

## Original Article

# The outcome of emergency and elective surgery in caesarean section

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**ABSTRACT:**

**Objective:** In this study our main goal is to the outcome of emergency and elective surgery in Caesarean section.

**Method:** This prospective study was carried out at Department of Obstetrics and Gynaecology, Comilla Medical College Hospital, Comilla. Where total of 100 consecutive cases were selected for this study who underwent caesarean section. **Results:** During the study, 80% women underwent emergency caesarian section and 20% underwent elective caesarian section. 83 cases were spinal anesthesia, significantly higher number of women belong to emergency cases (79.5%). In 2 cases of epidural anesthesia, both underwent elective caesarian section procedure. Out of 15 cases of general anesthesia, 14(93.3%) women underwent emergency and only 1(6.7%) elective procedure. out of 80 emergency Caesarian section, 63(78.8%) babies survived and in elective caesarian section

19(95%) babies survived. **Conclusion:** From our study we can conclude that, maternal and fetal complications were significantly higher in the emergency caesarean section as compared to elective caesarean section group.

**Keywords:** emergency, elective surgery, caesarean section.

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**INTRODUCTION**

Caesarean delivery is the birth of a fetus through incisions in the abdominal wall and the uterine wall.<sup>1</sup> Cesarean section (CS) is one of the most commonly done procedures

in obstetric practice now-a-days and is a life-saving surgery for mother as well as fetus.<sup>2</sup> World Health Organization suggested that caesarean rate should not

exceed 15%<sup>3</sup>, however the rate of cesarean section delivery is increasing.<sup>4</sup> Compared to vaginal delivery, both maternal mortality and especially morbidity are increased with cesarean birth. The overall maternal mortality rate is 6-22 deaths per 100,000 live births, with approximately one third to one half of maternal deaths after cesarean delivery directly attributes to the surgical procedure and the rest to condition that led to the need of the section.<sup>5</sup>

The outcome of cesarean delivery should not only be limited to a healthy mother and baby at the time of discharge. It must encompass the entire journey of intra-operative and postoperative course which is further influenced by the standard of care, skill of the surgeon and the prevailing circumstances.

Elective cesarean section is done at 39 weeks of gestation ideally although; medical and obstetric conditions determine the gestation at which elective cesarean section is planned. Various studies have shown higher operative complications and longer recovery time in emergency cesarean sections compared to elective cesarean section.<sup>6</sup>

In this study our main goal is to evaluate the outcome of emergency and elective surgery in Caesarean section.

## OBJECTIVE

To assess the outcome of emergency and elective surgery in Caesarean section.

## METHODOLOGY

### Study Type:

- This study was a prospective study.

### STUDY PERIOD AND PLACE:

- This study was conducted in Department of Obstetrics and

Gynaecology, Comilla Medical College Hospital, Comilla.

### SAMPLE SIZE:

Total 100 consecutive cases were selected for this study who underwent Caesarean section.

### METHOD:

Data from individual patients were collected in a preformed questionnaire. Complication during Caesarean section, like severe hypotension, severe vasovagal attack, were noted from operative findings.

Postoperative complications were collected from patients' history and from follow-up monitoring. Fetal outcome was noted from operative findings and from follow-up monitoring. Remote complications of Caesarean section were not studied.

### DATA ANALYSIS PROCEDURE:

- First data were edited to the validity and consistency of the data. After proper verification data were coded and entered into computer by using SPSS software programmes. Descriptive analysis was done by percentage, mean and standard deviation. Association was observed by appropriate statistical test at 95% confidence interval e.g. Odds ratio, Chi-square, t-test.

### RESULTS

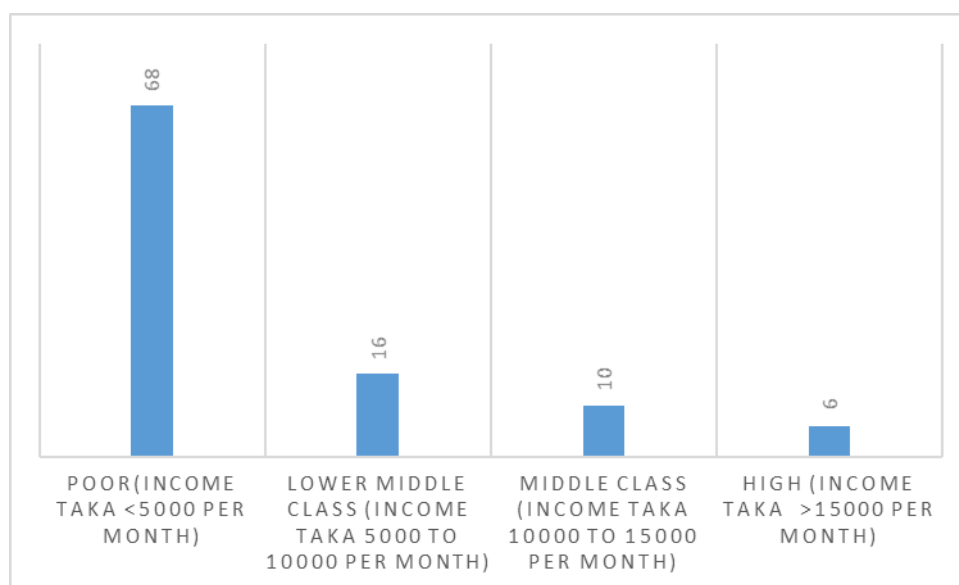
In table-I shows age distribution of the study group where most of the women belonged to the age group 26-30 years (40%), followed by 21-25 (29 %), 31-35 (20%) and  $\leq 20$  years (11 %). Mean (+SD) age of the patients was 26.39 +4.52 (range: 16-35 years). The following table is given below in detail:

