Back to the Earth: Exploring Environmentally Sustainable Midwifery as a Means for Supplementing Traditional Maternal Care

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Abstract

Can the solutions to the maternal health crisis come from the very systems it originated from, or must we look elsewhere for answers? Are there feasible pathways to supplement unsustainable Western maternal care practices with the individualized affirmation, support, and attention that only non-clinical birthworkers can provide? To validate these questions, the examination of existing data and literature will support the conceptualization and operationalization of the birthing experience. Using this premise as a foundation, the most profound connections between the U.S. healthcare system's treatment of people who can become pregnant and how the presence of ecologically sustainable midwifery practices may promote positive health outcomes in both the parent and child can be revealed.

The primary objective of this investigation is to gain a consensus on the essential yet rarely researched areas of this field. This will include an inquiry into: inclusive language within the field of obstetrics and gynecology, histories of birthwork, the environmental footprint of healthcare, cultural dichotomies of purity and pollution relating to pregnancy, and evidence-based care practices that can reduce the strain on both the patients and environment. These findings may be used to identify actionable pathways for the promotion of sustainable pre- and postpartum midwifery care as well as advocate for their presence, in addition to other non-clinical personnel, to be integrated into mainstream healthcare frameworks as effective tools to provide sustainable obstetric care.

Keywords: birthwork, decolonization, healthcare, midwifery, sustainability, obstetrics

Inclusive Language

To begin this investigation from a framework of inclusivity, it is imperative to acknowledge the nontraditional language used in this work. As part of a broader effort to decolonize the way we conceptualize womanhood, pregnancy, and expectations enforced by an austere gender binary, the phrasing surrounding pregnancy must be addressed. The imposition of Western colonizers effectively created the two-gender system that erases non-binary identities, excludes the existence of transgender people, and holds cisgender women to a standard of motherhood that is simply unattainable for many. Therefore, phrasing that suggests only cisgender women can experience pregnancy will not be used here. As an alternative to following gendered labels, this paper embraces the diversity of gender, biological sex, and unique pregnancy experiences to actively combat harmful social stereotypes and return historically excluded people back into the narrative.

