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Original Article

Incidence and indications of LSCS among Doctors Community of Chattogram

Adiba Malik[1*]
Kamrun Nessa[2]
Yasmin Ara Begum[3]
M. Jalal Uddin[4]
Aklima Sultana[1]
Nasrin Ferdous[2]
Purabi Bardhan[5]

[1]Department of Obstetrics & Gynecology
Chattogram Maa-O-Shishu Hospital Medical College
Chattogram, Bangladesh.

[2]Department of Obstetrics & Gynecology
Institute of Applied Health Sciences (IAHS)
Chattogram, Bangladesh.

[3]Department of Obstetrics & Gynecology
Southern Medical College
Chattogram, Bangladesh.

[4]Department of Community Medicine
Chattogram Maa-O-Shishu Hospital Medical College
Chattogram, Bangladesh.

[5]Department of Anaesthesiology
Chattogram Maa-O-Shishu Hospital Medical College
Chattogram, Bangladesh.

Abstract

Background: *Lower segment caesarean section (LSCS) is a surgical intervention, which is carried out to ensure the safety of mother and baby when vaginal delivery is not possible or when danger to mother and baby would be greater with vaginal delivery. This study is designed to identify indication of LSCS and detect complications if any among the respondents.*

Materials and methods: *Cross sectional descriptive study where 95 female doctors of Chattogram were selected by convenient sampling without knowing their mode of delivery and if it is LSCS then indication of LSCS , maternal and neonatal complications were noted.*

Results: *Age of the respondents at the time of interview were noted and most of them were between 31- 40 years 52 (55%), regarding income most of them between 100000 -200000 42(44%) most of the delivery occurred in the private clinics 92 (70%) regarding mode of delivery, LSCS was 92 (70%) vaginal delivery 40 (30%) regarding indications of LSCS most common was repeat caesarean section 27 (29%) and second common was LSCS due to maternal interest 18 (20%) and others were severe preeclampsia 10 (11%) fetal distress 08(09%) placenta previa, Diabetes with big baby, cephalopelvic disproportion, PROM with non progression of labour. PPH was the most common complication 05 (63%), next was paralytic ileus 02 (25%) and left ventricular failure 01 (12%). Common neonatal comoplications were low birth weight baby 904 (40%), prematurity 03 (30%) and birth asphyxia 03 (03%).*

Conclusion: *LSCS is a major surgical procedure for delivery. Inspite of its low maternal morbidity and mortality due to improved surgical technique, modern aneasthetic skill and availability of blood and blood products, still it carries a slightly greater risk in subsequent pregnancy, so we should be rational in doing primary caesarean section.*

Key words : LSCS; Pregnancy; Vaginal delivery.

INTRODUCTION

Lower Segment Caesarean Section (LSCS) is a surgical procedure to deliver the baby after the age of viability when vaginal delivery is not possible or unsafe for mother or baby.

Initialy it was performed mainly for the maternal interest but recently health of fetus has played a significant role in making decision of caesarean birth[1]. Meticulous antepartum and intrapartum fetal monitoring may further contribute to this. The 2012 US caesarean delivery rate was unchanged at 32.8%. The caesarean rate rose nearly to 60% from 1996 (20.7%) to 2009 and decline slightly from 2009 to 2010 and has been stable since then[2].

*Correspondence to:
Dr. Adiba Malik
Associate Professor
Department of Obstetrics & Gynecology
Chattogram Maa-O-Shishu Hospital Medical College
Chattogram, Bangladesh.
Mobile : +88 01817 73 26 98
Email : dradibamalik@yahoo.com

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LSCS is a life saving procedure in conditions such as fetal distress, malpresentation like transverse lie, cord presentation, placenta previa, severe preeclampsia, eclampsia gross cephalopelvic disproportion, Diabetes with complications. Like other surgical procedure it is also associated with short term and long term risks. Short term maternal risk including bleeding, injury to urogenital and gastrointestinal organs which is common in repeat caesarean section or patients having endometriosis or pelvic inflammatory disease due to adhesions, post operative infections, scar rupture, need of blood transfusion, increased deep venous thrombosis, intensive care unit admission, prolong hospital stay. The long term complications are increase risks of severe bleeding due to uteroplacental complications such as placenta previa and placenta accreta in subsequent pregnancy[3,4]. Complications like placenta previa and placenta accreta which may need peripartum hysterectomy due to intractatable Post Partum Haemorrhage (PPH) may end the obstetric future of a woman.

With having previous caesarean section with premature scar pain or impending rupture of scar leads to prematurity with its complications like neonatal respiratory distress syndrome, transient tachypnoea and persistent pulmonary hypertension[5]. LSCS is termed as elective and emergency. Elective is which is done at a pre arranged time during pregnancy to ensure the better quality of obstetric care, anaesthesia, neonatal resuscitation and nursing services. The procedure is called emergency when it is performed due to unforeseen or acute obstetric emergencies to save the mother and baby[6]. It is seen that morbidity and mortality are assoiciated more with emergency than elective caesarean section[7].

Proportion of LSCS to the total births is considered as one of the important indicators of emergency obstetric care[8]. A figure below 5% implies that a substantial proportion of women do not have access to surgical obstetric care, on the other hand a rate higher than 15 % indicates over utilization of the procedure for other than life saving reasons[9].

Based on the WHO systematic review, increase in caesarean section rate 10 -15% at the population level are associated with decrease in maternal , neonatal and infant mortatility[10].

Present study is designed to determine the demographic profile of the respondents, find out the incidence of LSCS, identify indications of LSCS and to detect complications if any among the respondents.

MATERIALS AND METHODS

This cross sectional descriptive study was carried out in Chattogram area during the period of July 2019 to December 2019 on 95 female doctors.