**Table-I: Age distribution of the study group**

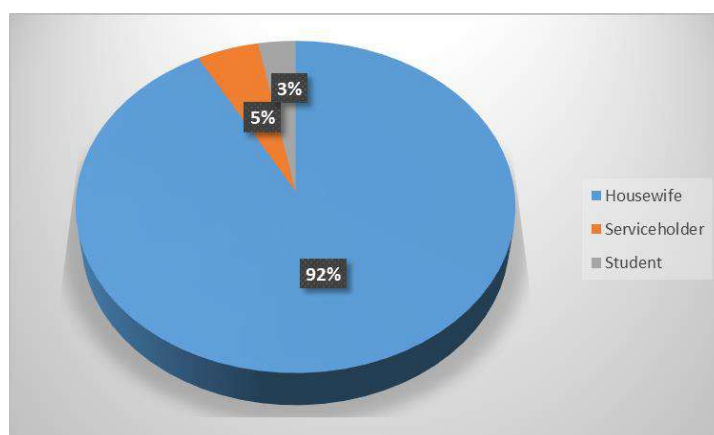
Age group	n	%
≤20 years	11	11
21-25 years	29	29
26-30 years	40	40
31-35 years	20	20

In figure-1 shows economic status of the study group where most of the study group

were in poor economic status, 68%. The following figure is given below in detail:

**Figure-1: Economic status of the study group.**

In figure-2 shows occupational status of the study group where 92% were housewife followed by 5% were service holder and 3% were students. The following figure is given below in detail:

**Figure-2: Occupational status of the study group**

In table-II shows distribution of the study group according to caesarian section procedure adopted where 80% women underwent emergency caesarian section

and 20% underwent elective caesarian section. The following table is given below in detail:

**Table-II: Distribution of the study group according to caesarian section procedure adopted**

Procedure	Number of patients	Percentage	P value
Elective	20	20	<0.001
Emergency	80	80	

In table-III shows relation of anesthesia given and caesarian section procedure where 83 cases were spinal anesthesia, significantly higher number of women belong to emergency cases (79.5%). In 2 cases of epidural anesthesia, both

underwent elective caesarian section procedure. Out of 15 cases of general anesthesia, 14(93.3%) women underwent emergency and only 1(6.7%) elective procedure. The following table is given below in detail:

**Table-III: Relation of anesthesia given and caesarian section procedure**

Anesthesia	Caesarian section		Total; n (%)
	Emergency; n (%)	Elective; n (%)	
Spinal	66(79.5)	17 (20.5)	83(83)
Epidural	0 (	2(100)	2(2)
General	14(93.3)	1(6.7)	15(15)

In table-IV shows relationship between fetal outcome and caesarian section procedure where out of 80 emergency Caesarian section, 63(78.8%) babies

survived and in elective Caesarian section 19(95%) babies survived. The following table is given below in detail:

**Table-IV: Relationship between fetal outcome and caesarian section procedure**

Fetal outcome	Caesarian section		Total; n (%)
	Emergency; n (%)	Elective; n (%)	
Alive	63(78.8)	19(95)	82(82)
Early neonatal outcome	10(12.5)	0	10(10)
Stillborn	7(8.8)	1(5.0)	8(8)

Chi square test:

$X^2=3.296$ ,  $df=2$ ,  $p=0.192$  (not significant)

## DISCUSSION

In one study showed, higher incidence of emergency CS in younger age group i.e. 20-25 years whereas incidence of elective CS was common in advanced age group i.e. 26-30 years, which was statistically significant (p value <0.05).<sup>7</sup> This finding was similar to study by another study in which 58.1% of emergency CS group were in 18-25 years. In emergency (58.1%) while 46.12 % in 26 – 30 years elective CS group.<sup>8</sup> whereas, in our study we found that, most of the women belonged to the age group 26-30 years (40%), followed by 21-25 (29 %), 31-35 (20%) and ≤ 20 years (11 %). Mean (+SD) age of the patients was 26.39 +4.52 (range: 16-35 years).

During the study period, the incidence of caesarean section in our hospital was found to be 80% women underwent emergency caesarian section and 20% underwent elective caesarian section.

The higher incidence of emergency caesarean section depicts the tendency to give opportunity for vaginal delivery as long as feasible and resorting to caesarean section only when the compromise to fetal or maternal health is anticipated.

In one study maternal complications like post-operative wound infection, PPH, UTI, need for blood transfusion, post-operative fever in emergency CS were significantly higher than that in elective CS group (p-value < 0.05) and fetal complications like meconium stained liquor, birth asphyxia, need for NICU admission were significantly higher than that of elective CS group ( p- value < 0.05).<sup>9</sup> Where as in our study we found that, 83 cases were spinal anesthesia, significantly higher number of women belong to emergency cases (79.5%). In 2 cases of epidural anesthesia, both underwent elective caesarian section procedure. Out of 15 cases of general

anesthesia, 14(93.3%) women underwent emergency and only 1(6.7%) elective procedure. 80 emergency Caesarian section, 63(78.8%) babies survived and in elective Caesarian section 19(95%) babies survived.

## CONCLUSION

From our study we can conclude that, maternal and fetal complications were significantly higher in the emergency caesarean section as compared to elective caesarean section group. Further studies on a larger scale are required regarding assessment of factors that influence the other aspects of maternal and neonatal outcome following C.S.

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