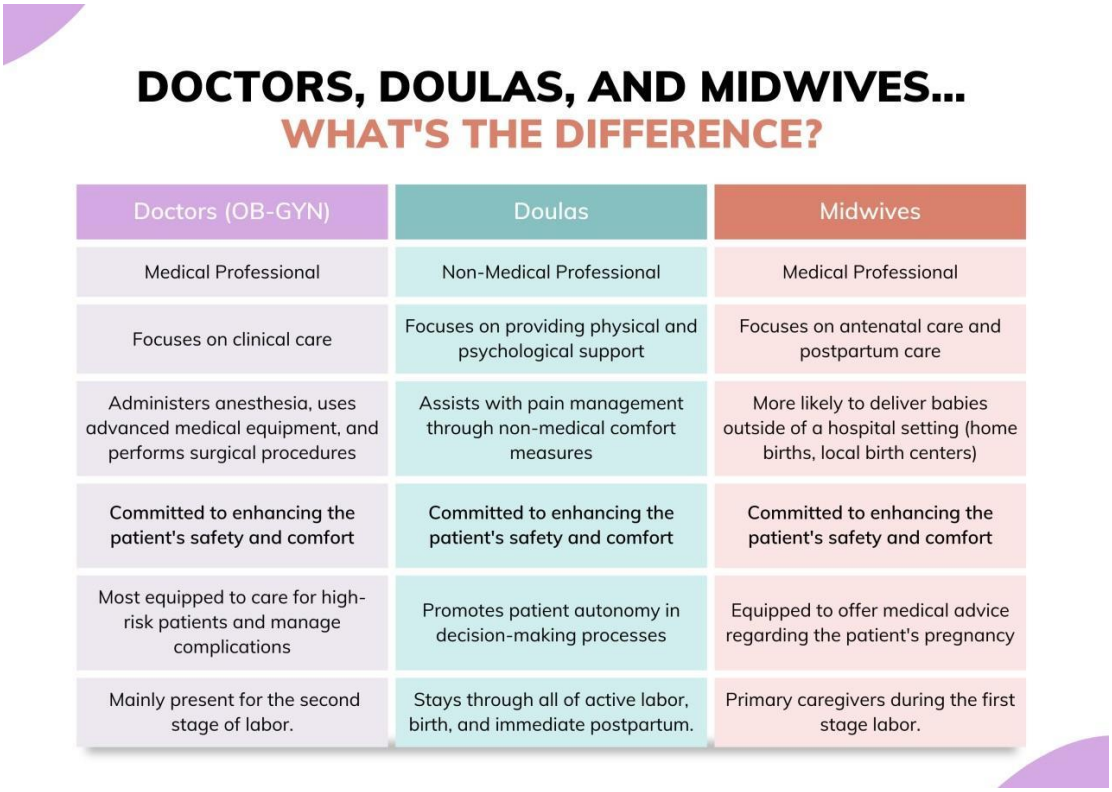
Defining Birthwork

The U.S. healthcare system is plagued by a dark history of unethical treatment and appalling maternal mortality rates that exemplify collective failures to deliver consistent, high-quality, equitable care to all patients. Specifically within the fields of obstetrics and gynecology, the experience of childbirth has the potential to lay a vital foundation for the biological parent's postpartum wellness as well as their child's. That is why the presence of birthworkers, whose primary focus is to provide individualized care and attention that takes the childbearing parent's full host of needs into consideration, can be a crucial determinant of a successful labor and delivery. As emphasized in **Figure I**, roles in doulaship and midwifery can work

interprofessionally with medical doctors to support their patient's physiological and psychological needs.

Figure I

Doctor's, Doulas, and Midwives…What's the Difference?



DOCTORS, DOULAS, AND MIDWIVES...
WHAT'S THE DIFFERENCE?

Doctors (OB-GYN)	Doulas	Midwives
Medical Professional	Non-Medical Professional	Medical Professional
Focuses on clinical care	Focuses on providing physical and psychological support	Focuses on antenatal care and postpartum care
Administers anesthesia, uses advanced medical equipment, and performs surgical procedures	Assists with pain management through non-medical comfort measures	More likely to deliver babies outside of a hospital setting (home births, local birth centers)
Committed to enhancing the patient's safety and comfort	Committed to enhancing the patient's safety and comfort	Committed to enhancing the patient's safety and comfort
Most equipped to care for high-risk patients and manage complications	Promotes patient autonomy in decision-making processes	Equipped to offer medical advice regarding the patient's pregnancy
Mainly present for the second stage of labor.	Stays through all of active labor, birth, and immediate postpartum.	Primary caregivers during the first stage labor.

Note. This figure was developed for the purposes of this inquiry to summarize and differentiate between the three most common roles involved in the pregnancy, labor, and birth process (Delgado, 2023).

Ideally, 'physiologic' labor and delivery is the most desirable outcome for any pregnant person. According to the Journal of Perinatal Education, this term is traditionally defined as when these natural processes are powered by the innate human capacity of both the birthing

person and fetus (p. 14, 2013). This, along with reducing as much unnecessary clinical intervention as possible, are central goals of midwifery practice (2013). While an entirely physiologic labor may be unattainable for high-risk patients or those who develop any number of potential complications, supporting the natural processes of the body has proven to be the most effective method of providing safe birthing experiences for all.

However, in recent decades, the birthing experience has become highly medicalized within the Westernized framework for maternal care. While life-saving interventions such as cesarean sections, epidurals, and inductions of labor can be necessary in many cases, they can also interfere with the physiologic process of labor (2013). As a result, this can lead to a multitude of poor outcomes for the patient. Additionally, common results of medical interventions can include prolonged delivery, increased pain, psychological disconnection from the body, financial hardship due to the high costs of treatments, and much more (Rutherford et al., p. 7, 2019).

Origins of Midwifery

Historically, the duty of healing is perceived as the natural responsibility of women and femme people due to the gendered norms in society that assign them domestic roles that involve caretaking. This stereotype is affirmed by a 2017 study in the Journal of Midwifery & Women's Health, in which 69% of 304 adults surveyed reported associating midwifery as a woman's job (p. 690). To fully understand the source of this expectation, it is vital to note that the patriarchal systems of power which have forced women into birthing scenarios for generations simultaneously villainize their contributions to the field. A prime example of this is encapsulated in the 'midwife-witch' archetype, who in many cultures is feared to possess supernatural

knowledge about the healing properties of plants, herbs, and reproductive health, which are attributed to demonic powers.

By experimenting with herbal remedies and holistic treatments for pain during childbirth, midwives were harshly maligned and persecuted for their work. This stigma was especially present in the 16th and 17th-century European witch hunts, leading to the execution of countless innocent people. Many of the casualties were financially vulnerable peasant and non-Christian women who identified as midwives (Balch, p.1, 2022). These accusations were likely motivated by a deadly combination of pervasive fear and superstitions in a directed attempt to deflect blame for recent outbreaks of disease among other misfortunes common in unsanitary communities during this time. Despite this violent persecution, midwives remained vital pillars of their communities and were often revered as wise healers with extensive knowledge in botany and herbalism years before the breakthrough of pharmaceutical medicine, specifically morphine, in the 19th century (Trang et al., p. 13879, 2015).

