PROF. ERIC JAUNIAUX (Orcid ID : 0000-0003-0925-7737)

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Mini-commentary on BJOG-19-1949.R2: Global incidence of caesarean deliveries on maternal request: a systematic review and meta-regression

Increasing caesarean delivery rates in Egypt: The impact of maternal request

Ahmed M Hussein,[1] Abdelmaguid Ramzy,[1] Eric Jauniaux[2]

1. Department of Obstetrics and Gynecology, University of Cairo, Cairo, Egypt.

2. EGA Institute for Women's Health, University College London Faculty of Population Health Sciences, University College London, London, UK.

Contact email: e.jauniaux@ucl.ac.uk

In 1985, WHO experts found a rapid increase in caesarean section (CD) rates worldwide over the prior decade and concluded that there was no justification for any country to have a CD rate higher than 10–15% (WHO working group on caesarean section, Lancet,1985;2:436–7). This recommendation has had little impact and CD rates have continued to rise without any improvement in perinatal outcomes in most countries of the World (Betran et al., BJOG;123:667-70). The increase in CD rates in different regions and individual countries has been attributed to changes in maternal profile over the last 20 years, such as age at first birth, overweight/obesity and multiple pregnancies resulting from assisted reproductive technology and fear of litigation.

In middle income countries including Egypt, Turkey, Brazil and Mexico, over 50% of births are now by cesarean section. A recent study of medical records for all deliveries during April 2016 in 13 public hospitals in four governorates in Egypt (Cairo, Alexandria, Assiut and Behera) found an overall CD rate of 54.2 % ranging from 22.9% to 94.3% between the different centres (Elnakib et al., BMC Pregnancy Childbirth, 2019;19:441). The most common medical indication was repeat CD (50%) and 10 % had no reported medical indication.

In this issue of the journal, Begum et al report on the findings of a systematic review and meta-analysis on the global prevalence of CD on maternal request (Begum et al., BJOG 2020). They identified articles from 14 different countries, mainly high and upper-middle income, and found that CD for maternal request rate varied between 0.2% to 20% of total deliveries and 0.9% to 38% of all CD with lowest rate in Ireland (0.9%) and highest rate in China (60%). Egypt, with a rate of 51.8 % is now ranking 3rd among the countries with the highest rate of CD (Nahla et al., Ministry of Health and Population, 2018) . Notably, CD for maternal request was the highest in primigravidas delivering privately (60-90%).While this was reported to be mainly due to fear of pain, prolonged labour, genital lacerations and fear of “indecent exposures” during vaginal birth ,it is likley that counselling by the

obstetrician plays an important role in decision making.

The economy and health care systems of lower-middle income countries are less able to afford the associated burdens resulting from the immediate and long-term complications of CD. Conditions such as placenta previa and placenta accreta are essentially secondary to prior CD and their individual and combined risks increase with the number of previous procedures (Jauniaux et al., BJOG, 2019;126:e1-e48). Not surprisingly, in those countries with high fertility rates, such as Egypt or Turkey, the rising CD rates have led to a “placenta previa accreta epidemic” (El Gelany et al., BMC Pregnancy Childbirth, 2019;19:313). Women requesting a CD for social reasons should be counselled about the advantages of vaginal birth i.e. faster recovery, lower immediate complication rates and shorter hospital stay and about the long-term risks of repeat CDs. Tailored pregnancy advice via local media platforms to better informed primigravidas are essential to reduce both the human and financial costs of excessive CD rates.

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