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**Title**

Caesarean delivery on maternal request: a personalised approach informed by principle-based ethics

**Author**

James Samuel White

Email: [swhi7300@uni.sydney.edu.au](mailto:swhi7300@uni.sydney.edu.au)

Current 4<sup>th</sup> year Doctor of Medicine student at the University of Sydney  
Student

**160 Character Summary of Article**

Discussion of pertinent ethical considerations relating to caesarean delivery on maternal request. Advocacy for personalised medicine approach to counselling pregnant women.

**Keywords**

clinical ethics; autonomy; caesarean section; vaginal delivery; obstetrics and gynaecology

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**Learning Points**

- Caesarean delivery on maternal request (CDMR) is a commonly encountered clinical scenario in Australia, accounting for 17% of all caesarean deliveries.
- The approach to CDMR should include assessment of medical suitability as well as discussion of the factors motivating the patient's preference to ensure caesarean delivery will be in the interests of the overall health and wellbeing of the mother and fetus. Gaining genuinely informed consent through detailed and objective communication of potential risks and benefits is also vital in respecting patient autonomy.
- A woman's preference for caesarean delivery is often the product of a complex interaction between personal, cultural, and environmental factors. Consideration of ethical principles such as autonomy, beneficence, non-maleficence, and justice provides a suitable framework by which the clinician may evaluate the ethics of performing a caesarean delivery. However, it does not generate an ethical obligation to do so.

**Introduction**

Caesarean delivery is one of the most common procedures performed in high-income countries. Caesarean delivery is not without risk of complication and has historically been associated with increased maternal [1] and neonatal [2] morbidity and mortality compared to normal vaginal delivery. However, as the evidence favouring normal vaginal delivery over caesarean delivery has become more tenuous particularly as the mean age at which women have children increases [3], there has been a surge in the proportion of mothers undergoing elective caesarean section [4]. This issue will be examined using principle-based ethics. This is an approach that emphasises the importance of moral concepts such as beneficence, non-maleficence, autonomy, and justice, which were originally derived from the works of Hippocrates [5] and others, and were later more fully characterised by Beauchamp and Childress [6].

Caesarean delivery on maternal request (CDMR) is defined as an elective primary caesarean delivery performed in the absence of medical indication at the desire of the mother [7]. In Australia, CDMR accounts for 17% of all caesarean deliveries [8], contributing to the overall caesarean delivery rate of 33% [9], which exceeds the World Health Organisation recommended rate of 10-15% [10]. In contrast, CDMR accounts for only 2% of all caesarean deliveries in North America and 8% in Europe [11]. Reasons for Australia's comparatively higher CDMR rate may include the availability of services through the private health system as well as the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) recommendation that clinicians agree to perform CDMR provided their patient demonstrates an understanding of the associated benefits and risks [12]. This is in contrast to the advice of the American College of Obstetricians and Gynaecologists (ACOG) that vaginal delivery should be recommended in the absence of an indication for caesarean delivery [13]. However, CDMR has been associated with increased risk of conditions such as obesity [14] and asthma [15] in children as well as increased maternal risk in subsequent pregnancies [1]. This is not only an important consideration for individual mothers but is also significant at the population level as increasing morbidity is likely to place additional strain on health budgets. The potential for CDMR-related morbidities to contribute to ongoing inequity in health resource allocation threatens to adversely impact justice for members of the community who face reduced access to services.

CDMR presents both professional and ethical challenges. A 2006 National Institutes of Health consensus statement concluded that there was insufficient evidence to compare the potential risks and benefits of CDMR and planned vaginal delivery [16]. The key ethical tension raised by CDMR is between respecting the mother's right to decide through informed consent whilst also advocating for the mother's and child's best interests and avoiding harm where possible. This involves delicately balancing the principles of respect for autonomy, beneficence, non-maleficence, and justice.

