

Original Article

## Socio-demographic Factors Associated with Emergency Caesarean Section Cases admitted at Tertiary Care Hospital in Dhaka City

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### Abstract

**Background:** Socio-demographic factors are related with the need of emergency obstetric care. **Objectives:** The purpose of the present study was to see the socio-demographic characteristics of emergency caesarean section. **Methodology:** This cross-sectional of study was conducted in the Department of Obstetrics and Gynaecology at Dhaka Medical College, Dhaka from the duration July 2006 to December 2006 for a period of six (6) months. The pregnant women underwent emergency caesarean section admitted at Dhaka Medical College Hospital during the mentioned period of the study were my study population. The cases were selected from the patients who got admitted at obstetrics ward of DMCH with an indication of emergency caesarean section with stable general condition at that moment. Every 10th patient was selected for the study. Data has been collected after taking written consent from the patients as per consent form. Then a thorough history, clinical examination was done and information were collected. Intraoperative complications such as haemorrhage, cardiac arrest were noted. **Result:** The study was performed on 100 cases of which 35(35.0%) emergency caesarean section cases belonged to the age group of 20 to 24 years and 56.0% were from lower socio economic class. Among them 42.0% of the cases of emergency caesarean section had education SSC and above level; furthermore 12.0% were illiterate. In addition 92.0% cases were house wife. **Conclusion:** In conclusion young house wives from lower socio economic status are mostly underwent emergency caesarean section. [*Journal of Current and Advance Medical Research 2017;4(1):23-26*]

**Keywords:** caesarean section; Socio-demographic factors; age difference; emergency

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## Introduction

Promotion of maternal and child health has been one of the most important components of the Family Welfare Program of the Government of Bangladesh since its independence<sup>1</sup>. Also the National Population Policy reiterates the government's commitment to the safe motherhood program within the wider context of reproductive health<sup>2</sup>.

However, the maternal mortality ratio in Bangladesh is one of the highest in the world, despite the presence of relevant policy and programmatic initiatives<sup>3</sup>. Moreover, the estimated lifetime risk of dying from pregnancy and child birth-related causes is about 100 times higher than that in developed countries<sup>1</sup>. The coverage of institutional delivery and delivery assistance by health professional were lower in rural areas where socio-economic status is lower than that of the urban areas. Such a scenario in urban slums is considered to be almost the same as that for the rural areas. Studies found that women with lower socioeconomic status often do not avail the existing reproductive health care services, particularly delivery care services.

Both socioeconomic and demographic factors, however, have been shown to have a particularly greater influence on the use of health care services (4- 8). Also, in studies of preventive and curative services it was often found that the use of health services is related to the availability, quality and cost of services, as well as social structure, health beliefs and personal characteristics of the users(9-12). Thus, considering such issues an attempt has been made in this study to identify the socio-economic determinants of institutional delivery as well as delivery assistance from health professional.

## Methodology

This cross sectional study was conducted in the Department of Gynaecology and Obstetrics at Dhaka Medical College Hospital, Dhaka the busiest tertiary care hospital in Bangladesh, during the period from July 2006 to December 2006 for a period of six (6) months. The patients underwent emergency caesarean section for any indication during the mentioned period of study was selected as study population. The cases were selected by random sampling from the patients with an indication of emergency caesarean section but with stable general condition at that moment. Every 10th

patient was selected for the study. Data were collected after taking written consent from the properly selected patients. At first, thorough history as per prepared questionnaire, then clinical examination was done and information was collected. All relevant clinical information of the cases was recorded systematically in the predesigned clinical data sheet. Data were checked, verified and compiled by computer; analysis was done by using SPSS and the results were displayed in tables and diagrams.

## Result

A total number of 100 patients were recruited for this study. The most of the emergency caesarean section cases were performed among the age group of 20 to 24 years which was 35(35.0%) cases followed by 25 to 29 years, 30 to 34 years and less than 20 years of age group which were 31(31.0%) cases, 24(24.0%) cases and 6(6.0%) cases respectively (Table 1).

**Table 1: Distribution of Cases According to Their Age (n=100)**

Age Group	Frequency	Percentage
Less Than 24 Years	41	41.0
More than 24 Years	59	59.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

Majority of the patients (56%) were from lower socio economic group; however, middle and upper class groups were 27% cases and 17% cases respectively (Table 2).

**Table 2: Distribution of Cases According to Their Socio-economic Status (n=100)**

Socio-economic group	Frequency	Percentage
<b>Lower Class</b>	56	56.0
<b>Middle Class</b>	27	27.0
<b>Upper Class</b>	17	17.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

Among the 100 cases 42.0% had emergency caesarean section who were having education SSC above level 13% and 17% were from HSC and degree equivalent, 16% had primary education and only a few 12% were illiterate (Table 3). Among the 100 cases 92% had emergency caesarean section were housewife while 8% were service holder and others (Table 4).

