

### Abstract

Home birth rates are increasing throughout the developed world, which necessitates a discussion regarding the outcomes and perceptions of home birth in developed countries. Home birth outcomes and perceptions are widely varied, and many have noted that there exists a relationship between a nation's acceptance and integration of home birth into the standard model of maternity care and the nation's home birth outcomes. This paper discusses a sample of developed countries, namely the United States, Canada, the United Kingdom, and the Netherlands, and seeks to identify the relationship between a nation's home birth outcomes and its home birth perceptions. It was found that some countries, such as the United States, are reluctant to integrate home birth into the standard model of maternity care, and also have poor home birth outcomes. Countries like the Netherlands, by contrast, have created a standard maternity system that embraces and supports home birth. Home birth outcomes in these countries are exceptional. However, it was also found that no matter where a woman lives, the home birth is associated with fewer medical interventions, high rates of physiologic birth, and a strong sense of empowerment and autonomy. By comparing and contrasting home birth outcomes and perceptions in nations around the globe, our understanding of this growing phenomenon improves drastically and it becomes possible to create safer, better-integrated home birth systems.

## Introduction

The concept of home birth has been hotly debated throughout the western world for the past several decades. This is likely due, at least in part, to the fact that home birth rates are increasing in many developed nations. The United States, the United Kingdom, and Australia all reported that home birth rates in their countries are on the rise (Macdorman, Declerq, & Mathews, 2013; Office for National Statistics, 2012; Li, Zeki, Hilder, & Sullivan, 2010). In other nations like the Netherlands and Canada, the rates of home birth have held relatively steady, but are by no means decreasing. This suggests that home birth warrants significant worldwide discussion. The perception of home birth in the developed world – both of healthcare providers and of patients – ranges from wildly positive to decidedly negative, with many nations falling somewhere on this continuum. Interestingly enough, home birth outcomes across country borders are just as variable. In some nations, such as the United Kingdom, home birth is just as safe as delivering in a hospital (Birthplace in England Collaborative Group, 2011). In others, like the Netherlands, it is even safer than delivering in a hospital (De Jonge, Mesman, Zwart, van Dillen, & van Roosmalen, 2013). However, in some countries, namely the United States, home birth is slightly riskier (Snowden, et al., 2015). Many have noted the relationship between a nation's acceptance and integration of home birth into the standard maternity care and their home birth outcomes, namely that a better integrated home birth system yields better outcomes (Cheyney, et al., 2014; Wax, et al., 2010; Ashley & Weaver, 2012; Murray-Davis, et al., 2012). This paper seeks to compare home birth perceptions and outcomes in developed nations, and discuss how these might contribute to and be affected by a nation's acceptance and integration of home birth into the standard maternity care.

### **Home Birth Outcomes**

Much research has been compiled throughout the western world in regards to home birth outcomes. When broken down by country, it is clear to see that the outcomes are exceptionally variable.

In the United States, home birth outcomes are relatively poor. For example, Snowden, et al. (2015) reported that perinatal mortality in Oregon (a state with one of the highest home birth rates) was twice as high in planned out-of-hospital settings as in planned in-hospital settings, though they admit that the absolute risk of mortality was low in both settings (Snowden, et al., 2015). Grünebaum, et al. (2015) also reported similar findings (Grünebaum, et al., 2015). They found that home birth in the United States should be considered high risk when compared to other developed nations (Grünebaum, et al., 2015).

By comparison, many other developed nations have excellent home birth outcomes. In Great Britain, the Birthplace in England Collaborative Group (2011) found that there was no significant difference in perinatal and maternal outcomes when home births were compared to hospital birth (Birthplace in England Collaborative Group, 2011). This means that home birth in the Great Britain is just as safe as hospital birth.

In the Netherlands and Canada, this level of safety goes even further. De Jonge, et al. (2015) found that intrapartum and neonatal death rates were actually lower in the home setting than in the hospital setting (De Jonge, et al., 2015). The Netherlands also has one of the highest home birth rates in the western world, with over thirty percent of women delivering at home. De Jonge, et al. (2013) also found that maternal morbidity was lower in the home setting than in the hospital setting (De Jonge, et al., 2013). Janssen, et al. (2009) report that in Canada, much like

the Netherlands, the rate of perinatal death is lower for home births than for hospital births (Janssen, et al., 2009).

