



Original Article

Primary Causes of Caesarean Section among the Primigravida in Rajshahi Medical College Hospital

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Abstract

Background: Bangladesh recently became a middle income country and despite of its relatively low skilled birth attendance (26.5%) nevertheless experience a rise in caesarean section (CS) rate. But now the rate of CS increased almost seven fold from 3.5% in 2004 to 23% in 2016.

Objective: To find out the cause and incidence of caesarean section among the primigravid mother in Rajshahi medical college hospital performed in between January 2017 to December 2017.

Methods: This prospective type of observational study was performed in Rajshahi Medical College Hospital (RMCH) over a period of one year from January 2017 to December 2017. All primigravida who underwent caesarean section in RMCH were included.

Result: During the study period there were 11018 deliveries. Overall CS rate was 40.98%. The rate in primi was 30.70% and last year it was 25.58%.

Conclusion: The vast majority of CS was not medically indicated. A number of policies and program had been launched to counteract this increasing rate of CS but virtually there was no impact.

Key words: Primigravida, caesarean section.

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Introduction

The fundamental changes in the attitude of caesarean section among patients and doctors are due to scientific progress, social and cultural changes and in particular legal changes. Nowadays consensus around the indications for CS has changed and in many countries CS was done due to physical anxiety about the delivery or even mother's wish to have a CS in the absence of anymedical indication.¹ Nevertheless the reasons

for increasingly liberal attitudes towards caesarean section are diverse and not easily distinguishable. A pregnant woman is exposed to many risks that may put both lives of herself and her unborn child in danger. In recent years, a number of factors have been under consideration as possible cause on the rising cesarean section rate.

Changing risk profiles among increasingly older primipara are often considered as a reason for the

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rise in cesarean deliveries.²⁻⁴ An increase in maternal request for CS is also playing an important part.^{5,6} Financial, social and cultural elements appear to play an important role.⁷⁻¹⁷ These factors are taken together with the public perception that a cesarean delivery is now an almost risk-free procedure and this might be contributing to the rise in the number of CS.¹⁸ It is important, therefore, to study the rising cause of CS rates across lower and middle income countries (LMIC). An earlier study from Bangladesh (2007–2008) of 400 CS conducted suggested that 12.5% CS rate but has no clear medical indication recorded.¹⁹ Standardization of hospital record keeping systems for CS and the monitoring of indications is widely recommended. We conducted this study to examine the indications for CS at RMCH among the primigravid mother.

Materials and Methods

This was a prospective type of observational study, carried out in Rajshahi Medical College Hospital, Rajshahi from Jan 2017 to Dec 2017. We identified all patients who underwent primary CS in this hospital from ward and operation theatre. Primi patients who underwent first time CS known to have primary CS. Information taken were name, age, date of CS, profession and indication for CS. The five commonest indications for an emergency CS were: fetal distress, cephalo-pelvic disproportion, prolonged/obstructed labor and rupture of membranes. For elective CS commonest indications were: postdated, bad obstetric history, hypertensive disorders, central placenta previa, severe oligohydramnios and patient's desire.

Results

During study period from January 2017 to December 2017, total 11018 deliveries were done among these 6503 were NVD (normal vaginal delivery) and 4515 were CS (Figure-1). Table I showed primary caesarean section was more (74.92%) than repeat CS (25.08%). Table II showed about two third of the primary caesarean women were housewife. In figure2, maximum patients underwent CS were between (20-29) years age group (40%). Figure 3 showed nowadays number of elective CS is increasing, here two third patients underwent elective CS. Table -III showed patient's desire was main cause for increasing the rate of primary elective CS. Maximum primi patients underwent CS due to own wish others

important part.^{5,6} Financial, social and cultural elements appear to play an important role.⁷⁻¹⁷ were done due to proper indications. Table -IV showed fetal distress was main cause for primary emergency CS.

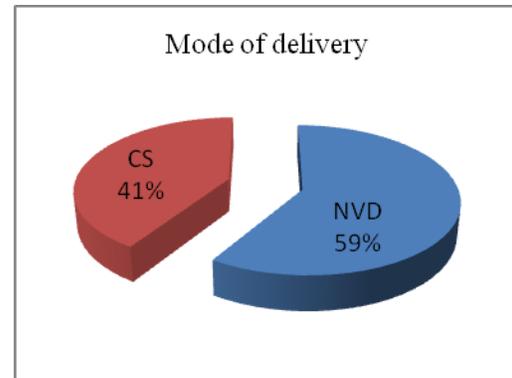


Figure 1: Mode of delivery (n=11018)

