity Ward of Selected Hospital in Belagavi, Karnataka', *International Journal of Current Advanced Research*, 08(04), pp. 18412-18418. DOI: <http://dx.doi.org/10.24327/ijcar.2019.18418.3519>

\*\*\*\*\*