

Induction of labour and caesarean delivery rates: The need for a national and international consensus

In high- and middle-income countries (HMIC), induction of labour are common obstetric interventions often based on guidelines and hospital protocols aimed at starting the labor for specific medical circumstances or initiate it in post-term pregnancy. In low-income countries (LIC), inductions are rarely available to pregnant patients due to lack of maternity resources. By contrast, cesarean delivery (CD) rates are more volatile and continue to increase in most HMIC with little improvement in perinatal outcomes (Betran et al., BJOG; 206;123:667-70) whereas CD rates have remained low in most sub-Saharan African countries (Boatin et al., BMJ, 2018;360:k55) but maternal and perinatal deaths following CD are disproportionately high (Sobhy et al., Lancet, 2019;393:1973-82) due to inadequate access to emergency obstetric care facilities.

There is little controversy regarding induction of labour at any gestational age to prevent perinatal morbidity and mortality in case of pregnancy complications. Conversely, the timing of induction for post-term pregnancies has been recently challenged. A large trial from the United States, found no significant difference in perinatal outcome in nulliparous patients induced between 39 weeks+0 and 39 weeks+4 days compared to expectant management up to 41 weeks+0 days but reported a significantly lower incidence of CD in the early induction group (Grobman et al., NEJM, 2018;379:513-230). A Swedish trial comparing induction at 41 versus 42 weeks was stopped due to a significantly higher rate of perinatal mortality in the expectant management group (Wennerholm et al., BMJ,2019;367:l6131).

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Overall, CD rates have increased by 400% between 1966 and 1997 in most HICs (Glantz and McNamley, *Obstet Gynecol Surv.* 1997;52:497505). This trend extends even more rapidly in MICs where attempts at stemming it have so far failed (Hussein et al., *BJOG*, 2021;128:807). A recent analysis of the 2010-2018 world data from 154 countries covering 94.5% of live births shows that 21.1% of pregnant patients gave birth by CD (Betran et al., *BMJ Glob Health.* 2021;6:e005671). The authors estimate that by 2030, 28.5% of patients worldwide will be delivered by caesarean section with the greatest increase predicted to be in Eastern Asia.

The recent publication of a national review of maternity safety has identified a “culture to keep CD rates low at all costs” in some UK maternities with poor perinatal outcomes (www.gov.uk/publications/Okenden_review/2022). In this issue of the journal, Gurol-Urganci et al (*BJOG*, 2022: in press) report on rates of induction of labour and emergency CD in the English National Health Service (NHS) between April 2015 and March 2017. The authors found considerable in between-hospital variation in the use of both procedures and hospitals with a higher induction rate presented with a lower risk of adverse birth outcomes but no similar association was found for CD rates. The UK has a unique national system of evidence-based guidelines for clinical care (www.nice.org.uk/guidance). The recommendations proposed in these guidelines are intended to decrease variations in clinical practice to optimize patients care and are developed involving patients. Their implementation should focus on patient needs and preferences and not be influenced by local socio-economic, medico-legal or cultural factors.

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Disclosure of interests

The author has no conflicting of interest to declare.

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