



## **A cross sectional study depicting indications of caesarean section and fetomaternal outcome: A Novel initiative**

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### **Abstract**

**Introduction:** The steadily increasing global rates of caesarean section have become one of the most debated topics in maternity care as its prevalence has increased alarmingly in the last few years.

**Methodology:** It was a cross sectional study conducted in Dept. Of Obstetrics and Gynecology at a tertiary care hospital. Data was collected from 1st January to 30th June 2019.

**Results & Conclusion:** Encouragement should be given to trial of labour in selected low risk cases and in primi patients. The results of the study cannot be generalized to general population as it is small sample hospital-based single centered study so it is possible that it may not be showing exact picture of LSCS delivery.

**Keywords:** fetomaternal, Maternity, alarmingly, Encouragement, LSCS

### **Introduction**

The steadily increasing global rates of caesarean section have become one of the most debated topics in maternity care as its prevalence has increased alarmingly in the last few years. Caesarean section is a major surgical procedure with a corresponding level of risk and should be performed in the presence of specific and clearly defined indications while some of the obstetricians consider it to be quite simple, efficient, safe and psychologically. well-tolerated procedure and far superior to secondary interventions such as vacuum delivery or emergency caesarean section [1, 2].

CSs are associated with more blood loss, more risk of bladder and ureteral injuries, postpartum infections, pulmonary embolisms, and more risks of neonatal respiratory complications (if performed before 39 weeks). In addition, multiple repeat CSs can lead to increased risk of maternal morbidity and mortality because of abnormal placental adherence and caesarean hysterectomy, which increases with each subsequent CS. Such complications are difficult to manage and can cause significant consequences and even maternal death. There is an increase in trend in both primary and repeat caesarean section rates [4, 5]. The reasons for the increase are multifaceted. Fetal distress, especially its detection by continuous electronic fetal monitoring, more liberal use of caesarean section for breech presentation and

improved safety of caesarean section are commonly cited causes. According to WHO, which reviewed 110,000 births from nine countries in Asia during 2007 – 2008, 27% births were delivered by caesarean section. India had 18% incidence [6, 7].

The present study was conducted to estimate proportion of various indications of lower section caesarean section (LSCS) and also to assess socio demographic profile.

### **Methodology**

It was a cross sectional study conducted in Dept. Of Obstetrics and Gynecology at a tertiary care hospital. Data was collected from 1st January to 30th June 2019. Non probability convenient sampling method was used. All patients admitted to PNC ward after LSCS were included in study. Patients those who were not willing to take part in study, those who were referred out and maternal deaths were excluded from study. Total 300 mothers were underwent LSCS, out of them 32 were excluded due to various reasons. Data was analysed using SPSS 20.0 for windows (SPSS inc., Chicago, IL, USA).

### **Results**

During study period, total deliveries conducted were 486. Out of which, deliveries conducted by Caesarean section were 300.

**Table 1:** Socio – demographic profile of study subjects

Variables	Frequency (n=300)	Percentage
Age		
18- 24 yrs	170	56.66%
25- 30 yrs	110	36.66%
31-35 yrs	18	6%

36-40 yrs	02	0.06%
Occupation		
Professional	3	0.01%
Semi- Professional	2	0.06%
Skilled	6	0.02%
Unskilled	55	18.33%
Housewife	234	78%
Religion		
Hindu	206	68.6%
Muslim	84	28%
Christen	10	3.3%
Education		
Illiterate	82	27.33%
Primary	102	34%
Secondary	106	35.33%
Higher secondary	4	1.3%
Graduate	4	1.3%
Post Graduate	2	0.6%

**Table 2:** Indication for LSCS

Indication of LSCS	Frequency	Percentage
Previous LSCS	102	34%
Pre-eclampsia	62	20.6%
Eclampsia	31	10.3%
CPD	17	5.6%
Fetal distress	14	4.6%
Meconium stained liquor	12	4%
Post datism	12	4%
Breech	15	5%
Preterm labor	9	3%
Twin	7	2.3%
Prolonged labor	9	3%
Abruptio placenta	4	1.3%
Placenta previa	3	1%
IUGR	3	1%
Occipito posterior position	3	1%
PROM	4	1.3%
Transverse lie	3	1%

**Table 3:** Outcome of LSCS Pregnancy

Outcome	Frequency
Live birth	289 (96.33%)
Still birth	11 (3.66%)

## Discussion

Caesarean section is a major abdominal surgery which is life saving for mothers and fetus by providing alternate route of delivery. This procedure offer great benefit in situation in which vaginal delivery carries high risk of complications and death. Sakael TM<sup>[1]</sup> et al. conducted a hospital-based study from 2001-2005 which showed that proportion of Caesarean section cases were 32.6%. According to WHO no region in the world is justified in having caeseran section rate 10 to 15%. In present study 'previous LSCS' was indication in 34% of cases and CPD in 5.6% cases. A study conducted by Katke Rajshree D<sup>[3]</sup> et al. found that proportion of previous LSCS was 45.8% and CPD in 4.64% cases. Decision to deliver women with previous

CS is a complicated process that involves the physician's knowledge of the available evidence, experience, and fear of litigation as well as the previous maternal experience and knowledge. Any decision made will affect the outcome of the present pregnancy as well as the future obstetric performance and fertility of the patient.

In present study Eclampsia and preeclampsia were the indications for LSCS in 10.3%, and 20.6% cases. Katke Rajshree D<sup>[3]</sup> et al. found that proportion of PIH as a indication of LSCS in 8.86% cases.

PIH, Breech presentation, fetal distress, and cephalopelvic disproportion were the common indications for LSCS in primi.

## Conclusion

Encouragement should be given to trial of labour in selected low risk cases and in primi patients. The results of the study cannot be generalized to general population as it is small sample hospital-based single centered study so it is possible that it may not be showing exact picture of LSCS delivery.

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