One aspect of home birth outcomes that are consistent across country borders is the fact that the rate of medical intervention is much lower in the home setting versus the hospital setting. This is an important phenomenon to consider, due to the fact that throughout the world the medicalization of birth has become a hot button issue, even more so than the concept of home birth itself. For example, Cheyney, et al. (2013) found that in the United States, women who choose to deliver at home had very high rates of physiologic birth and exceptionally low rates of medical intervention (Cheyney, et al., 2013). In the United Kingdom, Li, et al. (2014) reported that home birth was correlated with very low rates of medical intervention (Li, et al., 2014). Rates of medical intervention in Canadian home births are low as well; Janssen, et al. (2009) reported that women who birth at home are statistically less likely to have obstetric interventions or assisted vaginal deliveries (Janssen, et al., 2009). Finally, in the Netherlands, women who prefer home births were found to have used fewer medical interventions during the labor and delivery process than women who preferred to deliver in the hospital (van Haaren-ten Haken, et al., 2015).

### **Home Birth Perceptions and Barriers**

When considering home birth outcomes, especially in countries like the United States where home birth is slightly riskier, it is also pertinent to consider why women choose to deliver in the home setting versus the hospital setting. Thus, one must understand the perception of home birth as well as the outcomes. In the United States, there are several key reasons as to why some women preferred home birth. For example, women who wanted to have a more active role in the childbearing process tended to gravitate towards home birth (Arcia, 2013). Women also

chose to birth at home because they wanted to feel empowered and have a sense of choice in the birthing process (Bernhard, Zielinski, Ackerson, & English, 2014). Many women who delivered at home also did so to limit the amount of medical interventions to which they would have been subjected throughout the labor and delivery process if they were to have delivered in the hospital setting (Bernhard, Zielinski, Ackerson, & English, 2014). The medicalization of birth in the western world has left many women with the feeling that once they enter the doors of the hospital, their bodies are not their own. In Australia, Jackson, Dahlen, and Schmied (2012) reported that women who chose to deliver at home tended to have a high level of distrust for the medicalization of birth (Jackson, Dahlen, & Schmied, 2012). Interestingly, Jackson, Dahlen, and Schmied (2012) also reported that women who chose to deliver at home did so after a thorough analysis of the risks and benefits, obliterating the notion that women who deliver at home are irresponsible and making rash decisions with inaccurate data (Jackson, Dahlen, & Schmied, 2012). Home birth allows women to take back a sense of autonomy and choice and make decisions about birth that are best for their unique family needs based on careful, calculated research and risk analysis.

In countries where home birth is safe and birth outcomes are excellent, women tend to choose home birth for similar reasons. According to Ashley and Weaver (2012), women in the United Kingdom choose home birth in order to have more control over the birthing process, as well as to ensure that their birth follows their own personal birth philosophy (Ashley & Weaver, 2012). Canadian women, too, tend to choose home birth due to the amount of autonomy and choice provided in the home setting, as well as being able to avoid what they deemed “unnecessary” medical interventions (Murray-Davis, et al., 2012).

Most low-risk women in the western world still deliver in a hospital setting, despite the psychosocial and physical benefits. This suggests that in many countries, there are barriers – whether perceived or actual – that prevent women from being able to choose a home birth for themselves.

For American women, the choice to deliver in the home versus in a hospital is compounded by the perceived increased risk of delivering at home as well as several institutional barriers. The American College of Obstetrics and Gynecology (ACOG) stated in their 2016 Committee Opinion that birth centers and hospitals are still the safest place to deliver babies in the United States (ACOG, 2016). Arcia (2013) also found that even when American women preferred to deliver at home, few expected to be able to do so, which can be attributed to the numerous barriers to home delivery in the United States (Arcia, 2013). In the United States, midwifery is regulated at the state level, meaning that different states have different rules about whether or not midwives can practice (Osborne, 2015). Direct entry midwives (also known as certified midwives or certified professional midwives) are the only type of health care practitioner in the United States whose training focuses on learning to deliver in out-of-hospital settings. Only three states in the United States allow certified midwives to practice, and only twenty-eight states allow certified professional midwives to practice (Midwives Alliance of North America [MANA], 2016). This means that being able to find and utilize a midwife who is willing to facilitate a home delivery often is exceptionally difficult, and may even be illegal in a woman's home state.

