

# Evaluation of Patients Satisfaction following Caesarean Section in a Secondary level District Hospital

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## Abstract:

**Objective:** To assess the level of satisfaction with caesarean delivery and to see the relation between different parameters and satisfaction.

**Materials & Methods:** This cross sectional study was done in the department of Obstetrics & Gynaecology of the District Sadar Hospital, Laxmipur during the period of 1<sup>st</sup> January to 30<sup>th</sup> June 2017. A total of 423 post-caesarean women were included in the study. The structured questionnaires were used for the collection of data from the patients and the data were processed and analyzed with the help of software SPSS.

**Results:** During the study period, among the 465 caesarean delivery 423 were enrolled for the study. The mean age of the patients was 23.99±5.29 years and mean parity was 1.22±1.27. Initial negative reaction to the decision of caesarean section was expressed by 71.9% of the patients, 18.4% remained indifferent and 9.7% showed positive reaction. The major reasons of initial negative reaction were fear of death and dislike of caesarean section. The satisfaction following caesarean delivery was significantly associated with age, educational status and initial positive and negative reaction to the decision of caesarean section. Three hundred and fifty five (83.9%) women expressed their overall satisfaction following caesarean section.

**Conclusion:** Most patients expressed their overall satisfaction to caesarean delivery.

**Key words:** Satisfaction, Caesarean section.

## Introduction:

Caesarean section (CS) is the most frequent major abdominal surgery performed worldwide<sup>1</sup>. Increasing rates of CS is a matter of concern in many countries<sup>2</sup> and in the USA caesarean delivery accounts for 30% of all births<sup>3</sup>. The increasing caesarean rates not only exists in developed countries, it also reported from developing countries like Tanzania<sup>4</sup> and Bangladesh<sup>5</sup>. In developed countries, while fear of birth, increasing maternal age at marriage and first pregnancy, fear of pelvic floor damage, and genital prolapse in later years are implicated reasons<sup>6-10</sup>, in developing countries, the view that caesarean section

is the surest way to a live birth is believed to be a critical factor underlying their choice<sup>11</sup>. As a result, the numbers of pregnant women who have previously had a caesarean are also rising, however, the rates of Trial of Labour after CS are decreasing world wide<sup>12</sup>.

There are known risks of elective CS such as the increased risk of persistent pulmonary hypertension and respiratory distress syndrome in the new born<sup>13,14</sup>. A higher likelihood of uterine infection, wound complication, cardiopulmonary and thromboembolic condition<sup>15</sup> and future ectopic pregnancies and placental problems<sup>16</sup> are also

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observed following CS. However, improved quality of anaesthesia service, good surgical technique, available blood transfusion facility and antibiotic therapy have raised the safety profile of surgical delivery. CS is still being perceived as an abnormal means of delivery by some women in developing countries<sup>17</sup>, the negative view of CS by them has led to gross under-utilization of the procedure compared to the large burden of obstetric morbidity requiring resolution by CS<sup>18</sup>.

Patient satisfaction considered as one of the most important quality dimensions and key success indicators in health care<sup>19</sup>. Oliver<sup>20</sup> defines satisfaction as the consumer's fulfillment response, a post consumption judgment by the consumer that a service provides a pleasing level of consumption related fulfillment. Here consumers are the post-caesarean patients.

Though CS is an essential component in emergency obstetric care a few women prefer it as a mode of delivery<sup>21</sup>. It is important to accept it as a beneficial procedure for the pregnant mother when needed. Women's satisfaction with CS is an essential factor for such acceptance. Maternal satisfaction is multidimensional and is influenced both by medical and social factors.

Satisfaction with the mode of delivery is a useful indicator of compliance and re-attendance for treatment, and influences future management and provision of health care. Dissatisfaction can lead to sexual dysfunction, aversion to pregnancy and delivery, and increased complaints and litigation<sup>22,23</sup>.

Every service provider should assess how much he/she can satisfy his/her clients. Satisfied clients are likely to exhibit favorable behaviour, which are beneficial to the healthcare provider's long-term success. This study was designed as a preliminary study to assess the level of satisfaction among the parturients who had recently delivered by caesarean section and it may provide a reference for future in-depth analysis.

### Materials and Methods:

This descriptive type of cross-sectional study was conducted in the department of Obstetrics & Gynaecology of the District Sadar Hospital, Laxmipur from 1<sup>st</sup> January to 30<sup>th</sup> June 2017. The District Sadar Hospital, Laxmipur is a 100 bedded secondary level hospital. During the study period total of 893 delivery

occurred, among them 465 women delivered by CS. The written permission for the study was taken from the proper authority of the hospital.