### **Addressing the ethical challenge presented by CDMR**

When encountered with a pregnant woman requesting caesarean delivery, the clinician's response should be beneficent and respect the mother's autonomy where it is medically safe to do so. To achieve this objective, clinicians should first establish the medical suitability of the mother and fetus for caesarean delivery to minimise risk of harm. Whilst there are no absolute contraindications to caesarean delivery, relative contraindications may include maternal coagulopathy or extensive history of prior abdominal surgery [17]. Following this, clinicians should explore the extent to which caesarean delivery is in the interests of the overall health and wellbeing of the mother and the fetus. This should involve a discussion

regarding the personal, cultural, and environmental factors motivating the woman's preference for caesarean delivery. Factors shown to be associated with an increased likelihood of a woman requesting caesarean delivery include fear of childbirth, previous traumatic birth experiences [18], and psychological comorbidities such as depression and anxiety [19]. Exploration of such factors may confer several benefits. Firstly, it may afford clinicians the opportunity to address outstanding fears and misconceptions, enabling the patient to make a more informed decision. In addition, the discussion may facilitate detection and subsequent management of psychological comorbidities. Thirdly, it may assist the clinician's evaluation of potential implications for maternal and fetal overall wellbeing. For instance, Garthus-Niegel et al. [20] demonstrated that proceeding with normal vaginal delivery in women who had requested caesarean delivery resulted in increased depression and post-traumatic stress disorder (PTSD) scores after childbirth. Therefore, if a patient requesting caesarean delivery was found to be at a particularly increased risk of depression or PTSD at baseline, performing a caesarean delivery upon maternal request could be considered an important means of promoting maternal mental wellbeing.

Once it has been established that caesarean delivery will promote maternal and fetal overall health and wellbeing to the same (or a greater) extent than normal vaginal delivery, clinicians may choose to perform a caesarean delivery from a non-maleficence perspective [21]. As with any procedure, patient autonomy is only truly satisfied through informed consent [22], which is a critical component of professional practice that involves detailed discussion of relative risks and benefits including the likelihood of potential complications and outcomes. Clinicians should make a concerted effort to assess the patient's level of understanding before communicating information relevant to the patient's decision. For the mother, elective caesarean reduces the risk of perineal trauma that can compromise the integrity of the pelvic floor and cause issues such as urinary incontinence and pelvic organ prolapse [23]. Furthermore, elective caesarean protects against the possible requirement for emergency caesarean, which is associated with increased maternal morbidity and mortality [24]. From a neonatal perspective, caesarean delivery reduces risk of intracranial haemorrhage, encephalopathy, and infection as well as intrapartum events associated with neonatal intracranial injury such as shoulder dystocia and failure to progress [23]. However, caesarean delivery also introduces certain risks. For instance, the higher relative risk of maternal mortality associated with caesarean delivery has been attributed to complications such as haemorrhage, infection, and venous thromboembolism [25]. Additionally, caesarean delivery has long-term implications for a woman's reproductive health as it predisposes to uterine rupture and placental abnormalities such as placenta accrete [26], placenta praevia, and placental abruption [27] in subsequent pregnancies. Whilst gaining informed consent, clinicians should attempt to integrate the patient's specific circumstances into the discussion to provide greater context in considering perceived risks and benefits. For example, given its potential long-term effects on reproductive health, a caesarean delivery may be regarded a more appropriate choice for a multiparous woman wishing to have no additional children in the future as opposed to a primiparous woman having what she hopes to be the first of many children.

## **Conclusion**

Considering there is insufficient evidence concerning the potential harms of CDMR, decisions should be made collaboratively between clinicians, mothers, and families. Clinicians should approach the mother requesting caesarean delivery in a professional, non-directive manner that seeks to recognise and incorporate her values and social context into the decision-making process, with particular emphasis on her medical risk factors, future

family planning, and psychosocial concerns. Creating an appropriately thorough dialogue with mothers that upholds the ethical principles of autonomy, beneficence, and non-maleficence involves assessing for medical suitability, discussing the unique factors motivating the mother's preference, and gaining genuinely informed consent. The function of this purposeful interaction is to assess whether proceeding with CDMR is ethical for a given patient, rather than bestowing upon the clinician an ethical obligation to do so. This distinction is particularly important considering CDMR-related child and maternal morbidities may contribute to ongoing inequity in health resource allocation and thereby jeopardise the justice of others.

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