

PREVALENCE AND CAUSES FOR ELECTIVE AND EMERGENCY CAESAREAN SECTION DELIVERY AMONG PREGNANT WOMEN: A PROSPECTIVE HOSPITAL BASED STUDY

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**Abstract**

Background: The prevalence of caesarean sections had increased significantly past 30 years. It was observed that in India the prevalence of C-Section was 8.5% in NFHS-3, but it increased up to 17.2% in NFHS-4. The present study aimed to evaluate the prevalence and causes for cesarean section among the pregnant women. **Materials and Methods:** The present study was conducted in the department of OBG, AIMS, Bellur in 2002. A total of 112 cases were included in the study based on inclusion and exclusion criteria. Study procedure was explained to all the subjects and informed consent was obtained. Demographic and clinical data was collected and used for analysis. Statistical Package for Social Sciences (20.0) version used for analysis. **Result:** The study showed 102 underwent caesarean section and 491 vaginal mode of delivery. Emergency CS was done in 79 and elective in 23 subjects. Maximum number of subjects had age between 20-29 years. In total number of cases, emergency and elective CS maximum number was primi and gravida II. Previous LSCS and is major cause for emergency CS and contracted pelvis is major cause for elective CS. Maximum subjects were given spinal anesthesia before emergency and elective CS. **Conclusion:** The study observations concluded that selection of LSCS depends on the maternal complications.

INTRODUCTION

Cesarean section or cesarean delivery is defined as the birth of a fetus through incision in the abdominal wall and the uterine wall. Thus definition does not include the removal of the fetus from the abdominal cavity in the case of rupture of uterus or in case of an abdominal rupture pregnancy.^[1-3] This definition also excludes vaginal cesarean section or vaginal hysterotomy in which the transvaginal access to the fetus was achieved by incising the anterior lip of cervix and lower uterine segment.^[4] In the 20th century there have been many new developments in the field of medicine increased safety to all surgical operations, which is mainly due to the availability of antibiotics, safe anaesthesia and blood transfusion facilities. The same applies to cesarean section also, which has become an accepted standard procedure in modern obstetric procedure reducing maternal morbidity and mortality.^[5-7] The prevalence and causes for cesarean section is depend on hospital and geographic distribution. In India the prevalence of cesarean section is 10.0%. However, the rate of cesarean section has increased significantly in recent years.^[8] The present study aimed to evaluate the

prevalence and causes for elective and emergency caesarean section delivery among pregnant women.

MATERIALS AND METHODS

Study design: Observational study**Study settings:** The study was conducted in the department of OBG, AIMS, Bellur.**Study period:** The study was conducted from January to December 2002.**Study population:** 102 cases**Procedure:**

The study was included a total of 102 cases. All the pregnant women study procedure was explained and informed consent was obtained. Demographic (Age), menstrual history (age of menarche, regular or irregular cycles, date of last menstrual period), obstetric history (year of married life, use of contraceptives, total number of children's, type of delivery and previous casarean section), family history (any diseases, twin delivery in family) and present pregnancy data was recorded.

Statistical analysis:

The data was expressed in number and percentage. Statistical Package for Social Sciences (20.0) version used for analysis. Chi square test applied to

find the statistical significant. p value less than 0.05 considered statistically significant at 95% confidence interval.

RESULTS

The total number of delivers was 593 in that 491 were vaginal and 102 are caesarean sections. Out of 102 C-sections 79 were emergency and 23 are elective. Maximum number of cases had age between 20-29 years. 62 pregnant women with age group 20-29 are underwent emergency C-Section. Maximum number of subjects with age between 20-29 are underwent elective C-section [Table-1]. In total of number cases 39 were primi, 41 were grade-II. In Emergency CS maximum number of subjects was Primi and grade-II. Maximum number of subjects in elective CS was gravida-II [Table-2]. The main reason for emergency CS was previous LSCS (40), fetal distress (30), contracted pelvis (23) and cephalo pelvic disproportion (17). For elective CS main indication is contracted pelvis (18) and

previous LSCS (14) [Table-3]. In primary and repeat CS maximum number of subjects underwent emergency CS [Figure-1]. Maximum number of subjects in both elective and emergency CS had given spinal anesthesia followed by general and epidural [Table-4].

