

“To Study The Outcome Of Elective Cesarean Section And Decision Making By Patients Admitted In Tertiary Care Hospital Of North Karnataka”

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ABSTRACT

Background: The scientific term for delivery that involve a surgical incision is "caesarean section". Planned Caesarean section is known as an elective caesarean. An elective C-section is one that is carried out on a woman when there is no medical necessity. The most important and widely used factor in evaluating the birth experience is patient satisfaction, which also influences the choice of delivery mode.

Objective: To determine the manner of selection of delivery and to access the outcomes of elective caesarean sections and the at Tertiary Care Hospital, Belagavi, Karnataka.

Methodology: An expressive predesigned questionnaire-based investigation was done at Tertiary Care Hospital, Belagavi, North Karnataka to assess the outcome of elective caesarean section and decision making by patient. The sample size was 95 among them 37 were prenatal and 58 were postnatal. After taking Informed consent, data were collected from the patients. Data were analysed by using Microsoft Excel version 10.

Result: The study showed that out of 37 pre-natal participants, 51% requested for caesarean delivery and 49% of them requested for normal delivery. Among 58 post-natal participants, 38% of selected normal delivery and 62% selected caesarean delivery. While outcomes of an elective caesarean delivery were evaluated, anaemia and postpartum haemorrhage affected most participants.

Conclusion: According to the study's findings, most patients requested caesarean delivery out of dread of the pain associated with a natural delivery. One of the additional causes was some of their unpleasant pain memories from past normal deliveries. And also anaemia and postpartum haemorrhage are the most common complications associated with elective caesarean delivery.

KEYWORDS: Elective caesarean section, Outcome analysis, Decision-making, Delivery mode, Healthcare decisions, Birth experiences, Clinical outcome

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I. INTRODUCTION:

Caesarean sections that are properly executed in accordance with a valid medical reason have the potential to save lives. In several instances, women are undergoing caesarean sections without a valid medical reason, which may be a factor in the global secular trend towards rising rates of caesarean sections.¹ A modest research of obstetricians preferences suggested that a sizable proportion of obstetricians would opt for a caesarean birth for themselves or their partner had an impact on the discussion.^{2,3} The appropriateness of caesarean sections performed at the request of the mother or on the advice of medical professionals but without a clear medical justification has been a topic of discussion for the past two decades. This involves issues such as safety, expenditures, women's rights, wishes, and maternal and professional satisfaction.⁴ A perception of caesarean delivery as a typically safe treatment, despite the higher costs, has undoubtedly supported their liberalisation in clinical practice. However, there are significant limitations in the currently available medical research that make it difficult to determine the inherent risks of caesarean sections.^{5,6} Many recent papers have recommended for a trial of routine caesarean section versus vaginal birth in low-risk women because the evidence suggests that few women want caesarean without a medical reason.^{7,8} The absence of clear clinical data about the hazards or advantages of caesarean sections for low-risk pregnancies and the perception that caesarean sections are in high demand among women have both been used to support the need for a trial. The "demand" for caesarean sections among women would need to be extremely strong to justify such a trial from an ethical standpoint because most of the clinical evidence suggests that the risk of maternal mortality is 3-5 times higher with caesarean section and that the risk of major maternal morbidity is greater, even with elective caesarean section when confounding factors are controlled.⁹ A well-designed randomised controlled study would yield strong evidence if healthy women

without co-existing medical issues were randomly assigned to either expectant management or the intention to deliver by elective caesarean section.¹⁰ Ethical restrictions forbid such an experiment. In other designs, it has been difficult for the scientific community to draw conclusive conclusions about the relationship between caesarean sections and the occurrence of negative maternal outcomes because of indirectness, imprecision because of sample size restrictions and a lack of data, or challenges in untangling confounders and effect modifiers. With this background, the current study, analysed the manner of selection of delivery & the outcomes of elective caesarean section. The justification for and propriety of the expanding use of surgical procedures to bypass vaginal delivery partially or totally are major topic in discussion.

II. MATERIALS AND METHODS:

After obtaining ethical approval from Institutional Ethics Committee, the analysis was conducted out. The current study was carried out at Tertiary Care Hospital Belagavi, Karnataka for a period of 15th March 2022 to 15th March 2023. In this cross-section study, all the patients attending the OPD of department of OB-GYN and patients admitted in maternity ward at Dr. Prabhakar Kore hospital and MRC, Belagavi were included. Among them 95 voluntary patients were enrolled in the study. Among them 37 were Prenatal and 58 were postnatal. Each patient’s selection of mode of delivery survey was conducted by using a questionnaire that consists of demographic information and 12 close questions and 1 open question based on selection of mode of delivery. The Questionnaire consists of 2 sections, Section I consists of question related for pre-natal mother which include variables such as age, education level, number of delivery, health issues, superstitious or religious belief, preference of delivery, stress for undergoing vaginal or caesarean delivery and Section II consists of questions for post-natal mother which include variables such as age, education level, number of deliveries, health issues, superstitious or religious belief, preference of delivery, stress for undergoing vaginal or caesarean delivery along with that rating of delivery, pain assessment and outcomes of elective caesarean delivery were questioned. Data was collected from the patients after taking Informed consent. The data was compiled and were analysed by using Microsoft Excel version 10.