The post-caesarean patients were the study population. Patients were interviewed on 2<sup>nd</sup> to 6<sup>th</sup> post-operative day after the recovery of initial trauma of surgery. The inclusion criteria were met by 443 of 465 post-caesarean women, among them 20 mothers withdrawn themselves from the study and 423 were enrolled in the study. Exclusion criteria were postpartum eclampsia, severe postpartum haemorrhage requiring re-laparotomy with hysterectomy, postpartum psychosis, severe cardiac and respiratory diseases, wound infection with burst abdomen or any condition requiring referral to the higher centre and severe neonatal conditions or neonatal death. These patients were severely ill and were unwilling or unable to take part in the study, therefore they were excluded.

The variables included in the study were age, parity, educational status, types of CS. The initial reaction to the decision of CS, the reasons of reaction and the satisfaction following CS were also studied. The structured questionnaires were prepared which include all the variables of interest. After explaining the objectives of the study and assuring that her response would never affect her treatment, verbal consent for participation in the study was taken.

The data were collected from the patients on variables of interest using the structured interview, observation and from the history sheet of the patients. The collected data were processed with the help of software SPSS (Statistical Package for Social Sciences) version-22 and analyzed. The test statistics used to analyze the data were descriptive statistics, Chi-square ( $\chi^2$ ) probability test for qualitative variables and unpaired student t-test for quantitative variables. For all analytical tests level of significance were set at  $p < 0.05$ .

### Results:

The socio-demographic characteristics of the patients are presented in the table-I. The mean age of the patients was  $23.99 \pm 5.29$  years (range 18-45 years). Among the study population 240 (56.7%) were multipara and 183 (43.3%) were primipara. More than 90% of the patients had secondary and tertiary level of education. Emergency CS occurred in 301 (71.2%) cases and remaining 122 (28.8%) were elective CS.

**Table-I**  
*Sociodemographic and clinical parameters of the patients.*

| Parameters                              | Number<br>(n=423) | Percentage |
|-----------------------------------------|-------------------|------------|
| Age (years)                             |                   |            |
| < 20                                    | 66                | 15.6       |
| 20 - 29                                 | 291               | 68.8       |
| 30 - 39                                 | 61                | 14.4       |
| > 39                                    | 5                 | 1.2        |
| Parity                                  |                   |            |
| 0                                       | 183               | 43.3       |
| 1 - 4                                   | 237               | 56.0       |
| ≥5                                      | 3                 | 0.7        |
| Educational Status <sup>a</sup>         |                   |            |
| Primary                                 | 41                | 9.7        |
| Secondary                               | 185               | 43.7       |
| Tertiary                                | 197               | 46.6       |
| Types of caesarean section <sup>b</sup> |                   |            |
| Elective                                | 122               | 28.8       |
| Emergency                               | 301               | 71.2       |

- a) Primary indicates 5 years of basic education; secondary indicates 12 years of education; tertiary indicates graduation or Masters or same level.
- b) Elective means planned caesarean section without immediate threat to fetus or mother; emergency means patient is in labour or ruptured membrane or having immediate threat to mother or fetus.

Table-II shows the initial reaction and their reasons to decision of caesarean delivery. Most of the patients (90.3%) were negative and indifferent to the decision of caesarean delivery. The major reasons of negative reaction were fear and dislike of CS. The table-III & IV represent the relation between the study parameters and the level of satisfaction following caesarean section. The statistically significant relation was established between satisfaction with CS and mean age, educational qualification and initial reaction to CS. Among the study population, 355 (83.9%) patients expressed their satisfaction with CS as a mode of delivery.

**Table-II**  
*Reasons of Initial reaction to decision of caesarean section.*

| Initial reaction and reason | Number | Percentage |
|-----------------------------|--------|------------|
| Positive (n=41)             |        |            |
| Prolonged Labour Pain       | 22     | 53.7       |
| Previous experience         | 14     | 34.1       |
| No reason                   | 5      | 12.2       |
| Negative (n=304)            |        |            |
| Fear                        | 177    | 58.2       |
| Dislike                     | 57     | 18.8       |
| No reason                   | 45     | 14.8       |
| Previous bad experience     | 14     | 4.6        |
| Suddenness                  | 11     | 3.6        |
| Indifferent (n=78)          |        |            |
| Previous experience         | 51     | 65.4       |
| No reason                   | 27     | 34.6       |

