Incidence and indications of LSCS among Doctors Community of Chattogram

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 (55%), regarding income most of them between 100000-200000 (44%) most of the delivery occurred in the private clinics (70%) regarding mode of delivery, LSCS was (70%) vaginal delivery (30%) regarding indications of LSCS most common was repeat caesarean section (29%) and second common was LSCS due to maternal interest (20%) and others were severe pre eclampsia (11%), fetal distress (9%), placenta previa, Diabetes with big baby, cephalopelvic disproportion, PROM with non progression of labour. PPH was the most common complication (63%), next was paralytic ileus (25%) and left ventricular failure (12%). Common neonatal complications were low birth weight baby (40%), prematurity (30%) and birth asphyxia (30%).

Conclusion: LSCS is a major surgical procedure for delivery. Inspite of its low maternal morbidity and mortality due to improved surgical technique, modern anaesthetic 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.

Initially it was performed mainly for the maternal interest but recently health of fetus has played a significant role in making decision of caesarean birth. 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.
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%) cephalepelvic disproportion 07 (08%) Malpresentaion 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 haemorrhage         | 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 hospital15. 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 201212-13. 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 physician 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% cases14. 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%) according to another study it was 8.6% which was much lower than present study14. 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 socioeconomic 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 done with out delay. But LSCS without medical indications can carry potential risk in subsequent pregnancy.

DISCLOSURE

All the authors declared no competing interest.
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