III. RESULTS:

TABLE 1

OBSERVATIONS	PRE NATAL	POST NATAL
AGE		
• 18-19 years	2.70%	20.69%
• 20-24 years	18.92%	43.10%
• 25-30 years	67.57%	34.48%
• 31-40 years	10.81%	1.72%
EDUCATION		
• Educated	94.59%	91.38%
• Uneducated	5.41%	8.62%
HEALTH ISSUES		
• YES	16.22%	15.52%
• NO	83.78%	84.48%
SUPERSTITIOUS BELIEF ON DATE AND TIME		
• No	94.74%	94.74%
• Yes	5.26%	5.26%
RELIGIOUS BELIEF		
• No	83.78%	83%
• YES	16.22%	17%
STRESSED FOR NORMAL DELIVERY		
• Maybe	24.32%	---
• No	37.84%	36.21%
• Yes	37.84%	63.79%
STRESS FOR CS DELIVERY		
• Maybe	38%	3%
• No	24.32%	64%
• YES	38%	33%
PRERRENCE OF DELIVERY		
• Caesarean delivery	51.35%	62.07%
• Normal delivery	48.65%	37.93%

TABLE 2

REASON FOR SELECTING NORMAL \ CS DELIVERY

<i>Preference of delivery</i>	PRE NATAL	POST NATAL
Caesarean delivery	51.35%	62.07%
Advised by Doctor.	13.51%	17.24%
Complications	2.70%	8.62%

I want caesarean delivery	8.11%	27.59%
I'm afraid of normal delivery so I requested for caesarean delivery	2.70%	1.72%
I'm scared for normal delivery	2.70%	1.09%
It is my first delivery I want caesarean delivery	2.70%	1.08%
It's an emergency basis	2.70%	1.09%
Due to pain	16.22%	3.45%
Normal delivery	48.65%	37.93%
I requested for Normal delivery	2.70%	29.31%
1 st baby so I requested for Normal delivery	40.54%	4.45%
I was told by my mother-in-law to choose normal delivery	2.70%	2.45%
Safe	2.70%	1.72%

