



**A RETROSPECTIVE STUDY OF PREVALENCE AND MAJOR INDICATIONS OF CESAREAN SECTION IN A TERTIARY CARE HOSPITAL IN INDIA**

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**ABSTRACT**

According to the World Health Organisation (WHO), a caesarean section is a surgical procedure that can save the life of a woman and her baby when undertaken for medical reasons. Thus, the procedure should only be used in complicated pregnancies. However, C-sections have gradually become common in developing countries, and it is already quite common in the developed countries for a long time. A number of obstetric complications such as dystocia, foetal distress, breech births, post-term pregnancy, multiple pregnancy, and pregnancy-induced hypertension are recognized as reasonable motives behind caesarean section deliveries. Approximately 18.5 million caesarean births have been recorded each year globally, accounting for 19.1% of total births, which is beyond the cut-off recommended by the World Health Organization (WHO). In India, the rate of caesarean section delivery is dramatically increased from 3% in 1992-93 to 17% in 2015-16. In terms of regional variations, south Indian states have recorded substantially higher levels of caesarean deliveries in comparison to north India. Despite several studies that have investigated the factors contributing to caesarean section delivery, systematic evidence is still lacking towards understanding the determining factors and formulating effective policies to address the increasing rate of caesarean section deliveries in India. With this backdrop, this study attempts to observe the major indications and prevalence of caesarean section among pregnant women in a tertiary care hospital in India.

**KEYWORDS :** caesarean section, WHO, prevalence, indications.

**INTRODUCTION**

- Caesarean section comes from roman law lex Cesarea (715 BCE). The law allowed live abdominal delivery or postmortem burial after 28 weeks where fetuses are removed through abdominal and uterine incisions.
- The incidence of cesarean section is steadily rising. During the last decade there has been two to threefold rise in the incidence from the initial rate of about 10%.
- This increment are due to :
  - identification of high-risk cases
  - advances in anaesthesia
  - repeat CS in previous CS
  - rising rates of induction of labour and failure of induction leading to c-section
- declining trend in operative vaginal and manipulative vaginal delivery and where vaginal delivery is contraindicated are all contributory factors.
- Some of the absolute indications of cesarean section includes :
  - central placenta previa,
  - contracted pelvis,
  - pelvic mass causing obstruction,
  - advanced carcinoma of cervix
  - vaginal obstruction like atresia and stenosis.
- Globally, LSCS rate is growing which is around 40% in the U.S., England, and Latin America.
- Between 1992-1993 and 2005-2006, India's C-section rate grew from 9% to 10%.

**AIMS & OBJECTIVES**

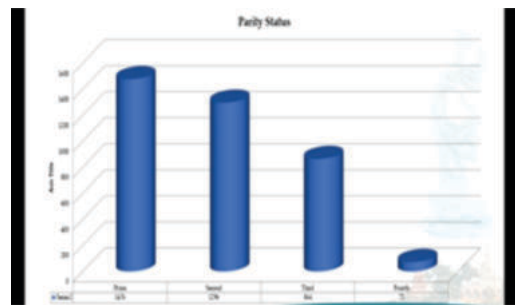
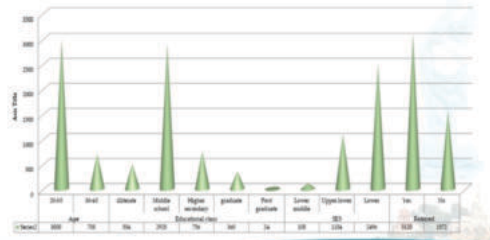
- This Study aims to assess the prevalence and major indications of cesarean section in tertiary care hospital in India.

**METHODOLOGY**

Hospital based retrospective cross sectional study was carried out at MGM Medical College ,MY& MTH hospital Indore in April month 2022 from 1<sup>st</sup> -30<sup>th</sup>. Data was collected from records of deliveries from April 1<sup>st</sup> 2021 – March 31<sup>st</sup> 2022 using structured check lists from records of the operation room, labour ward registration and patient charts.

**RESULTS & DISCUSSION**

Demographic details and referral status of patient



- Both industrialized and developing nations are concerned about the rising rate of CS[1,2]. Primary and repeat caesarean deliveries have increased in frequency [3].
- In the current study, the age range of 20 to 29 years (58.33%), which is thought to be the one with the highest fertility, is made up of the majority of patients. The findings

- concur with those of Gupta et al. [4] and other Indian investigators. [5,6].
- The research area's overall C/S rate was 36.35%, which is higher than the established upper WHO limit of 15%. This can be because patients are being sent to our hospital from neighbouring and far-off PHCs, CHCs, and private hospitals because it serves as the highest referral centre.
  - In comparison to the rates from the current study, even lower or equal rates—28.93% from Mumbai and 29% from Kolkata—were reported by Sibha et al. and Saha et al. According to Singh et al. [9] from Haryana (31% in 2007 and 51.1% in 2012), Subhashini et al. [10] from Andhra Pradesh (20.33 in 2009 and 25.66% in 2014), Yadav et al. [11] from Gujarat (23.48% in 2004 and 28.87% in 2013), and Manjulatha et al. [12] from Gujarat, CS rates are continuously rising in India. (16.60% in 2002 and 22.40% in 2012) were from Andhra Pradesh.
  - There are many factors contributing to the rise in caesarean deliveries, including an increase in institutional deliveries, a decrease in difficult manipulative or instrumental vaginal deliveries, the use of continuous electronic foetal monitoring to detect foetal distress, and the liberal use of caesarean in high-risk situations like breech presentation, a previous caesarean delivery, a growth-retarded foetus, multiple pregnancies, and preterm birth [4].
  - According to Gupta et al., the most frequent factor contributing to CS was Prev lcs followed by foetal distress.
  - The prevalence of CS varies greatly across industrialised and developing nations. CS rates were reported at 6.2% in Africa [13] and 24.1% in a study from UK [14]. 9.5% CS rates were reported in a different study by Samdal et al from a rural area of Nepal[15]. Similar to the findings of earlier studies by Singh et al. [9], Jawa A et al. [5], Chavda et al. [16], Nikhil et al. [17], and Bade et al. [18], previous CS was similarly the most frequent indication for CSection.
  - Fetal distress (26.8%), previous two Caesarean sections (14.8%), breech presentation (6.14%), and Induction failure (5.1%) were the other frequent causes of Caesarean sections in the research area. This was less than what our prior investigators discovered.

## CONCLUSION

- In this study, CS rates were over the WHO-recommended 15% for underdeveloped nations. Each indication requires a distinct technique to reduce primary caesarean rates. Individualization of indication, thorough evaluation, standardised guidelines, evidence-based obstetrics, and institutional audits can help minimise CS rate. Overall ceserean section reduces maternal, perinatal, newborn, and child morbidity and mortality.

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