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# STUDY ON THE PROFILE OF CAESARIAN SECTION IN TERTIARY CARE HOSPITAL – TAMIL NADU

**Jayasree TM*[1],Sriram khanna A [2], Dinesh kumar B [2],Aravind G [2], Felix AJW [3],Ethirajan N [4]**

[1]Reader, [2]Post graduate, [3]Reader cum statistician, [4]Professor and Head, Division of Community Medicine,
Rajah muthiah medical college, Annamalai University, Chidambaram, Tamilnadu, India.

**ABSTRACT**

The rise in caesarian section is now a matter that deserve international attention. To find out the frequency, indication and the factors associated with LSCS in RMMCH for one month period. A descriptive study was done using secondary data from medical record division of RMMCH. Out of 344 deliveries conducted during one month, 54.65% was found to be LSCS. 52% were in the age group of 21-25 years. 38.57% of LSCS was done for primigravida and 20.71%was repeat LSCS. 8.57% of LSCS was done without any indications. Caesarian section has become so common procedure in the practice of modern obstetrics.

**Key words:** Caesarian section, Secondary data, Indications.

## INTRODUCTION

What has already been described as the "caesarian birth epidemic" may now well be considered a true pandemic emerging issue in mother –child health care. Caesarian section is the second commonest surgery performed in women in India after tubectomy [1]. In India, giving birth in an auspicious day are driving the women to go for caesarian section [2].

Caesarian section rates range from 16.8% to 40% in latin American countries [3]. Reports from developing countries are often based on vital statistics in providing crude population – based caesarian birth rates. However caesarian section rates tend to vary widely with clinical and socio-demographic factors of patients and attitudes of health providers. Hence it has been suggested that national caesarian delivery rates do not reflect what is happening locally and vice- versa [4].

WHO endorsed the principle that there is no region in the world where a population based caesarian section rate exceeding 15% of all live birth is justified [5].

This study was planned to find out the frequency of LSCS in RMMCH for one month period , to find out the indications for elective and emergency LSCS and the factors associated with it.

## METHODOLOGY

RMMCH is a rural medical college in Chidambaram. The hospital has 20 beds in labour ward for immediate post partum care and has a good NICU. As a tertiary care centre a good number of cases are referred from small nursing home in vicinity. It serves the middle and lower class population. Study was conducted as a third term project for MBBS students during the month of march. After getting permission from the medical superintendant, data regarding profile of LSCS was taken from the case sheets with the help of proforma. The deliveries conducted during the previous month (February) was taken for convenience. Out of total 344 deliveries, 188 was found to be LSCS. 48 case sheets were not available in medical records division since they were still not discharged from the ward. Analysis was done for 140 case sheets. Descriptive analysis was done with simple frequency, proportion and percentage.

## RESULTS

Out of 344 deliveries conducted in one month period, 54.65% was LSCS(Figure.no.1). Only 28.57% were booked cases. 29% were referred cases. 52% of women were in the age group of 21 – 25 years with minimum age as 19 years and maximum 35 years (Table.no.1). 38.57% were primi gravidae, 20.71%

Corresponding Author :- **T.M.Jayasree** Email:- 1aravindg@gmail.com

Asian J. Pharm. Res. Vol 5, Issue 2, 79-82, 2015.

was repeat LSCS and 25.71% of LSCS was done for fetal distress. 8.57% of LSCS was done without any indication, as it was mothers wish to do it on that particular day. 81.42% of women were anaemic, out of which 7% of women were severely anaemic (<8 gms%). Time distribution of LSCS was almost equal from morning to midnight. 15% took place during 12MN – 6AM .