FIGURE 1 – Assessment of delivery

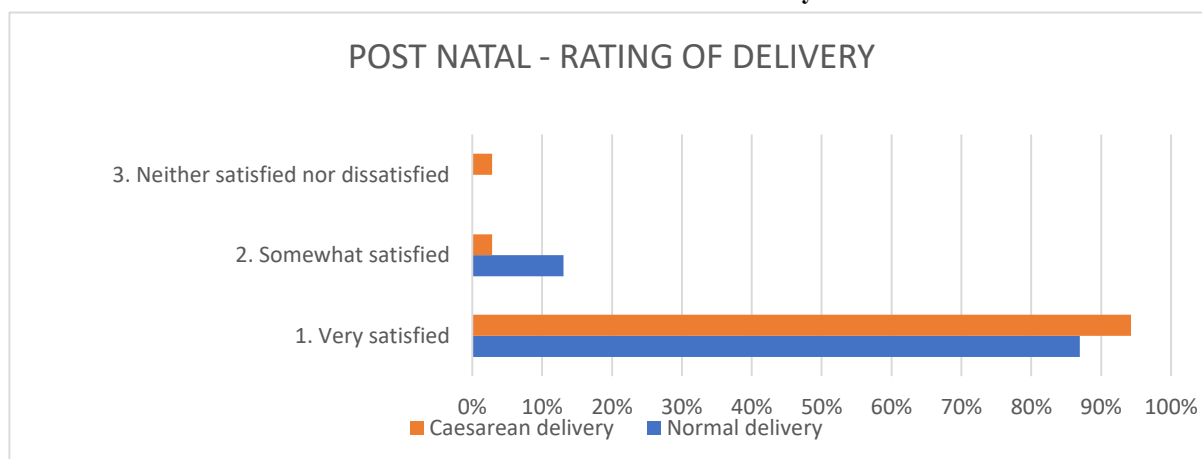


FIGURE 2 – Pain assessment of delivery

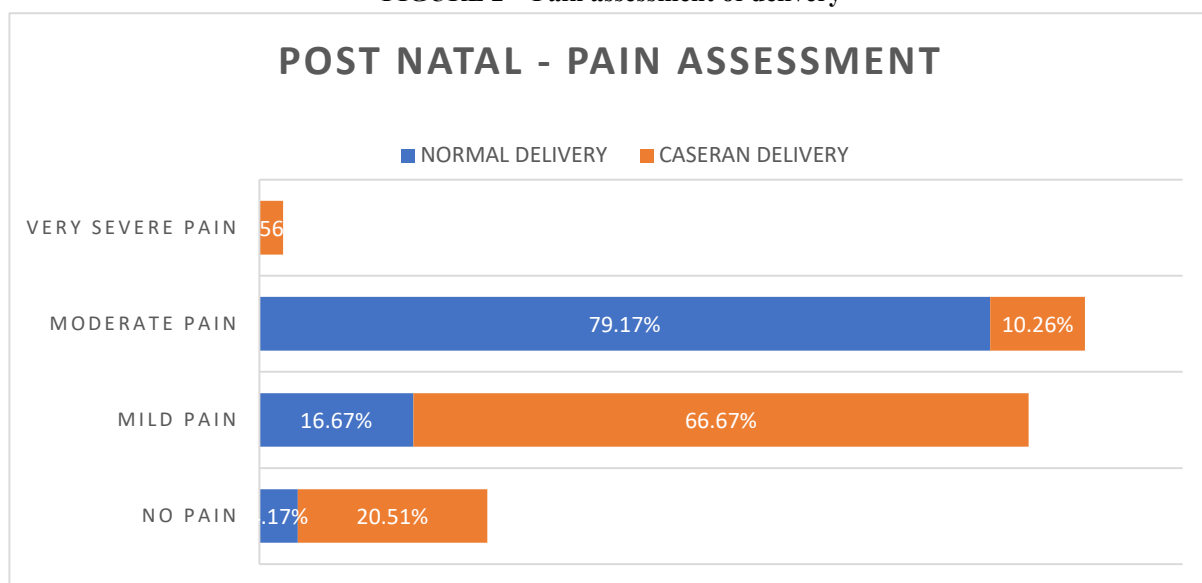
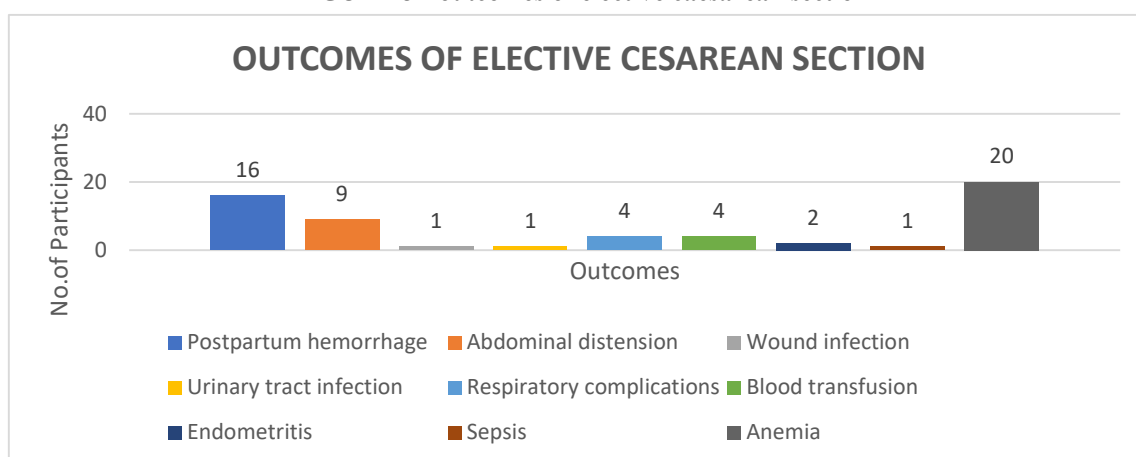


FIGURE 3 - outcomes of elective caesarean section



IV. DISCUSSION:

The demand for Caesarean sections among young, educated, urban-dwelling women is also rising, according to recent research. Caesarean section rates in metropolitan China ranged from 26% to 63%, according to statistics from hospital-based studies. Considering China's exceptional economic growth and the swift spread of private health care and health insurance systems nationwide, these trends are anticipated to continue. There is growing evidence that many women do caesarean delivery for personal reasons.

