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ORIGINAL ARTICLE

Socio-demographic Characteristics and Clinical Profiles of Women Presented with Post-Caesarean Section Complication

Nazrana Sharmin¹, Asma Begum², Sadia Afreen³, Jafrin Akhter⁴, Ayenun Akter⁵, Qazi Hena Ferdousi⁶

¹Junior Consultant, Department of Obstetrics and Gynaecology, Dhaka Medical College Hospital, Dhaka, Bangladesh; ²Medical Officer, Department of Obstetrics and Gynaecology, Sheikh Hasina National Institute of Burn & Plastic Surgery, Dhaka, Bangladesh; ³Gynae Specialist, Evercare Hospital, Dhaka, Bangladesh; ⁴Resident Surgeon, 250 Bedded Hospital, Magura, Bangladesh; ⁵Lecturer, Department of Obstetrics and Gynaecology, Govt Homeopathic Medical College and Hospital, Mirpur-14, Dhaka, Bangladesh; ⁶Assistant Professor, Department of Community Medicine, Government Homeopathic Medical College, Mirpur-14, Dhaka, Bangladesh

Abstract

Background: Post-caesarean section complications can occur in different Socio-demographic Characteristics with varied clinical profiles. Objective: The purpose of the present study was to see the socio-demographic characteristics and clinical profiles of women presented with post-caesarean section complications. Methodology: This cross-sectional study was conducted in the Department of Obstetrics and Gynaecological at Dhaka Medical College and Hospital, Dhaka, Bangladesh from January 2013 to June 2013 for a period of six months. All women admitted with post caesarean section complications referred from different level of hospitals with the age group of more than or equal to 18 years were included as study population. All relevant data were recorded in a predesigned data collection sheet which included age, social status, economic condition and parity. Results: A total number of 50 women who were underwent caesarean section outside DMCH and admitted with post-caesarean section complications were included in this study. Maximum (40.0%) patients were within the age group of 21 to 25 years. Majority of the patients completed their primary and secondary level of education which was 16(32.0%) cases and 18(36.0%) cases respectively. Majority (56.0%) were multiparous. Primi was found in 20(40.0%) cases. Conclusion: In conclusion most the women are in younger age group with secondary and higher secondary education. [Journal of Current and Advance Medical Research, July 2023;10(2):49-521

Keywords: Socio-demographic characteristics; clinical profiles; post-caesarean section complications

Correspondence: Dr. Nazrana Sharmin, Junior Consultant, Department of Obstetrics and Gynaecology, Dhaka Medical College Hospital, Dhaka, Bangladesh; **Email:** nazranasharmin@yahoo.com; **Cell No.:** +8801711029448; **ORCID:** https://orcid.org/0000-0003-4422-827X

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Introduction

Caesarean Section (CS) is an operative procedure whereby the fetus after the end of 28th weeks is delivered through an incision on the abdominal and uterine wall¹. There are several types of caesarean section, based on the type of incision made on the

uterus, apart from the incision on skin. The classical caesarean section involves a midline longitudinal incision in the fundus and body of the uterus, which allows a larger space to deliver the baby². It is rarely performed today, as it is more prone to complications. The lower uterine segment section is the procedure most commonly used today, it involves a transverse cut in the lower segment of

the uterus just above the edge of the bladder and result in less blood loss and is easier to repair³.

Based on timing of caesarean section, the indications are grouped into four categories⁴. Category 1 or Emergency Caesarean Section is performed when there is immediate threat to the mother or fetus, the conditions like, abruption, cord prolapse, scars rupture. Scalp blood pH less than 7.20 and prolonged FHR deceleration less than 80 beats/mins. Here ideally the caesarean section should be done within 30 minutes⁴. In category 2 or Urgent Caesarean Section, there is maternal or fetal compromise but was not immediately life threating. Here the delivery should be completed within 60 to 75 minutes and cases are those with FHR abnormality is of concern⁴. In category 3 or Schedule Caesarean Section, the mother needed early delivery but there is no maternal or fetal compromise there may be concern that continuation of pregnancy is likely to affect the mother or fetus in hours or days to come.