**Figure 1. LSCS / Normal delivery**

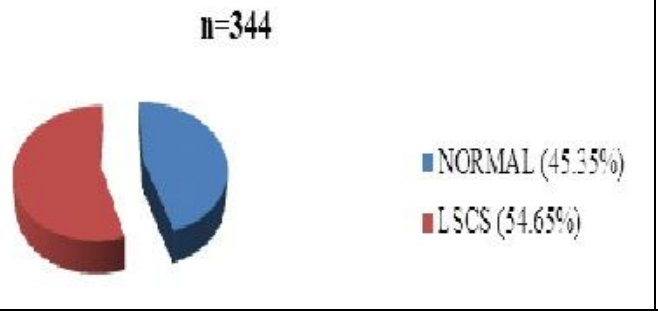


**Figure 2. HB status of women**

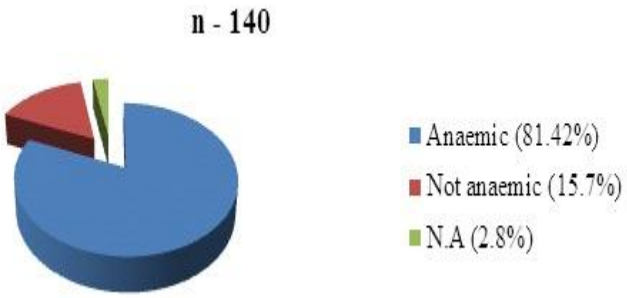


**Figure 3. Severity of anaemia**

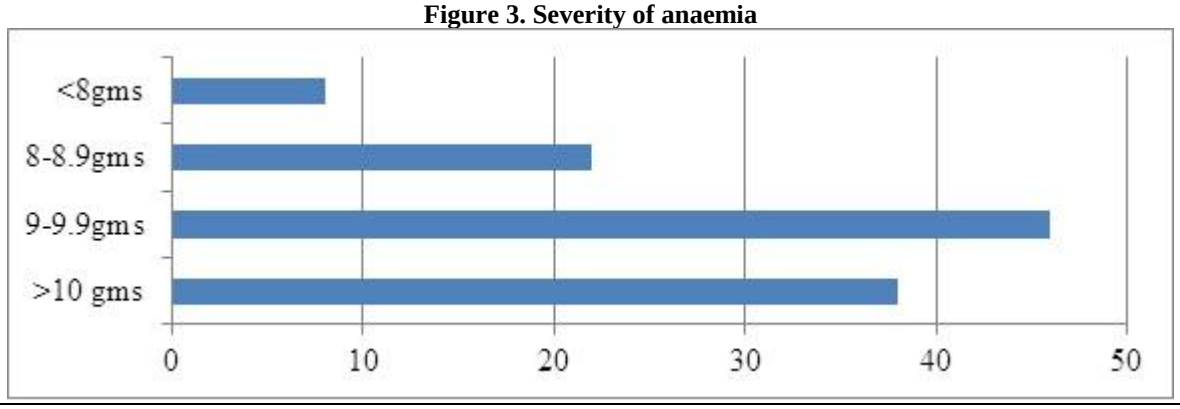


**Table 1. Distribution according to age group**

| Age group | Number | % |
|---|---|---|
| <20 | 10 | 7.14 |
| 21-25 | 73 | 52.14 |
| 26-30 | 43 | 30.72 |
| 31-35 | 14 | 10 |
| >35 | 0 | 0 |
| **Total** | **140** | **100** |

**Table 2. Indications for LSCS**

| Indication | Number | % |
|---|---|---|
| Fetal distress | 36 | 25.71 |
| Previous LSCS | 29 | 20.71 |
| CPD | 23 | 16.42 |
| PIH | 10 | 7.14 |
| Breech | 5 | 3.57 |
| Eclampsia | 4 | 2.85 |
| Prolonged labour | 2 | 1.42 |
| Obstructed labour | 1 | 0.71 |
| Oligohydramnios | 4 | 2.85 |
| Placenta previa | 3 | 2.14 |
| Failed induction | 1 | 1.42 |
| Infertility | 3 | 2.26 |
| Twins | 1 | 0.71 |
| Abnormal presentation | 2 | 1.42 |
| Jaundice | 2 | 0.7 |

Asian J. Pharm. Res. Vol 5, Issue 2, 79-82, 2015.

| | | |
|---|---|---|
| Keto-acidosis | 1 | 0.7 |
| Post dated | 1 | 0.7 |
| No indication | 12 | 8.57 |
| **Total** | **140** | **100** |

**Table 3. Time distribution of LSCS**

| Time | Number | % |
|---|---|---|
| 6.00am – 12 noon | 39 | 27.85 |
| 12 noon – 6 pm | 39 | 27.85 |
| 6.00 pm – 12 mn | 41 | 29.30 |
| 12 mn – 6 am | 21 | 15.00 |
| **Total** | **140** | **100** |

## DISCUSSION

The rate of caesarian section is alarmingly high in this study. The figures provided are hospital based and RMMCH is a tertiary care hospital where 30% of cases are referred from nearby nursing homes and private clinics. This do not necessarily reflect what is happening in the community. Out of 344 deliveries conducted in one month, 54.65% underwent caesarian section. The most common indication for LSCS was fetal distress(25.71%) followed by previous LSCS ( 20.71%) and CPD (16.42%). PIH accounted for 7.14% and breech 3.57%. 8.57% of women preferred to have LSCS done on that particular day and was done without any indication for LSCS(Table.no.2).

Several reports show constant increase in caesarian section rate ranging from 16.8% - 40% over the last decades throughout the world.[3,6] Overall incidence of LSCS was 25.7% in a tertiary care centre in Mumbai.[7] Methil et al reported that caesarian section rate is increased from 23% in 2000 to 50% in 2011, but without any improvement in overall perinatal outcome in a ten year study conducted in Bharathi hospital, pune [6]. According to methil et al, CPD and fetal distress stand out which share 50% of total procedure. As per Rajshree in her study in tertiary hospital Mumbai, previous LSCS was the leading cause (35.2%) followed by fetal distress (14.9%). PIH accounted for 8.86% [7].

Primi gravida as such is not an indication for LSCS, but in this study, 38.57% of caesarian section was done for primi gravida. 28.57% of cases were referred from outside. According to the data from the case sheets, only 2.8% of caesarian section were elective.

81.42% of women were anaemic during surgery according to this study. Anaemia was graded as follows, 33.3% between 10 – 11 grams, 40.3% between 9 – 9.9grams, 19.29% with 8-8.9 grams and 7% with < 8 grams(Figure no 2&3).

The lower cut off value of hemoglobin level for an emergency caesarian section remains a big enigma which needs evaluation . Parturient women tend to have lower haematocrit values due to physiological changes and dilutional effect, but they still can tolerate this chronic anaemia without any ill effects. A study done by Kalavala in Andhra Pradesh, reported that a total number of 303 patients underwent emergency caesarian section with hemoglobin <8.5gm% over a period of 18 months in government medical college, Andhra Pradesh. 88% of women with < 7 gm% and 30% of women with 7.8 grams were transfused and got discharged without any complication or morbidity. For years, anaesthetists have believed a minimum of 10 gm/ dl for a safe conduct of anaesthesia [8].

Regarding complications after LSCS, only 2.85% was reported to have minor ailments such as serous discharge from suture, white discharge per vagina and 2 needed re-suturing. One was dead born. Time distribution LSCS was almost equal from morning to mid night. Only 15 % happened during 12 MN – 6 AM , indicating the real emergency.

## CONCLUSION

There is no region in this world where a population based caesarian section rate exceeding 15% of all live births is justified. The caesarian section rate in this hospital is high – may be justified as it is a tertiary care hospital with a good number of referred cases as emergency and being a post graduate teaching medical college, caesarian section is carried out for teaching purpose also.

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