Understanding Relative Risk in the Community Birth Setting

Community birth (planned home and birth center births) is known to be a safe option for low-risk pregnancies. This has been demonstrated in studies in the UK, Netherlands, Canada, and the US.[1-5]

Community birth: comparing low risk groups to other groups

New research[6] published in the journal *Birth* asks the question "safe for whom?" by **comparing the lowest risk group of those birthing in a community setting** (those with at least one previous vaginal birth and no other risk factors) **to other groups also birthing in the community setting** (for example, advanced maternal age, breech, twins, or VBAC).

This research is the first ever look at the relative risks of community birth, based on the largest available U.S. dataset on physiologic birth. The data, which looks at more than 40,000 cases of birth planned in the community setting, is derived from medical records, the gold standard of medical research.

Key findings: risks vary depending on the group

- **Some groups - those with advanced maternal age** (>35 years of age) **or high BMI** (>25 kg/m^2) - **had only a slightly elevated risk** (as compared to the very low-risk control group), resulting in a low absolute risk of serious complications.

- **Other groups - those giving birth at or beyond a full 42 weeks of pregnancy, with gestational diabetes, or carrying twins - had a moderate risk** (2-3 times the very low-risk group) of serious complications.

- **A few groups - including those with preeclampsia and carrying babies in the breech position - have a significantly increased risk of serious outcomes**, including neonatal mortality 7 - 10 times higher than the lowest-risk group.

[1] de Jonge A, van der Goes BY, Ravelli ACJ, et al. Perinatal mortality and morbidity in a nationwide cohort of 529,688 low-risk planned home and hospital births. BJOG. 2009;116:1177-1184.

[2] Birthplace in England Collaborative Group, Brocklehurst P, Hardy P, et al. Perinatal and maternal outcomes by planned place of birth for healthy women with low risk pregnancies: The Birthplace in England national prospective cohort study. BMJ.2011;343:d7400.

[3] Hutton EK, Reitsma AH, Kaufman K. Outcomes associated with planned home and planned hospital births in low-risk women attended by midwives in Ontario, Canada, 2003-2006: A retrospective cohort study. Birth. 2009;36:180-189.

[4] Janssen PA, Saxell L, Page LA, Klein MC, Liston RM, Lee SK. Outcomes of planned home birth with registered midwife versus planned hospital birth with midwife or physician. Can Med Assoc J. 2009;181:377-383.

[5] Cheyney M, Bovbjerg M, Everson C, Gordon W, Hannibal D, Vedam S. Outcomes of care for 16,924 planned home births in the United States: The Midwives Alliance of North America Statistics Project, 2004 to 2009. J Midwifery Womens Health. 2014;59:17-27.

[6] Bovbjerg M L, Cheyney M, Brown J, Cox K J, Leeman L. Perspectives on risk: Assessment of risk profiles and outcomes among women planning community birth in the United States. Birth Issues in Perinatal Care. 2017;10.1111.

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- **Outcomes for VBAC vary widely and need further study.** For a woman who has had a vaginal birth in addition to a cesarean, a VBAC will confer no greater risk than being a first time mother (for the outcomes studied). However, women planning a VBAC who have never birthed a child vaginally have significantly-increased risks. More research will help us understand the complexities of VBAC.

Considerations for policy makers

- Not surprisingly, some groups experience additional risk. Some are very serious, including increased risk of neonatal death, while others experience only slightly elevated risk. This research provides community birth practitioners with an important tool for families: evidence-based information on both the potential risks and benefits. This information should inform a discussion between a family and their chosen community birth practitioner about each family's unique risk profile and client preferences.

- Even when risk may be elevated, people choose community birth for a variety of reasons, including cultural and religious influences and an assessment of their options in other settings. As with other health care decision making, this very personal decision should remain with a family, informed by accurate, evidence-based information.

- A mother's right to make decisions about place of birth is affirmed by American Congress of Obstetricians and Gynecologists (ACOG). In their recent committee position on planned home birth[7], ACOG affirmed a woman's right to make a medically informed decision about place of birth, even when risk is elevated. A birthing person's autonomy is also upheld by current thinking in obstetric ethics.[8]

- It is the professional responsibility of community birth practitioners to engage in a thorough shared decision-making process with their clients. All birth care providers have an obligation to fully inform potential clients of their experience level with the presenting risk factors as well as their regulated scope of practice.

- Families may face a limited range of options in the hospital setting, including very limited-to-nonexistent VBAC options, a lack of experienced birth care practitioners for vaginal breech, or little support for physiologic birth. This may force people to balance the known risks of surgical births (currently at 32% of all births in the US) with the small but significantly increased risk of very serious outcomes (including neonatal death) for some risk factors in the community setting.

While MANA does not recommend or advise a course of care or setting for birth when risk factors are elevated, MANA's Statement of Values and Ethics is a resource for midwives and their clients when considering the rights of mothers and the responsibilities of midwives in making decisions important to their family or their profession. Continuing high-quality, peer reviewed research plays a critical role in expanding our knowledge base for informed decisions.

[7] Planned home birth. Committee Opinion No. 697. American College of Obstetricians and Gynecologists. Obstet Gynecol 2017;129:e117–22.

[8] Jankowski, J., & Burcher, P. (2015). Home Birth of Infants with Anticipated Congenital Anomalies: A Case Study and Ethical Analysis of Providers' Obligations. The Journal of clinical ethics.