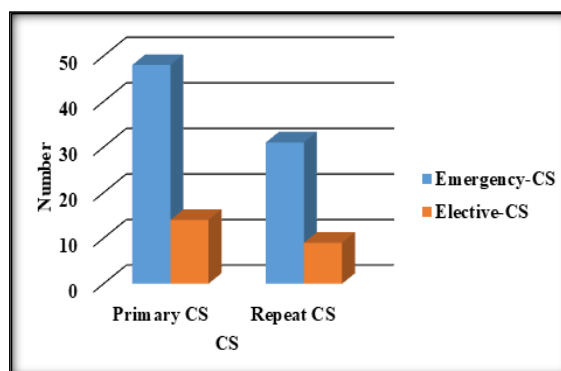


Figure 1: Comparison of primary and repeat cesarean section among emergency and elective cesarean section

Table 1: Distribution of subjects based on demographic and clinical data

Observation	Number	Percentage (%)
Mode of delivery		
Vaginal	491	82.80
Caesarean section	102	17.20
Total deliveries	593	100.00
Type of C-section		
Emergency	79	77.45
Elective	23	22.55
Age group (Years)		
Total number of cases		
20	12	11.76
20-29	83	81.37
30-39	7	6.86
Emergency C-S		
20	12	100.00
20-29	62	74.69
30-39	5	71.42
Elective C-S		
20	0	0.00
20-29	21	25.30
30-39	2	28.57

Table 2: Distribution of subjects based on clinical observation

Observation	Number	Percentage (%)
Gravidity parity (total number of cases)		
Primi	39	38.23
II	41	40.19
III	14	13.72
IV	10	9.80
Gravidity parity (Emergency C-S)		
Primi	31	79.48
II	31	75.60
III	9	64.28
IV	8	80.00
Gravidity parity (Elective C-S)		
Primi	8	20.51
II	10	24.39
III	5	35.71
IV	2	20.00

Table 3: Distribution of subjects based on indication for emergency and elective cesarean section

Indication	Number	Percentage (%)
Emergency cesarean section		

Previous LSCS	40	39.21
Fetal distress	30	29.41
Cephalo pelvic disproportion	17	16.66
PROM with associated complications	15	14.70
Failed induction	9	8.82
Breech presentation	5	4.90
Deep transverse arrest	1	0.98
Cord prolapse	1	0.98
Persistent occipito posterior	6	5.88
Bad obstetric history	12	11.76
PET with fetal distress	6	5.88
Antepartum eclampsia	2	1.96
Contracted pelvis	23	22.54
2 previous LSCS	4	3.92
Accidental hemorrhage	2	1.96
Placenta praevia	4	3.92
Prolonged II stage	3	2.94
Post datism	7	6.86
Threatened rupture uterus	1	0.98
Transverse lie	3	2.94
Face presentation	1	0.98
Obstructed labor	5	4.90
3 previous LSCS	1	0.98
Cervical dystocia	3	2.94
Bicomuate uterus	1	0.98
Severe IUGR with fetal distress	4	3.92
Elective Cesarean section		
Contracted pelvis	18	78.26
Previous LSCS	14	60.86
2 previous LSCS	4	17.39
Breech presentation	5	21.73
Preterm and prom	4	17.39
Bad obstetric history	3	13.04
Precious pregnancy	3	13.04

Table 4: Distribution of subjects based on type of anesthesia procedure

Type of CS	Spinal	General	Epidural	Total
Emergency	68	8	3	79
Elective	19	1	3	23
Total	87	9	6	102

DISCUSSION

The caesarean section is an old obstetric method. This procedure is performed when necessary for the sake of the mother, the foetus, or both. In this elective surgery or emergency surgery is preferred. According to WHO a caesarean section should be performed mainly to save mother and unborn child.^[9] These procedures are indicated in complex pregnancies and complicated cases. It was observed that recent years there is a significant increase in number of caesarean sections compared to vaginal deliveries. Compared to vaginal deliveries the risk of bleeding, infection, thrombosis and amniotic fluid embolism is five times higher in caesarean births.^[10-12] Despite of complications with CS to save life a baby is more important so many health care professionals prefer CS. But CS should be done when is medically necessary. The present study maximum number of subjects had age between 20-29 years. Caesarean section was done in 102 subjects. In this 79 were emergency and 23 were elective CS. Pragati M et.al study the maximum respondents were age between 25-29 years.^[13] Out of the total 108 patients 76.4% underwent elective and remaining 23.6% had emergency LSCS. In the

present study maximum subjects were in elective and emergency were primi and grade-II. Leth RA et.al., study also had maximum number of subjects are primi and grade-II.^[14] In this study main indication for emergency LSCS is previous LSCS and elective is contracted pelvis. Smalli F et.al study showed that the most common maternal indication of elective LSCS were previous LSCS.^[15] But in this study major cause of emergency LSCS is non-progress of labour or failed to induction. Our study results were suggested that indication for elective and emergency LSCS is different. Selection of surgical procedure should depend on the mother and fetus condition. The main aim of this surgical procedure to prevent the complications during and after delivery.

CONCLUSION

The study results concluded that maximum number of emergency and elective CS was done due to the maternal complications. Previous LSCS and contracted pelvis are the major condition was emergency and elective CS was done. Prevention of maternal and fetal complications is depending on the selection of cesarean section procedure.

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