95 female doctors having babies, without knowing their mode of delivery were selected by convenient sampling. Informed verval consent was taken before interview. A predesigned questionaire was used to get the relevant information regarding socieodemographic information, pregnancy details, mode of delivery, indication of caesarean section, any post natal or post operative complication of mother and baby.

RESULTS

Regarding age of the respondents at the time of interview, most of them were between 31-40 years, next common was between 21-30 years. Regarding monthly income between 100000 - 200000 was the most common and next was > 200000. Regarding place of birth most of the deliveries were in private clinics 92 (70%) than public hospitals 36(27%). Out of 132 deliveries LSCS was 92 (70%), Normal vaginal delivery 40 (30%). Among the LSCS the most common indications are repeat caesarean section 27(29%) next common indications are LSCS due to maternal interest 18(20%) others are due to Pre eclampsia 10 (11%) fetal distress 08m (09%) Diabetes with big baby 07 (08%) cephalopelvic disproportion 07 (08%) Malpresentation 05 (06%) placenta previa 03 (04%) PROM with non progression of labour 04 (04%). Regarding maternal complications post partum haemorrhage was the most common 05 (63%) next common complications were paralytic ileus 02 (25%) and left ventricular failure 01 (12%). Regarding complications of newborn most common was low birth weight baby 04 (40%) other complications were prematurity 03 (30%) birth asphyxia 03 (30%).

Table I : Age of the mothers

Age groups	No. of mothers (%)
21-30	18 (19%)
31-40	52 (55%)
41-50	17 (18%)
>50	08 (08%)
Total	95 (100%)

Source: Study report 2019.

Table II : Monthly income of mothers

Monthly income	Number of mothers (%)
< 100000	15(16%)
100000-200000	42(44%)
>200000	38(40%)
Total	95(100%)

Source: Report 2019.

Table III : Place of child birth

Place of child birth	No. of child birth (%)
Public hospital	38 (29%)
Private hospital	94 (71%)
Total	132 (100%)

Source: Report 2019.

Table IV : Mode of child birth

Mode of child birth	No. of child birth (%)
Normal delivery	40 (30%)
LSCS	92 (70%)
Total	132 (100%)

Source: Report 2019.

Table V : Indications of LSCS

Indications of LSCS	Frequency (%)
Repeat caesarean section	27 (29%)
Maternal interest	18 (20%)
Pre eclampsia	10 (11%)
Fetal distress	08 (09%)
Diabetes with big baby	07 (08%)
Cephalopelvic disproportion	07 (08%)
Malpresentation	05 (05%)
PROM with non progression of labour	04 (04%)
Placenta previa	03 (03%)
Others	03 (03%)
Total	92 (100%)

Source: Report 2019.

Table VI : Maternal complications

Complications	Frequency (%)
Post partum haemmorrhage	05 (63%)
paralytic ileus	02 (25%)
Left ventricular failure	01 (12%)
Total	08 (100%)

Source: Report 2019.

Table VII : Complications of Newborn

Complications	Frequency (%)
low birth weight	04 (40%)
Prematurity	03 (30%)
Birth asphaxia	03 (30%)
Total	10 (100)

Source: Report 2019.

DISCUSSION

Rise in incidence of caesarean sections could be due to increased safety of operation due to improved anaesthesia, availability of blood and blood products and Antibiotics and also rising of primary caesarean section and decline in operative vaginal delivery. Present study found most of the doctor mothers preferred private hospital 94(71%) than public hospital 38 (29%) and it was consistent with study by Vijay Kumar which showed 77.4 % delivery in private hospital[11]. Among the 132 deliveries LSCS was 92 (70%) and normal delivery 40(30%). Present study found total caesarean section rate was 70%. Doctor mothers anxiety about healthy outcome of her child may play an important role. This data may not be nationally representative as it was not reflecting the status of the mass population. Study of Vijay Kumar found total caesarean rate was 62%[11]. In a global survey China was reported to have the highest Caesarean rate 46.2%, Paraguay 42%, USA reported LSCS rate 32.8% in 2012[12-13]. Regarding indication of LSCS most common was repeat caesarean section 27 (29%). According to Shweta Yadav s study it was 22%[14]. Although previous LSCS does not necessarily always require caesarean delivery in subsequent pregnancy. But the sense of security of phisician mother seems to be responsible for repeat caesarean delivery. Next common indication was LSCS due to maternal desire which was 18 (20%). This rise may be due to increase awareness of doctor mothers about fetal distress and avoidance of forceps, venouse and breech vaginal delivery. Next common indication was Pre eclampsia 10 (11%), study by Shweta Yadav found Pre eclampsia as 18% cases[14]. which was higher than present study. Fetal distress was responsible in 08 (09%) LSCS and study by Sweta Yadav found it 25.1% 14 which was much higher than present study. Regarding maternal complications post partum haemorrhage was 05 (63%) acording to another study it was 8.6% which was much lower than present study[14]. Other complications are Paralytic ileus and 01 (12%) left ventricular failure in preeclamptic patient. Regarding neonatal complications low birth weight baby 04 (40%) which may be due to insufficient rest taken by the doctor mothers during their antenatal period. Prematurity was reported in 03(30%) cases which was due to Pre eclampsia and Placenta previa. Birth asphyxia was reported in 03 (30%) cases.

CONCLUSION

Present study found a higher rate of caesarean section. There may be significant association between increased maternal age, higher education, higher socieoeconomic status and taking decision by the patient with increase caesarean section. Maternal anxiety about a healthy outcome for her child may also play an important part. When indicated for the safety of mother and baby it should be donewith out delay. But LSCS without medical indications can cary potential risk in subsequent pregnancy.

DISCLOSURE

All the authors declared no competing interest.

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