Our study conducted in the maternity ward and OB-GYN OPD in north Karnataka, were most of the participants in prenatal were of 25-30yrs of age (67.5%) whereas in postnatal were 20-24yrs (43.10%). And most of the participants had adequate knowledge about selecting delivery modes as 95% in prenatal section and 91% post-natal section are educated and the education level of women is enquired and listed, 55% of participants are having college degree, 21% have completed high school and 7 % have completed secondary school and 8% have completed primary education of prenatal group and in case of postnatal, 55.17% completed college degree, 12% completed high school and 5% had primary education. Therefore, education regarding modes of delivery was well known. And 95% participants in both sections doesn't have any religious or superstitious belief. 37.84% of prenatal participants were stressed about vaginal delivery whereas 38% were stressed of caesarean delivery, shows that equal number of participants were stressed about delivery regardless of mode of delivery. Among prenatal participants, 51.35% preferred caesarean delivery and 48.65% preferred normal vaginal delivery and among postnatal participants, 62.07% requested for caesarean delivery and 37.93% requested for normal vaginal delivery.

In the questionnaire, 1 is open ended question, that is the reason for choosing vaginal or caesarean delivery, in that most of the prenatal women choose caesarean (16.22%) because of fear of pain. Whereas in postnatal they themselves requested for caesarean delivery (27.59%). In case of normal vaginal delivery most of the participants in prenatal requested it because its their 1st delivery, which they want to do vaginally (40.54%) and in postnatal also 29.31% participants themselves requested for vaginal delivery. Result of rating of delivery, in which the greatest number of participants undergone caesarean delivery were satisfied than those undergone normal vaginal delivery. In pain assessment 79.17% participants in normal delivery experienced moderate pain whereas 66.67% participants in caesarean experienced mild pain. Thus, it is inferred that most of the participants preferred caesarean delivery because of fear of pain. On assessment of outcome of elective caesarean delivery, most common complication is anaemia followed by postpartum haemorrhage.

Numerous studies in this regard demonstrate that in recent years, the necessity of medical intervention during childbirth has increased to prevent mother and infant deaths. It is the fact that maternal and newborn mortality have significantly decreased over the previous century, mostly because of greater use of caesarean delivery. It is of great concern because of the possibility that this medical technology would be abused in hospitals for financial benefit or to lower risk.¹²

Psychological factors, opinions about safety, and in some nations, cultural or social factors have had an impact on women's preference for caesarean sections. According to study done between 2000 and 2005, very few women wanted caesarean procedures.¹³ To conclude the degree to which women want caesarean sections in the nonappearance of clinical indications is the goal of our article.

The participants were also enquired whether they were suggested by any relatives, or did doctor suggested for caesarean delivery without any requirement of it to select caesarean mode of delivery. Only very few participants was suggested by her relatives to undergo caesarean delivery. In our study, total prenatal participants were 37, among them 18 (49%) were chosen normal delivery and 19 (51%) for caesarean delivery. In section 2, post-natal participants were 58 among them 22 (38%) were opt for normal delivery and 36 (62%) for

caesarean delivery. From this we can conclude that most women prefer to have caesarean delivery rather than normal delivery.

Caesarean Section offers a controlled and planned birth process, the outcomes can be mixed. On the positive side, elective C-sections can reduce the risk of birth injuries and complications associated with prolonged labour. However, it's important to consider that Caesarean sections carry their own set of risks, such as increased chances of infection, longer recovery times, and potential breathing difficulties for the newborn. Additionally, elective Caesarean sections might be missing out on vaginal delivery's benefits such as stimulating the baby's immune system development while developing healthy intestinal microbes. Ultimately, the decision to undergo elective Caesarean section should be based on a thorough discussion between the pregnant individual and their healthcare provider, weighing the potential benefits and risks to make an informed choice that prioritizes the well-being of both the mother and the baby.

V. CONCLUSION:

The study concluded that most of the participants had requested for Caesarean delivery. The overall selection for delivery in pre-natal is Caesarean delivery (51%) and also post-natal is also Caesarean delivery (62%). Every participant involved in this study had knowledge about the modes of delivery as most of them were educated. We can infer from that the participants have selected the modes of deliveries on their own not on any superstitious believes. The doctors can also suggest the patients for the mode of delivery as per the health conditions of the mother and infant and before in hand they should explain if there will be any complication during and after delivery, so the patient can select the mode of delivery according to their health conditions to avoid further complications.

VI. RECOMMENDATIONS:

The study identified the following key points:

This study revealed that most of the patients had requested for caesarean delivery.

They are educated and do not practice any superstitious belief or get influenced by other suggestions in selecting mode of delivery except Doctor's.

The study recommends that the pregnant women should be educated reassured and support, to address and treat the small problems in pregnancy and provide effective care.

Pregnant women should be educated regarding delivery and its modes, OPD visits should be done by women to avoid further complications in delivery and after delivery.

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