A study to determine the influence of caesarean births on perinatal outcomes - A hospital based cohort study.

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"ABSTRACT

A research study entitled "Influence of caesarean births on perinatal outcomes: A hospital-based cohort study." was carried out at Manipal Academy of Higher Education (MAHE), Manipal by Anjana Sharma for the award of Master of Science in Nursing and as a partial fulfilment of the course.

The objectives of the study were to determine the incidence, perinatal outcomes of caesarean birth and compare the perinatal outcomes in relation to the types of caesarean birth (elective and emergency). The outcomes of caesarean births were measured using baseline proforma and perinatal outcomes tools, which were developed by the researcher. The conceptual framework used in this study was based on "WHO near miss approach for maternal health".

Administrative permissions were obtained from the Dean, Manipal College of Nursing, Manipal, Medical Superintendent of Kasturba Hospital Manipal, HOD of Department of OBG and Incharge of NICU. Ethical clearance from Institutional Ethics Committee (IEC), Kasturba Hospital Manipal and informed consent were obtained from the participants.

Content validity and reliability of the tools were established and all the tools were pretested. All tools were found to be reliable. Pilot study revealed the feasibility of the study and used to calculate the sample size. The study was conducted during December 2017 to March 2018 in the postnatal and neonatal intensive care unit of Kasturba Hospital Manipal. The data gathered were coded and entered in a master Abstract

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sheet and were analyzed using Statistical Package for Social Sciences (SPSS) 16.0 version.

The findings of the study were based on the research objectives.

Out of 809 births, in three months (January – March 2018) 147 were elective caesarean section (incidence of 18.1%) and 344 were emergency CS (incidence of 42.5%). The present study highlights that mean age for emergency CS was 28.4 and 30.04 in elective CS. The common indication for emergency CS were PROM 17% and fetal distress 14% where as for elective CS, they were gestational diabetes mellitus 10.6% followed by breech 11% and previous CS 78.5%.
The common perinatal outcomes were breast engorgement in both groups (12.5 % & 9.9%), prematurity (31.9 % & 12.4 %) and fetal outcomes after emergency CS were 47 neonates had low Apgar score at one minute of birth (22.3%), eight (3.8%) at five minutes of CS, 17 (8%) neonates had mild respiratory distress, 10 neonates (4.7%) had moderate respiratory distress, five neonates (2.3%) had severe respiratory distress, 31 neonates were on continuous positive airway pressure CPAP (14.7 %), 29 of neonates (13.8%) had physiological jaundice. Fetal outcomes after emergency CS were, eight (5.5 %) had low Apgar score at one minute at birth, five neonates (3.4%) had mild respiratory distress, one neonate (0.6%) had moderate respiratory distress, five neonates (3.4 %) were on CPAP and 11 neonates (7.5 %) had physiological jaundice.

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Significant risk factors were measured with relative risk and 95% confident interval (CI) and the outcomes were blood transfusion in OT 1.4 (0.288 – 6.878), blood transfusion within 24 hours 5.63 (0.636 – 49.8), neonates received “Neopuff” 0.290 (0.101 – 0.830), low Apgar score at first one minutes of life 0.247 (0.120 – 0.55), neonates on CPAP 0.234 (0.93 – 0.586), neonates born before 37 weeks 0.411 (0.258 – 0.653) and neonates did not cry at birth 0.090 (0.012 – 0.672). The data show that there is weak significant difference in the perinatal outcomes in relation to the types (elective versus emergency) of caesarean section showing a beneficial effect for elective CS.

The study concluded that emergency CS were occurring at a higher frequency as compared to elective CS. Emergency CS have increased risk of having unfavourable outcomes as compared to elective CS."