In the United Kingdom, the choice to deliver in a hospital instead of at home is typically one of familiarity, as there are fewer structural barriers to home birth. All midwives working in the United Kingdom must be registered with the Nursing and Midwifery Council, which can

only happen after they complete midwifery school and graduate with a bachelors in midwifery (Baird, Murray, Seale, Foot, & Perry, 2015). The NHS supports home birth, and most low-risk women are offered the option to deliver at home. Yet many still choose to deliver in the hospital. Coxon, Sandall, and Fulop (2015) found that healthy, low-risk women chose to deliver in the hospital even though they were given the option to deliver at home, simply because they were more familiar with the hospital experience – either they or someone they knew had delivered in a hospital previously (Coxon, Sandall, & Fulop, 2015).

In Canada, a lack of knowledge about home birth by providers can cause women to choose hospital birth despite the fact that home birth is a safe and viable option for them. Vedam, et al. (2012) found that many obstetricians and general practitioners did not believe that midwives were equipped to deal with obstetric emergencies, which made hospitals the safest place in their mind for women to deliver (Vedam, et al., 2012). Therefore, they were uncomfortable discussing home birth with their patients, meaning that Canadian women are sometimes not given the full range of options for delivery (Vedam, et al., 2012). This can be partially explained by the fact that the idea of regulated midwifery is relatively new in Canada. In the past twenty years, all but two Canadian provinces have created regulating bodies and rules for midwives (Canadian Association of Midwives, 2010). In each of these provinces, women who choose midwife-led care are offered the option to deliver at home, as long as they fit in a specific set of criteria meant to ensure that women are delivering in the safest of circumstances (The Midwifery Group, 2010).

Women in the Netherlands have by far the fewest barriers to home birth, which means that many women are free to choose to deliver at home. As many as thirty percent of the births in the Netherlands occur in the home (de Geus & Cadee, 2014). Midwives are regulated by the

Royal Dutch Organization of Midwives, and must graduate with a degree in midwifery before they can practice. They are considered independent medical practitioners, and almost all women see a midwife when they become pregnant and are given the option to deliver at home if they meet a certain set of low-risk criteria.

### **Discussion**

The number of women delivering in an out-of-hospital setting throughout the developed world is growing, which necessitates a look at the outcomes and perceptions of home birth in these countries. By comparing the United States, Canada, the United Kingdom, and the Netherlands, it is clear that there is a wide spectrum of both perceptions and outcomes. What is interesting to note when looking at these spectra is how inter-related they actually are.

At one end of the spectrum lies the United States, a nation with poor home birth outcomes and poorer integration of the home birth model of care into the mainstream maternity care system. In the middle lie the United Kingdom and Canada. In Canada, the home birth model of care is relatively new, but is well supported by the national government, and Canadian home births are just as safe as hospital births. In the United Kingdom, home births are part of the national healthcare system, are offered to most women, and have lower rates of maternal and perinatal mortality and morbidity than hospital births. Finally, the Netherlands tops the spectrum with one of the best home birth systems in the world. Home birth is so integrated into the maternity healthcare system that it is the first choice offered to low-risk pregnant women during prenatal care, and obstetricians are reserved for women who fall under the high-risk category. The Netherlands also has some of the best home birth outcomes, with much lower maternal and perinatal morbidity and mortality in the home setting versus the hospital.



Finally, it is interesting to note that no matter what country is being analyzed, home birth is associated with higher rates of physiologic or natural birth, lower rates of medical intervention, and a strong feeling of autonomy and empowerment for the women delivering in the home setting. These are important considerations for several reasons. The first is that they appear to be some of the most integral driving forces when women are considering a home delivery. Secondly, as the medicalization of childbirth grabs the attention of healthcare providers throughout the western world, it is interesting to see that women in the process of choosing where to deliver are taking it into account as well. This makes it clear that the concern for the medicalization of childbirth has spread to the general public.