Case related to pre-eclampsia where the liver or renal function tests are deteriorating where the caesarean section in planed for within hours to days, before further deteriorations occurs⁵. In category 4 or Elective Caesarean Section, this type of caesarean section planned to do at times suitable to mother and operation staff there are some cases where is an indication for caesarean section but there is no urgency. It includes placenta previa with no active bleeding, mal presentations (brow, breech), and history of successful repair of VVF^{4,6}. This present study was undertaken to see the sociodemographic characteristics and clinical profiles of women presented with post-caesarean section complications.

Methodology

Study Settings and Population: This was a hospital based cross-sectional type study. This present study was conducted in the Department of Obstetrics and Gynaecological at Dhaka Medical College and Hospital, Dhaka, Bangladesh from January 2013 to June 2013 for a period of six months. The patients were referred to Dhaka Medical College Hospital (DMCH) from outside with post caesarean section complications. Purposive sampling technique was used for collection of data. All women admitted with post caesarean section complications referred from different level of hospitals with the age group of more than or equal to 18 years were included as study population. Patients or attendants who were

unwilling to give consent to take part in the study were excluded from this study.

Study Procedure: Data were collected during antenatal care like recording of medical history, assessment of individual needs, advice and guidance on pregnancy and delivery, screening tests, education on self-care during pregnancy, identification of conditions detrimental to health during pregnancy, first-line management and referral if necessary. Regular antenatal care is a crucial factor in ensuring the health of both the mother and child throughout pregnancy. The regular antenatal care was minimum four (04) or more antenatal checkups⁴³. Irregular antenatal care was less than four (04) antenatal checkups. All relevant data were recorded in a predesigned data collection sheet which included general information of patient, demographic profile, previous obstetrics history and obstetrics complications, patient profile on admission.

Statistical Analysis: Statistical analyses were performed with SPSS software, versions 22.0 (IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.). Continuous data were summarized in terms of the mean, standard deviation, median, minimum, maximum and number of observations. Categorical or discrete data were summarized in terms of frequency counts and percentages.

Results

This hospital based prospective type of study was conducted in Obstetrics and Gynaecology Department of Dhaka Medical College Hospital (DMCH) over a period of six (06) months from January 2013 to June 2013. A total number of 50 women who were underwent caesarean section outside DMCH and admitted with post-caesarean section complications were included in this study.

Table 1: Distribution of Study Population according to Age Group of Patients

Age Group	Frequency	Percent
≤ 20 Years	11	22.0
21 to 25 Years	20	40.0
26 to 30 Years	12	24.0
31 to 35 Years	4	8.0
≥ 36 Years	3	6.0
Total	50	100

Maximum (40%) patients were within the age group of 21 to 25 years. However, about 12(24.0%)

cases were in the age group of 26 to 30 years and 11(22.0%) cases were in the age group of less than or equal to 20 years of age group (Table 1). Majority of the patients completed their primary and secondary level of education which was 16(32.0%) cases and 18(36.0%) cases respectively. Higher secondary certificate (HSC) was found in 10(20.0%) cases. However, 4(8.0%) cases were illiterate (Table 2).

Table 2: Distribution of Study Population according to Educational Status

Educational Status	Frequency	Percent
Illiterate	4	8.0
Primary	16	32.0
SSC	18	36.0
HSC	10	20.0
Graduate and above	2	4.0
Total	50	100.0

SSC=Secondary School Certificate; HSC=Higher Secondary Certificate

Maximum (76%) referred patients were from poor economic background. Middle class was found in 12(24.0%) cases. However, there was no cases reported in high income group (Table 3).

Table 3: Distribution of Study Population according to Economic Status

Economic Status	Frequency	Percent
Poor Income	38	76.0
Middle Class	12	24.0
High Income	0	0.0
Total	50	100

Majority (56%) were multiparous. Primi was found in 20(40.0%) cases. However, grand multi was found in only 2(4.0%) cases (Table 4).

