



## OPEN ACCESS

EDITED AND REVIEWED BY  
Stephen Kennedy,  
University of Oxford, United Kingdom

\*CORRESPONDENCE  
Peter von Dadelszen  
✉ pvd@kcl.ac.uk

RECEIVED 22 June 2023  
ACCEPTED 27 July 2023  
PUBLISHED 11 August 2023

CITATION  
von Dadelszen P, Verhoeven CJM and  
Ganzevoort W (2023) Editorial: Approaches to,  
and the implications of, timing of birth.  
Front. Glob. Womens Health 4:1244492.  
doi: 10.3389/fgwh.2023.1244492

COPYRIGHT  
© 2023 von Dadelszen, Verhoeven and  
Ganzevoort. This is an open-access article  
distributed under the terms of the [Creative  
Commons Attribution License \(CC BY\)](#). The use,  
distribution or reproduction in other forums is  
permitted, provided the original author(s) and  
the copyright owner(s) are credited and that the  
original publication in this journal is cited, in  
accordance with accepted academic practice.  
No use, distribution or reproduction is  
permitted which does not comply with these  
terms.

# Editorial: Approaches to, and the implications of, timing of birth

Peter von Dadelszen<sup>1\*</sup>, Corine J. M. Verhoeven<sup>2,3,4,5</sup>  
and Wessel Ganzevoort<sup>6,7</sup>

<sup>1</sup>Institute of Women and Children's Health, King's College London, London, United Kingdom, <sup>2</sup>Department of Midwifery Science, Amsterdam University Medical Centre, University of Amsterdam, Amsterdam, Netherlands, <sup>3</sup>Amsterdam Public Health Research Institute, Amsterdam, Netherlands, <sup>4</sup>Division of Midwifery, School of Health Sciences, University of Nottingham, Nottingham, United Kingdom, <sup>5</sup>Department of Obstetrics and Gynaecology, Maxima Medical Centre, Veldhoven, Netherlands, <sup>6</sup>Department of Obstetrics, Amsterdam University Medical Centre, University of Amsterdam, Amsterdam, Netherlands, <sup>7</sup>Amsterdam Reproduction and Development Research Institute, Amsterdam, Netherlands

## KEYWORDS

pregnancy, timing of birth, evidence-based medicine, induction of labour, elective caesarean birth

## Editorial on the Research Topic Approaches to, and the implications of, timing of birth

In late 2022, we proposed a Research Topic entitled *Approaches to, and the implications of, timing of birth*. We are delighted to have supported the publication of four manuscripts within the topic (McLaughlin et al.; Molla et al.; Roba et al.; von Dadelszen et al.). To us, it is interesting to observe how various groups of investigators responded to the topic.

Our observation is that, for three of the manuscripts, there is an underlying common thread about gathering information to enable and enhance shared decision making about the timing and place of giving birth (McLaughlin et al.; Molla et al.; von Dadelszen et al.). While most women and their families desire to experience a spontaneous onset of labour, it is a reality that in some cases timed birth may be the better option if the goal is to avoid a Caesarean birth, while in other cases it might be better to wait for this spontaneous onset. The decision is never between labour induction and spontaneous onset of labour, it is between induction and ongoing pregnancy that may end with either spontaneous labour or a medically-indicated birth (i.e., induction or elective/semi-elective Caesarean birth)—when pregnancies are complicated by, say, an increased risk of hypertension, then the natural history is of a high rate of interventions proportional to the level of that developed risk (1). Indeed, in both uncomplicated and complicated pregnancies at term, in randomised controlled trials induction appears to consistently increase the opportunities to give birth vaginally (2–5), albeit that this may not be the only outcome of value to women and their context. It is important to notice that in observational studies, such as registry-based studies, it seems the other way around: in regions with low induction of labour rates, also fewer unplanned Caesareans were observed (6). This apparent contradiction requires ongoing investigation and is a source of debate amongst the editors.

With community engagement and feedback, McLaughlin and colleagues were able to introduce a programme of ultrasound and specialist consultation to guide the care of 500 pregnant Burundian women with previous Caesarean births. While overall Caesarean births increased, the rate of the more dangerous unscheduled Caesarean births decreased (McLaughlin et al.). Molla and colleagues describe their experience of caring for

264 Ethiopian women with ultrasound-detected oligohydramnios—a high rate of interventions ensued with an overall Caesarean birth rate of almost 60%; only two-thirds of the Caesarean births were elective (Molla et al.). This is important information to guide joint decision making and to create realistic expectations in pregnant women and their families. von Dadelszen and colleagues examined the relationship between the content of 21 induction of labour patient information leaflets and current evidence—the evidence-to-advice gap was substantial and almost universally biased against induction (von Dadelszen et al.). While celebrating the benefits of spontaneous labour and vaginal birth, we feel that maternity care providers have a responsibility to provide best evidence-based counselling and guidance to pregnant women and their families and not to bring unconscious biases to the counselling table.

The final paper by Roba and colleagues is an outlier in being focussed on the interactions between food insecurity and secondary subfertility assessed through accessing demographic and health surveys in 10 East African countries (Roba et al.). In addition to food insecurity and other factors, increased age at first birth was associated with subsequent subfertility.

## References

1. von Dadelszen P, Syngelaki A, Wright A, Akolekar R, Magee LA, Wright D, et al. The implications of the fetal medicine foundation 35- to 36-week preeclampsia prediction competing-risk model on timing of birth. *Am J Obstet Gynecol.* (2023) 228:457 e1–e7. doi: 10.1016/j.ajog.2022.09.047
2. Middleton P, Shepherd E, Crowther CA. Induction of labour for improving birth outcomes for women at or beyond term. *Cochrane Database Syst Rev.* (2018) 5: CD004945. doi: 10.1002/14651858.CD004945.pub4
3. Grobman WA, Rice MM, Reddy UM, Tita ATN, Silver RM, Mallett G, et al. Labor induction versus expectant management in low-risk nulliparous women. *N Engl J Med.* (2018) 379:513–23. doi: 10.1056/NEJMoa1800566
4. Koopmans CM, Bijlenga D, Groen H, Vijgen SM, Aarnoudse JG, Bekedam DJ, et al. Induction of labour versus expectant monitoring for gestational hypertension or mild pre-eclampsia after 36 weeks' gestation (HYPITAT): a multicentre, open-label randomised controlled trial. *Lancet.* (2009) 374:979–88. doi: 10.1016/S0140-6736(09)60736-4
5. Middleton P, Shepherd E, Morris J, Crowther CA, Gomersall JC. Induction of labour at or beyond 37 weeks' gestation. *Cochrane Database Syst Rev.* (2020) 7: CD004945. doi: 10.1002/14651858.CD004945.pub5
6. Offerhaus P, van Haaren-Ten Haken TM, Keulen JKJ, de Jong JD, Brabers AEM, Verhoeven CJM, et al. Regional practice variation in induction of labor in The Netherlands: does it matter? A multilevel analysis of the association between induction rate and perinatal and maternal outcomes. *PLoS One.* (2023) 18(6): e0286863. doi: 10.1371/journal.pone.0286863

## Author contributions

PvD wrote the first draft of the editorial, and CV and JG edited the text. All authors contributed to the article and approved the submitted version.

## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.