Table I: Caesarean rate (n=4515)

	Number of CS	Percentage (%)
Primary CS	3383	74.92%
Repeat CS	1132	25.08%

Table II: Occupation of Primary CS mothers (n=3383)

Occupation	Number of patients	Percentage (%)
Housewife	2369	70%
Working women	1014	30%

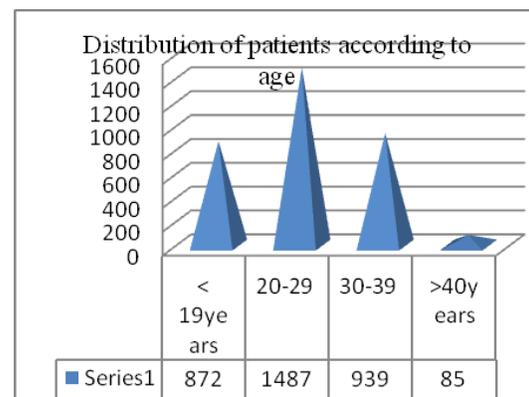


Figure 2: Age distribution of patients (n=3383)

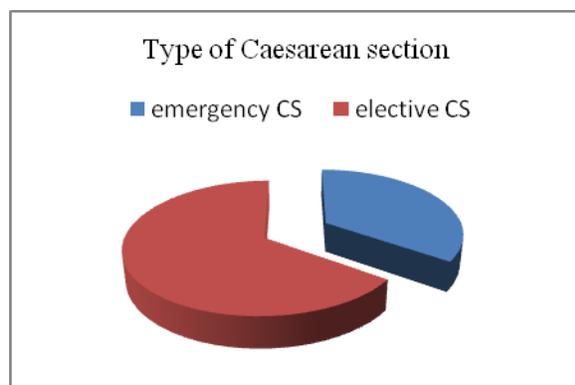


Figure-3: Type of Caesarean section (n=3383)

Table III: Causes of elective CS (n=2208)

Elective CS	No. of patients	Percentage %
Patients desire	989	45%
Post-term pregnancy	488	22%
HTN disorder of pregnancy	369	17%
Placenta Previa	98	4%
Bad Obstetric History	71	3%
Severe oligohydramnios	193	9%

Table IV: Causes of emergency CS (n=1175)

Emergency CS	Number of patients	Percentage (%)
Fetal distress	488	42%
CPD	298	25%
Ruptured membrane	201	17%
Prolonged/obstructed labour	188	16%

Discussion

This study has documented the indications for both elective and emergency CS conducted at tertiary care public hospital in Bangladesh and explored how factors other than a medical reason for CS influence decision making.

Overall proportion of CS conducted without a clear medical indication could be considered to be

45% in this study. This could be higher if a more critical analysis of the indicators for CS were possible. It was a striking finding that the indication postdated pregnancy was recorded for almost 22% of all CS in primiparous young women. Other reasons are failure and inability to implement good quality evidenced practices such as ensuring companionship during labor and delivery, a choice and range of drugs and methods to alleviate pain and assisted delivery where indicated using vacuum or forceps.²⁰

In Pakistan a study of 300 cases conducted at a tertiary hospital noted 11.3% of these were elective CS and 88.7% were performed as an emergency CS.²¹ Sultana et al. reported on 209 CS performed at district level in Pakistan with 11.9% done as an emergency and 82.4% as elective.²² In Nepal at tertiary level, slow progress in labor, previous CS, fetal distress and breech presentation were the commonest indicators for CS.²³ Another study conducted in urban Bangladesh, reported fetal distress, pre-eclampsia and cervical dystocia as the commonest indications for CS.²⁴

Other studies from low and middle income countries suggested that the proportion of CS performed without a clear medical indication might be higher. In a study of Maaloe et al. found that, of the 303 caesarean sections they reviewed in Tanzania, 25% were based on inappropriate indications and in an additional 38% of cases the indication was not clear.²⁵ Similarly, in this study, it was possible that some indications could be termed inappropriate such as CS conducted for fetal distress if at birth there was no confirmation of fetal distress or incorrectly diagnosed CPD. A study by Chu showed 20% of all CS in Taiwan may be performed without a clear indication.²⁶

Patient pressure and competing private interests also increasingly playing an important role in the

decision-making process, awareness should be raised among providers as well as among pregnant women and their families regarding the potential dangers associated with delivery by CS.

Conclusion

Caesarean section is a surgical procedure and it can lead to numerous complications both in mother and the child. CS cannot be considered an equal alternative to spontaneous child birth and it should only be performed when definite indication is present.

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