Table 4: Distribution of Study Population according to Parity

Parity	Frequency	Percent
Primi (0 – 1)	20	40.0
Multi (2 – 3)	28	56.0
Grand Multi (≥4)	2	4.0
Total	50	100

Among 50 referred cases, maximum (52.0%) had regular antenatal checkup, 40.0% had irregular antenatal checkup and 8.0% had no antenatal checkup (Figure I).

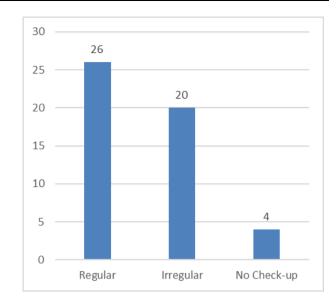


Figure I: Pattern of Antenatal Check-up

Among 50 referred cases of post caesarean section complications, maximum patient (84.0%) were delivered at term pregnancy (Table 5).

Table 5: Distribution of Study Population according to Gestational Age of Patient

Gestational Age	Frequency	Percent
\leq 35 weeks	01	2.0
36 to 40 weeks	42	84.0
More than 40 weeks	07	14.0
Total	50	100.0

Discussion

This study represents an effort to analyze the outcome and management of 50 cases of major post caesarean section complications done outside and referred to Dhaka Medical College Hospital (DMCH) in the Obstetrics and Gynaecology Department within the period from January to June 2013. This study showed maximum patients were from age group of 21 to 25 years. Habib⁶ studied showed maximum patients from age group 30 to 35 years out of total 754 cases. This study showed 52.0% had regular antenatal checkup. Krukowski et al⁷ showed in his study that 95% patients had regular antenatal checkup.

This study was found 56.0% cases multi-gravida and 4.0% cases were grand multigravida. These findings consisted with Savage study⁸. Most of the multigravida needed caesarean section. This may be due to the presence of previous caesarean section scar, malpresentation, and suspected scar integrity with some other problem.

In Ghana study⁹ commonest indication of primary CS where relaparatomy needed was prolonged labour and obstructed labor, and the commonest indication of relaparatomy was PPH due to uterine atony. The study in India¹⁰ also showed the same result where the commonest indication of primary CS was prolonged and obstructed labor and the commonest reason for relaparatomy was PPH. This study revealed that the commonest indication of primary CS was prolonged labor with foetal distress (24.0%) followed by previous one or two CS. Primary PPH and internal hemorrhage were the commonest reason for relaparotomy in this study similar to the findings of other studies.

Conclusion

In conclusion most the women are in younger age group. However, secondary and higher secondary education people are more commonly suffering from post-cesarean section. Further large scale study should be carried out to get the real scenario.

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None

Conflict of Interest

The authors have no conflicts of interest to disclose

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Contributions to authors: Sharmin N, Begum A prepared the manuscript from protocol preparation upto report writing. Afreen S, Akhter J, Akter A, Ferdousi QH have revised the manuscript. All authors involved from protocol preparation up to manuscript writing & revision.

Data Availability

Any inquiries regarding supporting data availability of this study should be directed to the corresponding author and are available from the corresponding author on reasonable request.

Ethics Approval and Consent to Participate

Ethical approval for the study was obtained from the Institutional Review Board. As this was a prospective study the written informed consent was obtained from all study participants. All methods were performed in accordance with the relevant guidelines and regulations.

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ORCID

Nazrana Sharmin: https://orcid.org/0000-0003-4422-827X Asma Begum: https://orcid.org/0000-0002-8583-3938 Sadia Afreen: https://orcid.org/0000-0003-2302-7567 Jafrin Akhter: https://orcid.org/0000-0002-5282-6598 Ayenun Akter: https://orcid.org/0009-0009-9705-7305 Qazi Hena Ferdousi: https://orcid.org/0000-0001-9664-4887

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