Original Research Paper



Obstetrics & Gynaecology

CESAREAN-SECTION AUDIT AND ITS IMPACT ON PRIMARY CESAREAN SECTION RATE AT A TERITIARY CARE HOSPITAL

Harshita Kotha

3rd Yr Post Graduate Rangaraya Medical College, kakinada

KEYWORDS:

INTRODUCTION

- The international healthcare community has considered the ideal rate for caesarean sections to be between 10% and 15%.
- The fifth NFHS done in two phases between June 2019 and January 2020, and January 2020 and April 2021, showed that the national C-section rate is 21.5 per cent, higher than what the WHOterms "ideal", 10-15 per cent.
- The number has has also gone up since NFHS 4 (conducted in 2015-16), when the percentage stood at 17.2. At the national level, 47.4 per cent babies born in the private sector are being delivered by surgical methods, as compared to just 14.3 per cent in the government sector.
- Ît is also noted that in certain situations c- section rates are very low indicating low levels of access to and utilization of comprehensive obstetric care for complicated deliverics.
- Rising C-Section rates are a major public health concern and cause worldwide debates due to potential maternal and perinatal risks associated with this increase, inequity in access and cost issues.
- Governments and clinicians have expressed concern about the rise in the number of c-section births and the potential negative consequences for maternal and infant health.
- When medically justified.C-section can effectively prevent maternal and perinatal mortality and morbidity.
- However, there is no evidence to show that C-section delivery has any benefits for women or infants who do not require the procedure.

OBJECTIVES

- To determine the changes in primary c-section rate after introduction of c-section audit.
- To determine the changes in common indications of primary csection.

MATERIALS AND METHODS

- Primary cesarean section rate at ggh kakinada for a period of one year were analyzed, to study the trends in CS rates and the indications for CS during this period. C-section audit was started from April 2021 at ggh kakinada so rates of primary c-section 6 months prior to audit (that is from october 2020to march 2021)group land 6 months after (that is from april2021 to september 2021)—group 2 were calculated and compared
- For data-collection, the sources used were case files, partographs, antenatal-care cards and delivery records books.it is an observational study.

RESULTS

- The study period was 365 days which as divided into 2 periods that is 6months before audit and 6 months after.
- After audit total delirveries were 3755 out of which 531 were primary c-sections and the primary section rate was 14.14.
- Before audit total deliveries were 4201 out of which 658 were primary sections and section rate was 15.66.
- the primary c-section rate decreased from 15.66% to 14.44% i.e
 9.7% decrease after audit

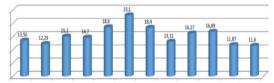


Table:1 shows total deliveries ,primary c-sections, c-section rate, and nicu deaths for a period of 6 months beforer the intoduction of audit. Neonatal mortality-15 per 1000 deliveries

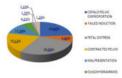
| MONTH | TOTAL DELIVARIES | PRIMARY C-SECTIONS | C SECTION RATE | NICU DEATHS |
|-------------------|---------------------|-----------------------|-------------------|----------------|
| OCTOBER -2020 | 789 | 107 | 13.56 | 17 |
| NOVEMB ER-2020 | 862 | 106 | 12.29 | 13 |
| DECEMBE R-2020 | 821 | 124 | 15.1 | 6 |
| JANUARY -2021 | 711 | 105 | 14.7 | 9 |
| FEBRUAR Y-202I | 504 | 79 | 18.6 | 12 |
| MARCH- 202I | 514 | 119 | 23.1 | 8 |
| TOTAL | 4210 | 658 | 15.66 | 65 |

Table :2 shows total deliveries ,primary c-sections , c-section rate, and nicu deaths for a period of 6 months after the intoduction of audit. Neonatal mortality 13 per 1000 deliveries common indications are cephalo pelvic disproportion, mal presentations ,fetal distress ,contracted pelvis in both groups but there is increase in fetal distress (28-31),nonprogress of labor(2.10%-3.04%) and secondary arrest of decent (1.3%-3.08%) in group 2

Other indicatins include- twins, abruption, placenta previa, imminent eclampsia, obstructed labor

| MONTH | TOTAL DELIVARIES | PRIMARY C-SECTIONS | C SECTION RATE | NICU DEATHS |
|--------------------|---------------------|-----------------------|-------------------|----------------|
| APRIL - 202I | 526 | 97 | 18.4 | 5 |
| MAY-202I | 717 | 94 | 13.11 | 7 |
| JUNE-202I | 381 | 62 | 16.27 | 11 |
| JULY-202I | 574 | 97 | 16.89 | 9 |
| AUGUST- 202I | 724 | 86 | 11.87 | 6 |
| SEPTEMB ER-202I | 833 | 95 | 11.6 | 10 |
| TOTAL | 3755 | 513 | 14.14 | 48 |

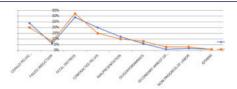
| INDICATIONS | BEFORE AUDIT | AFTER AUDIT |
|-------------------|--------------|-------------|
| CEPALO PELVIC | 24.04% | 20.23% |
| DISPROPORTION | | |
| FAILED INDUCTION | 6.83% | 8.10% |
| FETAL DISTRESS | 28.06% | 31.02% |
| CONTRACTED PELVIS | 19.12% | 15.14% |
| MALPRESENTATION | 11.34% | 10.22% |
| OLIGOHYDRAMNIOS | 6.01% | 8.10% |
| SECONDARY ARREST | 1.3% | 3.08% |
| OF DECENT | | |
| NON PROGRESS OF | 2.10% | 3.04% |
| LABOR | | |
| OTHERS | 1.2% | 1.06% |





PALLO PELVE
DISPROPRION
 PALLO REUETION

 PETAL DISTRESS
 CONTRACTED PELVIS
 MALPRESENTATION



SERIES 1:Indications before audit SERIES 2: Indications after audit

CONCLUSION

- An increase in trend in c-section is being observed world wide at all levels of care irrespective of whether it is a public or private facility and is a major public health concern because of potential maternal and perinatal risks associated with this increase. c-section audit is one of effective non clinical interventions to curb this rising trend.
- An audit and a detailed analysis of indications for CS have enabled the identification of possible remedial measures which could be adopted to reduce the rapidly rising CS rates.

 With the adoption of these measures, a significant reduction of CS
- rates can be expected in the future.