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Royal College of Obstetricians & Gynaecologists

### Comment on 'Use of induction of labour and emergency caesarean section and perinatal outcomes in English maternity services: a national-hospital-level study' of Gural-Ulganci et al. (2022)

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## Comment on 'Use of induction of labour and emergency caesarean section and perinatal outcomes in English maternity services: a national-hospitallevel study' of Gural-Ulganci et al. (2022)

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#### **Disclosure of interests**

The authors declare they have no conflicts of interests.

#### Data availability

No data was included in this commentary.

We would like to respond to the article of Gurol-Urganci et al. (2022) in BJOG in which they show a lower stillbirth and mechanical ventilation rate in hospitals with higher rates of induction of labour in English maternity services (1). The authors address a very important and relevant topic in contemporary maternity care where rising rates of induction of labour are reported, especially among women without medical indications.

# We are concerned about the conclusion which states that "a more proactive practice style with an increased use of induction of labour... seems to be linked to safer childbirth at term".

In fact, the measures did not cover a wide spectrum of perinatal outcomes that might inform safer childbirth practices. The main outcomes measured were antenatal and intrapartum stillbirth, neonatal unit admission, and mechanical ventilation. It is logical that induction of labour will prevent some stillbirths from happening, because being born prohibits dying in utero at a later stage. However, while reduction in stillbirth is a significant benefit, other studies have shown that this may come at the cost of higher rates of neonatal mortality, including sudden infant death syndrome (2). Besides, we previously showed that an induction of labour for non-medical reasons among low-risk women was associated with adverse health outcomes for both women and infants, compared with women with a spontaneous start of labour (3). Because a large number of women need to be induced to prevent one stillbirth, a more proactive practice style, as stated in the paper of Gural-Ulganci et al, will come at the costs of other adverse outcomes in many women and infants.

Therefore, while information about stillbirth, neonatal unit admission, and mechanical ventilation might be informative in decision-making, these are not sufficient. The information that is needed in practice, includes a wider range of risks, beyond the immediate intrapartum period. This includes neonatal mortality (from birth up till 28 days postpartum) and other short- and long term outcomes for women and infants.

The authors acknowledge that a higher rate of inductions led to more inductions before 39 weeks gestation, which may lead to an adverse neurocognitive (4) and health outcomes. Therefore, induction of labour should preferably be reported separately for different gestational ages as adverse neonatal outcomes increase with decreasing gestational age (2).

We appreciate the careful work the authors have carried out, and the contextual interpretation of their results. However, without more information on short- and long-term outcomes for women and infants, we believe that their conclusions about the applicability of their findings to practice is not yet justified.

#### References

- 1. Gurol-Urganci I, Jardine J, Carroll F, Frémeaux A, Muller P, Relph S, et al. Use of induction of labour and emergency caesarean section and perinatal outcomes in English maternity services: a national hospital-level study. BJOG. 2022.
- Abenhaim HA, Czuzoj-Shulman N, Benjamin A, Spence AR. Labor Induction at 39 Weeks in Low-Risk Term Pregnancies and Risk of Perinatal Death. Am J Obstet Gynecol. 2022;226(1):S314.
- 3. Dahlen HG, Thornton C, Downe S, de Jonge A, Seijmonsbergen-Schermers A, Tracy S, et al. Intrapartum interventions and outcomes for women and children following induction of labour at term in uncomplicated pregnancies: a 16-year population-based linked data study. BMJ Open. 2021;11(6):e047040.
- 4. Murray SR, Shenkin SD, McIntosh K, Lim J, Grove B, Pell JP, et al. Long term cognitive outcomes of early term (37-38 weeks) and late preterm (34-36 weeks) births: A systematic review. Wellcome Open Res. 2017;2:101.