

A Biological and Ethical Comparison of Birth Plans: Literature Review

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Abstract

The purpose of our study was to investigate the current literature surrounding birth methods and outcomes. This study compared the medical outcomes across different birth plans including physician-assisted in-hospital births, midwife-assisted births, and home births. The differences found among birth plans vary in risk profile across race and ethnicity. The studies used suggest non-white persons disproportionately experience birth complications, while their white counterparts are more likely to utilize midwife services and have lower rates of poor outcomes. This distinction can be due to the socioeconomic disadvantages met within gynecological resources available for persons of color, in addition to the financial burden associated with creating a birth plan. These facts are for research purposes only, and are not to advocate for or against different birthing methods.

Case Study: Fetal Abnormalities

- Mara and Mark committed to a home birth then went through prenatal diagnostic testing, which confirmed several fetal abnormalities including Trisomy 21, the lack of a corpus callosum, and asymmetric cardiac chambers.
- The couple refused further testing and continued with the plan of a home birth.
- The obstetrician, who is also a bioethicist, strongly supports home births but suggests that this case is too high-risk.
- Issues: duty to infant versus duty to mother/patient autonomy.

Fast Facts: Mistreatment

- WHO researchers conducted a mistreatment and discrimination analysis of 2200 women who recently gave birth.
- **28.1%** of women who gave birth in a hospital reported mistreatment, while only **5.1%** of women who gave birth at home reported the same.
- **27.2%** of women of color with low SES reported mistreatment, while **18.7%** of white women with low SES reported the same.
- More reported mistreatment and discrimination for women of color across all conditions.
- Midwife-assisted births correlated with a lower likelihood of mistreatment and/or discrimination.

Physician-Assisted Births

Overview: Obstetricians maintain that hospital births are associated with lower risks of neonatal and maternal death, and are overall a safer option for both low and high risk pregnancies. Care delivered by a licensed professional ensures both mother and infant are comfortable as hospitals provide access to equipment related to pain management, infant support, and birthing assistance when necessary.

Biology

Pros:

- Access to immediate medical interventions like labor induction, epidurals, episiotomies, and cesarean section
- Fewer maternal deaths due to postpartum hemorrhage
- Decreased risk of infant mortality

Cons:

- Invasive treatment used when it may not be necessary
- Exposure to hospital acquired pathogens
- Medicalization of childbirth leads to rushed risks being taken with women and children's lives

Ethics

Pros:

- Can be much cheaper for persons with insurance coverage
- Receiving care from licensed persons
- Peace of mind knowing medical interventions are within reach if called for

Cons:

- Parents may have little control
- Parents may experience prejudice, and it has been long speculated persons of color have greater infant mortality rates, especially in rural areas

Recommendations: A woman has the right to choose a hospital birth if she feels that is the environment she desires for herself and her child. Within the hospital location she will have access to superior medical care should the situation arise to call for higher level interventions, and it is the staff's responsibility to ensure equal consideration is given to the mother's original birth plan.

Midwife-Assisted Births

Overview: Midwives aid in the safe delivery of the baby. They are healthcare providers that support a woman's birth experience before and after the child has been delivered. Midwives have been ranked higher in beneficence compared to other birthing methods as a closer relationship is formed between the midwife and woman even postpartum.

Biology

Pros:

- Lower risk of cesarean by 30% .
- Fewer infants were admitted to the special care nursery

Cons:

- Midwife assisted births in hospital still have relative risks of obstetric interventions and adverse maternal and neonatal outcomes
- Postpartum hemorrhage and shoulder dystocia were higher when midwives were present at the birth.

Ethics

Pros:

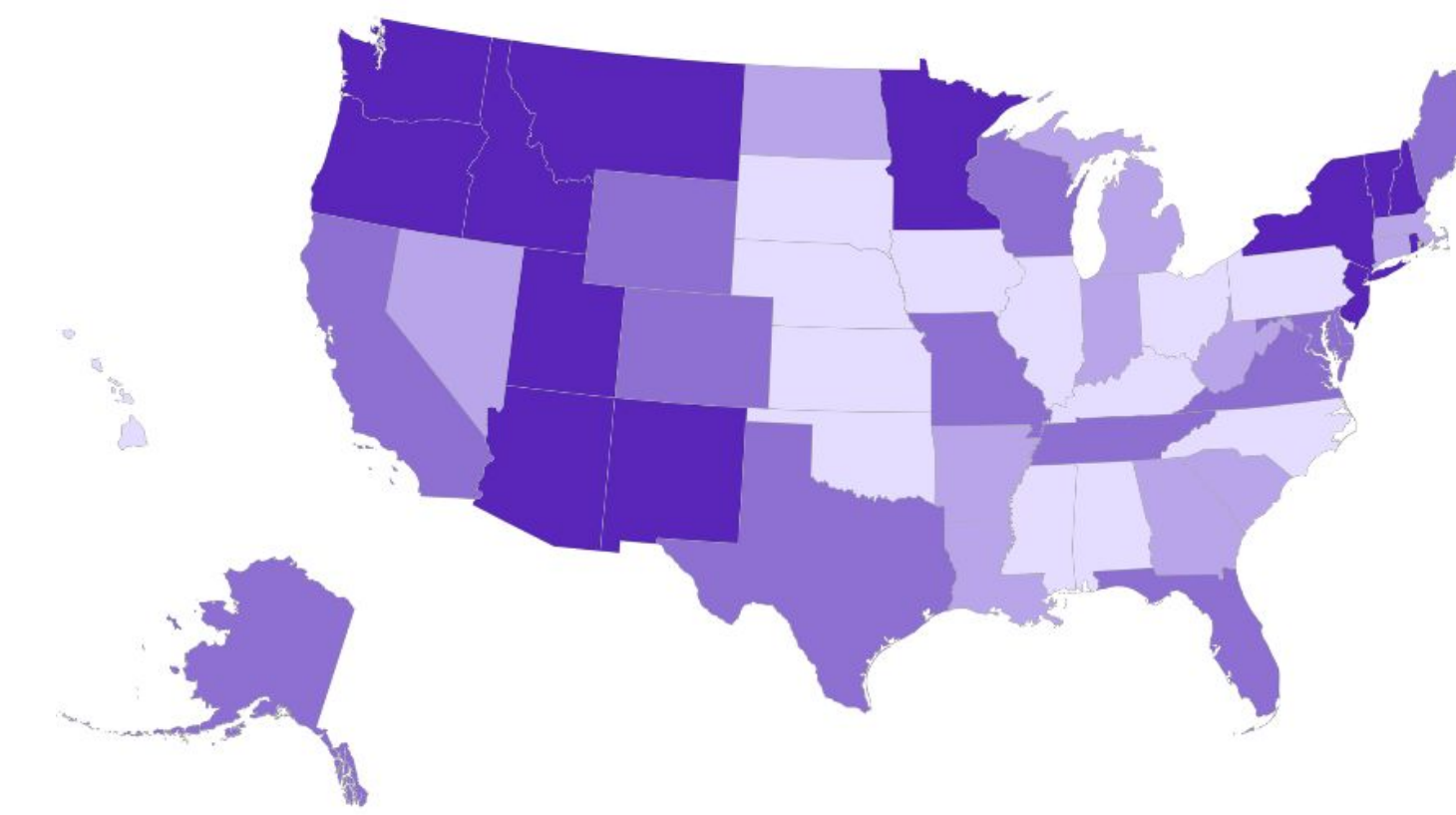
- Beneficence - doing what is best for the mother and child
- Better care for women of color and women in lower socioeconomic classes in general

Cons:

- Not all midwives are universally licensed to practice or integrated into regional health care systems
- Few studies have compared the midwife-assisted and physician care in the United States

Recommendations: A woman should be given multiple birthing options in addition to the traditional hospital birth. Who is present during the birth, where the birth will take place and the price of the birth should all be taken into account before the woman makes her final decision. Ultimately, the wellbeing of the woman and child are top priority when undergoing any birth situation.

Figure 2: According to MISS (Midwifery Integration Scoring system) this map has been generated to show the integration of Midwifery in the United States. Deeper shades of purple represent higher integration and lighter shades represent lower integration of midwives.



Overview: Planned home births in the US have leveled off after a sharp rise in the mid-2000s. Medical professionals assert the high risk of neonatal death when choosing a home birth, but for many low-risk pregnancies, some outcomes are shown to be better for home births compared to hospital.

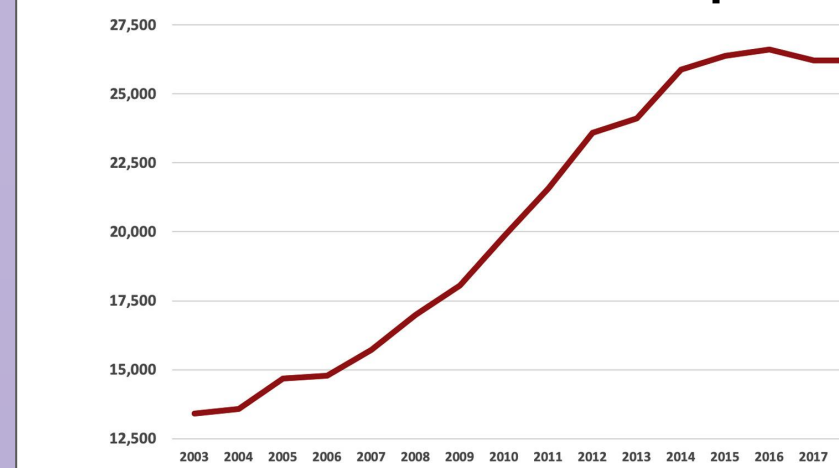


Figure 3: US Midwife-attended Planned home births: 2003-2018 (Grunebaum et al., 200).

