Planned homebirth: not a Dutch treat for export

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In their paper on perinatal mortality and morbidity up to 28 days after birth in a large population of women having a homebirth in the Netherlands, using three merged databases, de Jonge et al. conclude that 'no significant differences were found in the rates of intrapartum and neonatal death up to 28 days between planned home and planned hospital births among lowrisk women,' (De Jonge et al. BJOG 2015;122:724-732). Given the nature of this conclusion and the size of the database, this study might be viewed by some readers as validation of the safety of planned homebirth in the Netherlands and in the developed world. In our judgement, doing so is not warranted.

There are four reasons to be sceptical about the authors' conclusions. First, the authors' claim that their method is 'comparable to an "intention-to-treat analysis" is questionable. A true prospective Dutch intention-to-treat analysis (Evers et al. *BMJ* 2010;341:c5639) showed that low-risk women who started labour with a midwife had a higher risk of delivery-related perinatal death than high-risk women whose labour started under the supervision of an obstetrician.

Second, the rate of missing data for the national neonatal registry ranges from 31 to 51%. Given the high rate of transported patients, data from transported patients may be disproportionately represented among the missing data. In the absence of further analysis of the reasons for the missing data, the authors' assumption that 'information was missing randomly for planned home and planned hospital births' is not justified.

Third, the consistently lower rate of low Apgar scores for planned homebirth should be considered apocryphal, because of documented, marked bias toward assignment of higher Apgar scores when the homebirth attendant assigns them alone (Grünebaum et al. *J Perinat Med* 2014; DOI: 10. 1515/jpm-2014-0003).

Fourth, the authors' data support a neglected comparison: the risk of planned homebirth for nulliparous women. Neonatal intensive care unit admissions were 3.61/1000 births for nulliparous women versus 1.36 for parous women. Severe perinatal outcome rates were 4.17 versus 1.82, respectively. This pattern questions appropriate risk selection for planned homebirth and therefore a central claim of the paper: 'primary care

midwives in the Netherlands provide care to low-risk women only'. Paradoxically, one of the co-authors of this paper calls for delivery of nulliparous women in the hospital (Nijhuis, J.G., Bevalling eerste kind altij in ziekenhuis. De Verdieping TROUW, de persgroup Nederland BV, 2014, p. 7).

The rate of planned homebirth in the Netherlands has been decreasing, despite the fact that women must pay €200 out of pocket for hospital birth (Chervenak et al. Am J Obstet Gynecol 2012;208:31-8). Nevertheless, if a woman intends to have a planned homebirth, the Netherlands may well be the least worst locale in which to do so. Planned home birth in other countries, especially the USA with its increased, preventable neonatal mortality (Grünebaum et al. Am J Obstet Gynecol 2014;211:390.e1-7), inadequate transport systems, uneven education and regulation of midwives, and the absence of uniform selection criteria for homebirths, is perilous. Generalising from the Dutch homebirth experience to other countries, especially the USA, is impermissible.

Disclosure of interests

None of the authors have conflicts of interest to disclose.