### **Conclusion**

Home birth is on the rise all around the world and it is clear to see that home birth outcomes and perceptions throughout the developed world are exceedingly varied. Some countries, such as the United States, are reluctant to integrate home birth into the standard model of maternity care, and also have poor home birth outcomes. Countries like the Netherlands, by contrast, have created a standard maternity system that embraces and supports home birth. Home birth outcomes in these countries are exceptional. However, no matter where a woman lives, the home birth is associated with fewer medical interventions, high rates of physiologic birth, and a strong sense of empowerment and autonomy. By comparing and contrasting home birth outcomes and perceptions in nations around the globe, our understanding of this growing phenomenon improves drastically and it becomes possible to create safer, better-integrated home birth systems.

### References

- American College of Obstetricians and Gynecologists. (2016). Planned home birth. *Committee Opinion: ACOG, 127(654)*, 1–4.
- Arcia, A. (2013). US nulliparas' perceptions of roles and of the birth experience as predictors of their delivery preferences. *Midwifery, 29(8)*, 885–894.  
<http://doi.org/10.1016/j.midw.2012.10.002>
- Ashley, S., & Weaver, J. (2012). Factors influencing multiparous women who choose a home birth: a literature review. *British Journal of Midwifery, 20(9)*, 646–652.  
<http://doi.org/10.12968/bjom.2012.20.9.646>
- Baird, B., Murray, R., Seale, B., Foot, C., & Perry, C. (2015). Midwifery regulation in the United Kingdom. *The King's Fund*, 1–32. Retrieved from  
<http://www.kingsfund.org.uk/projects/midwifery-regulation-united-kingdom>
- Bernhard, C., Zielinski, R., Ackerson, K., & English, J. (2014). Home birth after hospital birth: Women's choices and reflections. *Journal of Midwifery and Women's Health, 59(2)*, 160–166. <http://doi.org/10.1111/jmwh.12113>
- Birthplace in England Collaborative Group. (2011). 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, 116(9)*, 1177–1184.  
<http://doi.org/10.1136/bmj.d7400>

Canadian Association of Midwives. (2010). Midwifery Regulation in Canada. 1–2.

Cheyney, M., Bovbjerg, M., Everson, C., Gordon, W., Hannibal, D., & Vedam, S. (2014).

Outcomes of care for 16,924 planned home births in the United States: The midwives alliance of North America statistics project, 2004 to 2009. *Journal of Midwifery and Women's Health*, 59(1), 17–27. <http://doi.org/10.1111/jmwh.12172>

Coxon, K., Sandall, J., & Fulop, N. J. (2015). How do pregnancy and birth experiences influence planned place of birth in future pregnancies? Findings from a longitudinal, narrative study. *Birth*, 42(2), 141–148. <http://doi.org/10.1111/birt.12149>

de Geus, M., & Cadee, F. (2014). Midwifery in The Netherlands. *The Royal Dutch Organization of Midwives*. <http://doi.org/10.1136/bmj.305.6862.1155>

de Jonge, A., Geerts, C. C., Van Der Goes, B. Y., Mol, B. W., Buitendijk, S. E., & Nijhuis, J. G. (2015). Perinatal mortality and morbidity up to 28 days after birth among 743 070 low-risk planned home and hospital births: A cohort study based on three merged national perinatal databases. *BJOG: An International Journal of Obstetrics and Gynaecology*, 122(5), 720–728. <http://doi.org/10.1111/1471-0528.13084>

de Jonge, A., Mesman, J. A. J. M., Mannien, J., Zwart, J. J., van Dillen, J., & van Roosmalen, J. (2013). Severe adverse maternal outcomes among low risk women with planned home

versus hospital births in the Netherlands: nationwide cohort study. *BMJ (Clinical Research Ed.)*, 346(jun13 2), f3263–f3263. <http://doi.org/10.1136/bmj.f3263>