Biology

Pros:

- Fewer medical interventions like labor induction, epidurals, episiotomies, and cesarean section that all carry risk
- Fewer vaginal, perineal, and third- or fourth-degree lacerations
- Fewer maternal infections

Cons:

- More than twofold increase in risk of perinatal death
- Threefold increase in risk of neonatal seizures or serious neurological dysfunction
- Up to 45% of women are transferred from a planned home birth from home to the hospital

Ethics

Pros:

- Respect for autonomy
- No interruptions from other practitioners during and after birth
- Privacy to mother and child
- Transparency in treatment options
- Cost effective compared to hospital births

Cons:

- Physicians do not always speak on behalf of home-births
- Putting both mother and baby in unnecessary/preventable harm
- Some policies within hospitals threaten or revoke privileges of practitioners who attend home births
- Majority of insurance providers do not cover home birth
- Home births are likely to appeal to affluent, educated white women as opposed to minority.

Recommendations: A woman should have a right to make an informed choice about where she will deliver her baby. Home birth may be a good option for incredibly low-risk pregnancies, and these guidelines should be clearly defined.

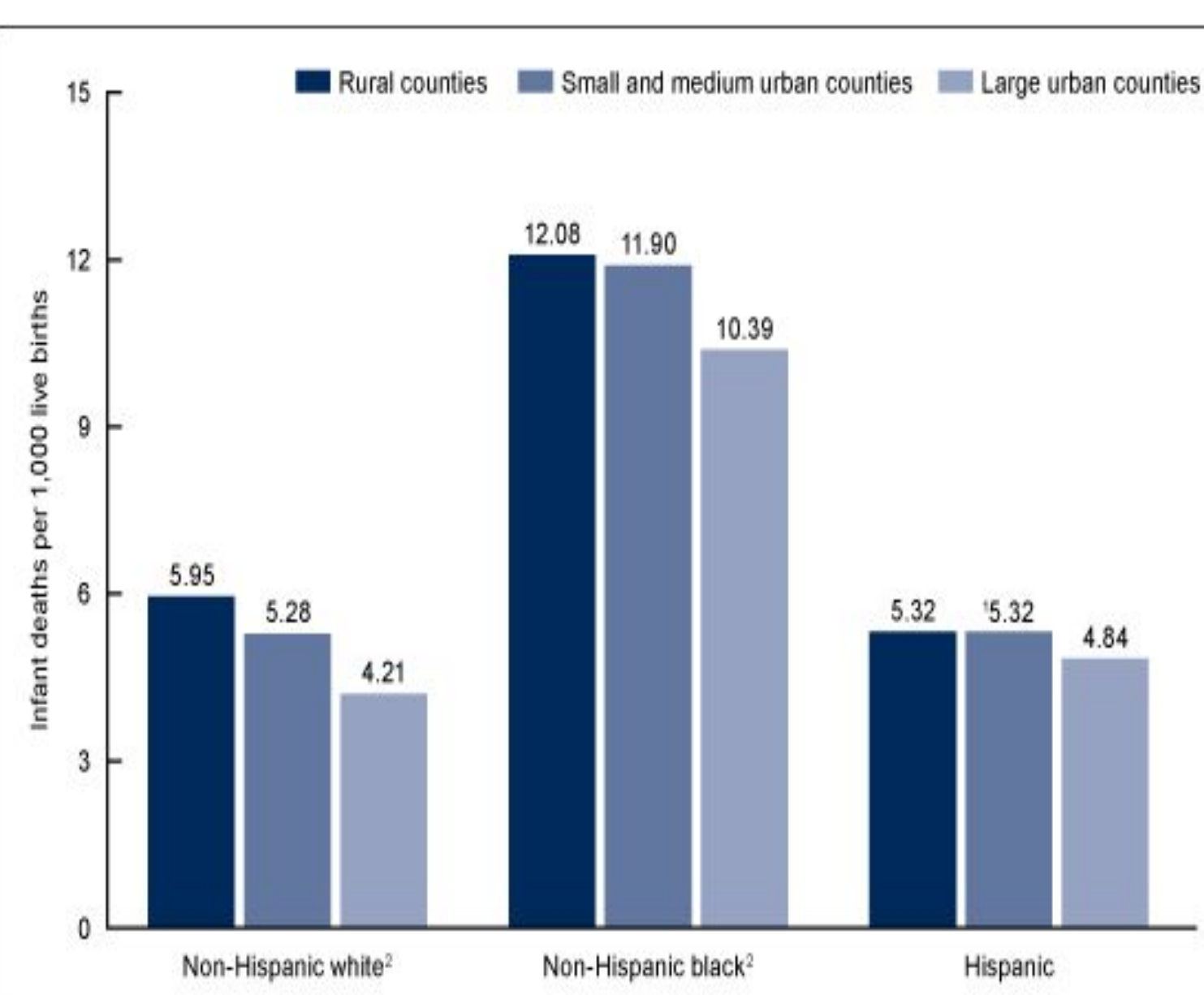


Figure 3: Center for Disease Control's 2017 findings on the association between infant deaths by urbanization level and race

Race: Non-Hispanic white, Non-Hispanic black, Hispanic

Dark blue: Rural counties

Medium blue: Small and medium urban counties

Light blue: Large urban counties

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