**Table 3: Distribution of Cases According to Educational Status (n=100)**

Educational Status	Frequency	Percentage
Illiterate	12	12.0
Primary	16	16.0
SSC	42	42.0
HSC	13	13.0
Degree & above	17	17.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

### Discussion

The lower institutional delivery and assisted by health professional generates a very relevant query: what are the factors that affects women to utilize institutional as well as assistance from health professional in slum areas where poor socio-economic conditions prevail to a greater extent<sup>2</sup>. Worldwide, maternal mortality remains a major challenge to health systems. An estimated 358 000 maternal deaths occurred globally in 2008 of which 99.0% were accounted for in developing countries<sup>4</sup>. Bangladesh is 1 of the 11 countries that contributed to 65% of that maternal mortality<sup>3</sup>. There are substantial socioeconomic disparities in access to professional delivery care in low and middle income countries.

**Table 4: Distribution of Study Population According to Occupation (n=100)**

Educational Status	Frequency	Percentage
Housewife	92	92.0
Service Holder & Others	8	8.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

The International Safe Motherhood Initiative made maternal mortality an international priority by the way of access to basic maternity care during pregnancy and delivery to all women<sup>4</sup>. One of the best way to do this is to make sure that women receive skilled care at delivery. Providing skilled care means ensuring that health professionals such as doctors, nurses or midwives can manage normal deliveries and treat the life-threatening complications of pregnancy and child birth. Therefore, skilled care at delivery or "safe delivery" has its greater significance in reducing sufferings of reproductive health system from women. Delivery performed by trained personnel with proper equipment and correct technique is the safest. So, safe delivery ensures that all deliveries are attended

by persons with the right knowledge, skills, and equipment and also provide postpartum care to mother and baby<sup>5</sup>.

The incidence of caesarean section varies from country to country, hospital to hospital and community to community. In the past 20 years, the rate of caesarean section had steadily increased<sup>6</sup>. Every operative procedure has its own hazards. Caesarean section is also not free from them. The risk of maternal death from caesarean section is four to six times greater than that of vaginal delivery<sup>7</sup>. But the improved safety of surgery with modern anesthetic techniques, availability of antibiotics, blood transfusion and intravenous fluid those have made caesarean section safer than they were. In emergency situation, caesarean section is done due to unforeseen complication arising either daring pregnancy or daring labour and acts as a life saving measure for both the mother and the fetus. Thus, it is necessary to bring all of these points in consideration along with the factors responsible for emergency caesarean section and outcome of this should be studied much more<sup>8</sup>. The incidence of caesarean section is gradually increasing in developing and also developed countries. The rate should be 7.0% in developed countries and less than 10.0% in developing countries. Minimum acceptable level as recommended in the guide line for monitoring progress in the reduction of maternal mortality, caesarean section as percentage of all births is not less than 5% cases and not more than 15.0% cases<sup>9</sup>.

It has been found that more than half (90%) of the cases were belonged to the age group of 20 to 34 years. These findings are similar to Petrou et al<sup>10</sup>. In this study it has been also found that 4.0% of cases belonged to more than 35 years. This is similar to Joll et al<sup>11</sup> of St Mary's, Hospital in England and had shown that pregnant women with the age group of 35 to 40 years of old were at increased rate of gestational diabetics, placenta previa and thereby increased rate of emergency caesarean section. The age group is nearer with Tadesse et al<sup>12</sup> which was 57.0% among 20 to 30 years of age group; however Banu and Rouf<sup>13</sup> at different hospitals of Dhaka city have reported a 16.0% cases among more than 35 years of age group.

Hospital is the safe place to delivery. Many women living in developing country like Bangladesh have come to the hospital at terminal stage after giving trial for normal delivery<sup>14</sup>. In another study Begum et al<sup>15</sup> have shown that women with primary and greater than primary education were significantly more likely to deliver at institute (OR=3.361 and 5.784 respectively) and to deliver by health

professional (OR=2.362 and 6.479 respectively) compared to women with no education. Similarly, women's high level of knowledge on maternal health care services was found to have a significant influence only on institutional delivery (OR=4.527) in the same study<sup>15</sup>.

This study shows that more than half (56.0%) of the patients were from lower socio economic class and three fourth (70.0%) of the cases had educated of SSC and below. This study was carried out to identify the factors which influenced choice of place of delivery by pregnant women and to recommend ways to improve women's access to skilled attendants at delivery. A pre-tested questionnaire was administered by interviewers to women who had delivered within 3 months prior to date of data collection. The response rate was 75.5%. Of the respondents, 52.9% delivered outside health institutions and 47.1% in health institutions<sup>16</sup>.

## Conclusion

In conclusion lower socioeconomic and educational conditions increases the emergency caesarean section operations. In this study emergency caesarean section rate was higher due to lack of proper antenatal care, illiteracy and low socioeconomic status. Although apparently it creates a good impression over the higher status but as a matter of fact higher socioeconomic and educational status favors the repeated and proper antenatal checkup which help to detect high risk mothers for special care; thus decreases the emergency caesarean section rates to prevent the maternal and infant deaths as well as their morbidities.

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