Grünebaum, A., McCullough, L. B., Brent, R. L., Arabin, B., Levene, M. I., & Chervenak, F. A. (2015). Perinatal risks of planned home births in the United States. *American Journal of Obstetrics and Gynecology*, 212(3), 350.e1-350.e6. <http://doi.org/10.1016/j.ajog.2014.10.021>

Jackson, M., Dahlen, H., & Schmied, V. (2012). Birthing outside the system: Perceptions of risk amongst Australian women who have freebirths and high risk homebirths. *Midwifery*, 28(5), 561–567. <http://doi.org/10.1016/j.midw.2011.11.002>

Janssen, P. A., Saxell, L., Page, L. A., Klein, M. C., Liston, R. M., & Lee, S. K. (2009). Outcomes of planned home birth with registered midwife versus planned hospital birth with midwife or physician. *CMAJ*, 181(6–7), 377–383. <http://doi.org/10.1503/cmaj.081869>

Li, Y., Townend, J., Rowe, R., Knight, M., Brocklehurst, P., & Hollowell, J. (2014). The effect of maternal age and planned place of birth on intrapartum outcomes in healthy women with straightforward pregnancies: secondary analysis of the Birthplace national prospective cohort study. *BMJ Open*, 4(1), e004026-2013–004026. <http://doi.org/10.1136/bmjopen-2013-004026>

Li, Z., Zeki, R., Hilder, L., & Sullivan, E. (2010). *Australia's Mothers and Babies 2010*.

Canberra: Australian Institute of Health and Welfare.

Maddormann, M. F., Declercq, E., & Mathews, T. J. (2013). Recent trends in out-of-hospital births in the United States. *Journal of Midwifery and Women's Health*, 58(5), 494–501. <http://doi.org/10.1111/jmwh.12092>

Midwives Alliance of North America (2016). *Legal Status of U.S. Midwives*. Retrieved from <http://mana.org/about-midwives/legal-status-of-us-midwives>

Murray-Davis, B., McNiven, P., McDonald, H., Malott, A., Elarar, L., & Hutton, E. (2012). Why home birth? A qualitative study exploring women's decision making about place of birth in two Canadian provinces. *Midwifery*, 28(5), 576–581. <http://doi.org/10.1016/j.midw.2012.01.013>

Office for National Statistics. (2012). Births in England and Wales by Parents' Country of Birth, 2011, 1–8.

Osborne, K. (2015). Regulation of Prescriptive Authority for Certified Nurse-Midwives and Certified Midwives: 2015 National Overview. *Journal of Midwifery and Women's Health*, 60(5), 519–533. <http://doi.org/10.1111/jmwh.12368>

Snowden, J. M., Tilden, E. L., Snyder, J., Quigley, B., Caughey, A. B., & Cheng, Y. W. (2015). Planned Out-of-Hospital Birth and Birth Outcomes. *New England Journal of Medicine*, 373(27), 2642–2653. <http://doi.org/10.1056/NEJMsa1501738>

The Midwifery Group. (2010). *Home Birth Handbook for Midwifery Clients*.

van Haaren-ten Haken, T. M., Hendrix, M., Smits, L. J., Nieuwenhuijze, M. J., Severens, J. L., de Vries, R. G., & Nijhuis, J. G. (2015). The influence of preferred place of birth on the course of pregnancy and labor among healthy nulliparous women: a prospective cohort study. *BMC Pregnancy and Childbirth*, *15*, 33. <http://doi.org/10.1186/s12884-015-0455-x>

Vedam, S., Schummers, L., Stoll, K., Rogers, J., Klein, M. C., Fairbrother, N., & Kaczorowski, J. (2012). The Canadian Birth Place Study: Describing maternity practice and providers' exposure to home birth. *Midwifery*, *28*(5), 600–608.  
<http://doi.org/10.1016/j.midw.2012.06.011>

Wax, J. R., Lucas, F. L., Lamont, M., Pinette, M. G., Cartin, A., & Blackstone, J. (2010). Maternal and newborn outcomes in planned home birth vs planned hospital births: A metaanalysis. *American Journal of Obstetrics and Gynecology*, *203*(3), 243.e1-243.e8.  
<http://doi.org/10.1016/j.ajog.2010.05.028>