

The Comparison of Sleep Quality after Cesarean and Normal Vaginal Deliveries

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Abstract:- Delivery is an important life event for women. Labor pain is the primary cause of women avoiding normal vaginal delivery and tendency toward cesarean section as an alternative method. Some women suffer from postpartum depression, illness, sleep disturbances, constipation and sexual disorders which are related to mode of delivery. The present study aimed to compare postpartum sleep quality after cesarean and normal vaginal delivery. The sample consist of 30 women with normal delivery and 30 women with cesarean at 3 month postpartum. Sleep quality was measured by using PSQI questionnaire. Mean PSQI score in normal delivery mothers group 11.77 ± 2.28 and Caesarean mothers 12.37 ± 2.08 , p value is 0.284. We found that there is no statistically significant difference between mode of delivery and sleep in the postpartum.

Keywords:- Cesarean, Postpartum, Sleep Quality, PSQI.

I. INTRODUCTION

Delivery is a physiological process. It is also an important life event for women. Labor pain is the major concern for pregnant women and therefore they avoid normal vaginal delivery. Cesarean is a surgical intervention to prevent maternal or perinatal complications and must be limited to high risk complicated pregnancies.^[1] The delivery and postpartum period are transition period in women. Many changes occurs during postpartum period like physical, mental and social health and overall quality of life of a woman. Some women suffer from depression, insomnia and physical pain in the postpartum.^[2] Majority of sleep disturbances are related with newborns sleep and feeding schedules. After birth, the mother's sleep is greatly affected by many things such as night time feedings, infant care etc. It is appropriate that sleep disturbances in the postpartum women should be carefully considered, because it is likely a precursor of depression.^[2] Poor sleep may increase the risk of depression in some women. Postpartum depression is a serious illness that negatively affects both

mother and child. Postpartum women sleep less during the early weeks following delivery than during pregnancy and other periods of reproductive age. The aim of the present study was to compare the sleep quality between women with normal vaginal delivery and cesarean.

II. MATERIALS AND METHODS

This is a comparative study conducted at Little Flower Hospital and Research Centre, Angamaly, Kerala. The study was approved by the Institutional Ethics Committee.

A total of 60 women, were about 30 with normal vaginal delivery and 30 with cesarean were recruited after obtaining voluntary written informed consent. The sampling technique used was simple random sampling.

A. Inclusion Criteria

- Women who give birth within the age group 20-30
- Women at 3 month postpartum
- Willing participants

B. Exclusion Criteria

- Women with specific diseases

C. Data Collection

The data collected by giving questionnaires to participants. The sleep quality of postpartum women were measured by using PSQI

D. Statistical Analysis

Statistical analysis was done using IBM SPSS 20. (SPSS Inc., Chicago, USA). For all the continuous variables, the results are given in Mean \pm SD and for categorical variables as percentage. To compare the mean of numerical variables between the two groups, independent sample 't' test was applied. Pearson correlation coefficient was used for find the correlation between two numerical data .A p-value < 0.05 was considered as statistically significant.

III. RESULT

Group	n	Mean ±SD	p value
Normal Delivery	30	11.77±2.285	0.284
Cesarean	30	12.37±2.008	

Table1:- Comparison of mean PSQI between groups

Table 1 shows the comparison of mean PSQI scores of women with normal delivery and cesarean. There were 30 women in each group. The mean PSQI score of normal delivery group was 11.77±2.285 and 12.37±2.008 in cesarean group. The p value 0.284.

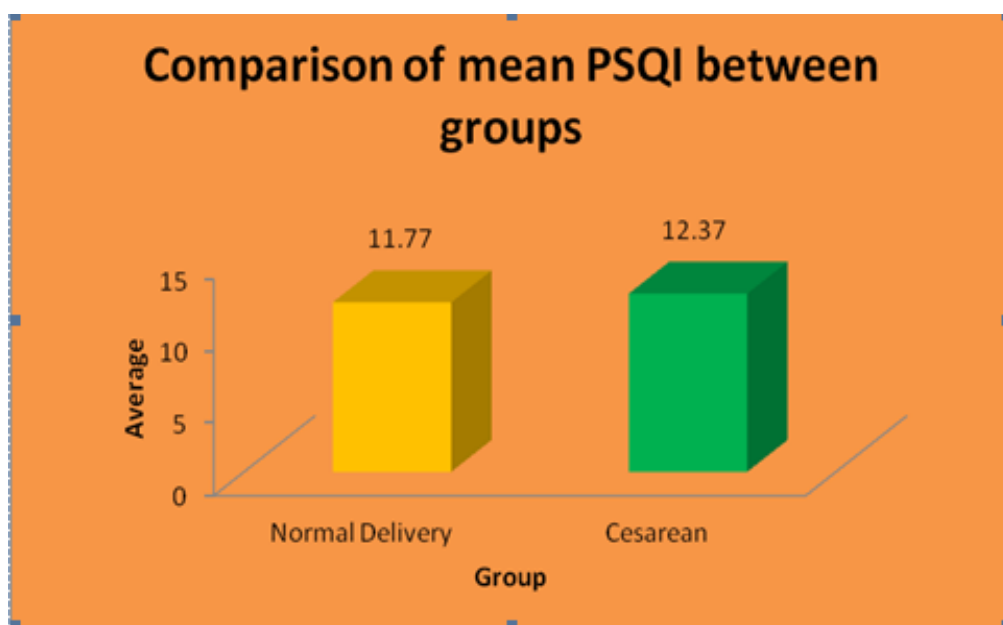


Fig 1

Mean PSQI score in normal delivery mothers group 11.77±2.28 and Caesarean mothers 12.37 ±2.08 , p value is 0.284 so there is no statistically significant mean difference between groups .

IV. DISCUSSION

A study by Montgomery-Downs *et.al* had shown that there were no statistically significant delivery methods differences on any sleep measure through postpartum week 6. Our study also shows that there is no significant difference in mode of delivery and postpartum sleep.

A study conducted by Laura Creti *et.al* had shown that a persisting tendency to sleep difficulty, anxiety and mood in a small percentage of mothers that does not respond to conditions at 6 month postpartum. There were no statistically significant difference between method of delivery and sleep in the postpartum.

Another study conducted by Signe Karen *et.al* had shown that Poor sleep may increase the risk of depression in some women, but as previously known risk factors were also associated, mothers diagnosed with postpartum depression are not merely reporting symptoms of chronic sleep deprivation.

The study conducted by Iranpour S *et.al* had shown that there is an association between sleep quality in women who had given birth in the last three months and symptoms of postpartum depression. In our study the women who had less sleep but no symptoms of depression in the postpartum

V. CONCLUSION

Sleep is less during the postpartum mainly due to night time feeding, infant care etc. This study shows that there is no significant difference between the mode of delivery and sleep in the postpartum. Further studies are needed to find out more information in larger samples.

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