**Table-III**  
*Relation between demographic and clinical parameters and satisfaction following caesarean section.*

| Parameters                 | Satisfaction following caesarean section |                                   | $\chi^2$ value/<br>t value | p value |
|----------------------------|------------------------------------------|-----------------------------------|----------------------------|---------|
|                            | Satisfied<br>(n=355)<br>No (%)           | Not satisfied<br>(n=68)<br>No (%) |                            |         |
| Age (in years)             |                                          |                                   |                            |         |
| Mean SD                    | 24.3±5.3                                 | 22.1±4.5                          | 3.115                      | 0.002   |
| Parity                     |                                          |                                   |                            |         |
| 0                          | 157(44.2)                                | 26 (38.2)                         | 1.52                       | 0.467   |
| 1-4                        | 195 (54.9)                               | 42 (61.8)                         |                            |         |
| ≥5                         | 03 (0.9)                                 | 0 (0.0)                           |                            |         |
| Educational status         |                                          |                                   |                            |         |
| Primary                    | 39 (11.0)                                | 2 (3.0)                           | 8.07                       | 0.018   |
| Secondary                  | 146 (41.1)                               | 39 (57.3)                         |                            |         |
| Tertiary                   | 170 (47.9)                               | 27(39.7)                          |                            |         |
| Types of caesarean section |                                          |                                   |                            |         |
| Elective                   | 109 (30.7)                               | 13 (19.1)                         | 3.73                       | 0.053   |
| Emergency                  | 246 (69.3)                               | 55 (80.9)                         |                            |         |

P value measured by Unpaired student t-test for quantitative variables and Chi-square test for qualitative variables.

**Table-IV**  
*Relation between initial reaction to decision of caesarean section and satisfaction following caesarean section.*

| Initial reaction | Number | Satisfaction following caesarean section |                      | $\chi^2$ value | p value |
|------------------|--------|------------------------------------------|----------------------|----------------|---------|
|                  |        | Satisfied No (%)                         | Not satisfied No (%) |                |         |
| Positive         | 41     | 41(100.0)                                | 0(0.0)               | 8.69           | 0.003   |
| Negative         | 304    | 243(80.0)                                | 61(20.0)             | 12.75          | <0.001  |
| Indifferent      | 78     | 71(91.0)                                 | 7(9.0)               | 3.57           | 0.058   |
| Total            | 423    | 355                                      | 68                   |                |         |

### Discussion:

Satisfaction provides the positive image of health services delivered. Jackson et al<sup>24</sup> suggests that patient satisfaction is strongly influenced by patient-doctor communication variables. In case of childbirth mode of delivery is the factor of concern. In this study most of the pregnant mother (90.3%) expressed initial negative reaction or remained indifferent to the decision of CS. The main reasons of such negative attitude were fear of death, dislike of caesarean operation and previous bad experience. No reason of such reaction was also found. This result is consistent with the result of other studies<sup>25-27</sup> where significant number of parturient were averse to CS initially and the main causes were also fear of death and dislike of caesarean delivery.

In this study out of 423 study population 355(83.9%) expressed their overall satisfaction with caesarean delivery. Other studies<sup>23,27</sup> in different countries reported that 80% of the patients were satisfied with CS. Our study was done in a secondary level hospital which is the only referral hospital in the district. We talked to the parturient after 2<sup>nd</sup> post-operative day during when their pain and discomfort were reduced and withstand their initial trauma. These maybe the contributing factor for slightly higher level of satisfaction.

The mean age of the patients was 23.99±5.29 years and range was 18-45 years. The satisfied women were slightly aged (mean age 24.3±5.3 years) than unsatisfied women (mean age 22.1±4.5 years) and it was statistically significant. It was supported by other international studies<sup>27,28</sup> where increasing maternal age was significantly associated with satisfaction for caesarean delivery. There was a significant association between the educational status of the patients and satisfaction with caesarean

delivery. Educated patients are probably more careful about their own health and the health of their babies. They can understand physicians' language more easily at the counseling session about the indications of CS. The patients with elective CS had higher satisfaction than emergency operation. This probably due to in case of elective operation patients have got enough time for preparation and mind setup in favour of CS.

Table-IV reveals that all the 41 initial positive women became satisfied following caesarean delivery. Out of 304 initial negative women, 243(80.0%) expressed their satisfaction with CS. A number of indifferent women (71 out of 78) also noticed their satisfaction following CS. It is obvious that both the initial positive and negative reaction to the decision of CS were statistically significantly associated with satisfaction following CS ( $p < 0.05$ ). The significant association was also found in the study done by Enabudoso E and Isara AR<sup>27</sup> in Nigeria.

This study was done on the 2<sup>nd</sup> to 6<sup>th</sup> post-operative day when the mothers were very emotional and happy with their babies. Getting a healthy baby mother may forget all the pains, distresses and negative feelings associated with CS. On the other hand patients of major complications were excluded from the study. These may be the possible explanation of disparity between initial negative reaction and number of satisfied mothers. Similar views have been reported in earlier studies<sup>29-31</sup>.

In conclusion, there was a high level of satisfaction in the mother who delivered by CS. Although this study did not explore the specific areas of satisfaction like satisfaction with hospital facilities, services provided by health care providers, it may be regarded as the preliminary survey for the future in-depth study.

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