Understanding the cultural associations of midwifery and women's connections to nature sheds light on why people may feel profoundly threatened by these practices. The presence of the midwife-witch is an innate act of rebellion against the patriarchy since they serve as guardians and advocates for pregnant people. Midwives, especially those hailing from indigenous communities, pioneered the ecofeminist use of natural remedies and techniques such as herbal teas, massage, breathing exercises, and other non-allopathic treatments to help pregnant people cope with the physiological and psychological challenges of childbirth—many of which are still used today (Tiran, p. 17, 2018). Furthermore, they represent social freedom for biologically female bodies and provide opportunities to empower individuals to exercise autonomy over their own reproductive health.

Considering the clear, numerous, benefits and advancements that midwifery offers the field of integrative medicine and communities in need, the true concerns about the practice can be speculated. Did the midwife-panic ever genuinely originate from valid suspicions of demonic pacts and maleficence? Or, did the empowerment of pregnant people simply trigger inherited cultural fears about intersectional feminist ideals that threatened long-standing systems of power and oppression?

The Environmental Footprint of Care

From the astronomically high costs of standard medical procedures to poor maternal mortality rates, it is clear that Westernized medicine still has a long way to go before it can truly support the needs of the population. Outside of direct patient care, a significant issue that receives minimal mainstream attention is the high pollution and detrimental environmental footprint they can have on the communities in which they are based. Medical equipment, linens, food waste, and other contaminants can cause serious harm to the ecosystems where they are disposed of. This can create a widespread toxic impact on local wildlife and human health. Additionally, it is important to note the daily energy consumption needs of even a medium-sized suburban hospital. To heat, cool, electrify, and maintain medical equipment at functional levels, they must produce considerable greenhouse gasses and other chemical pollutants. The U.S. healthcare system alone is responsible for 8.5% of the worldwide greenhouse gas emissions (Dzau et al., p. 1, 2018), contributing to the catalyzed progression of climate change.

Specifically pertaining to obstetric care, the midwifery profession is uniquely equipped to support pollution reduction efforts to combat this crisis. For instance, following the physiological birth model, midwives seek to promote natural childbirth when safe and beneficial. This

approach avoids inductions of labor, cesarean sections, and invasive medical devices, therefore reducing the amount of waste generated from that patient's visit. Midwives can also advocate for the use of sustainable postpartum supplies such as cloth diapers and other affordable, eco-friendly, baby products. The role of a midwife can also include educating childbearing parents about the advantages of breastfeeding initiation and referring them to the appropriate follow-up resources. The alternative to this breastfeeding, which is formula feeding, creates a significant amount of waste due to the production and disposal of single-use plastic bottles, nipples, and formula containers (Leissner and Ryan-Fogarty, p. 1, 2019). However, according to Andresen et al. (2022), breastfeeding produces no waste as it does not require any substantial resources or energy to complete, consequently leading to the conservation of precious water and land resources (p. 2).

Examining these points alone is enough to warrant alarm regarding how Westernized, for-profit hospital systems are operating unsustainably. Moreover, there are dangerous comparisons that can be drawn between today's hospitals and your typical, mega-corporations like PG&E that demonstrate time and time again how willing they are to place the pursuit of short-term profit over the health of local residents and environments, as evidenced in the 2006 Hinkley groundwater contamination lawsuit (Santoso, p. 2, 2022). Otherwise inexplicable nosebleeds, miscarriages, and cancerous tumors were typical experiences within this town due to the contamination of hexavalent chromium in their water. Nevertheless, as healthcare accessibility efforts increase throughout the U.S., it is necessary to ensure that the appropriate action is taken to reform and supplement current practices with the goal of reducing environmental strain. By committing to the systematic reduction of pollution levels in tandem

with other patient-centered initiatives, healthcare leaders can take a stand against the substantial impact on the most vulnerable people and resources in their communities.

Purity Across Cultures

This ongoing investigation has found prominent motifs of purity and pollution that are fundamentally intertwined within the study of obstetrics, natural birthing and postpartum methodologies, as well as the diverse experiences of pregnant people. Within this dichotomy of clean and unclean, the parent and child are typically considered to be contaminated following the birth process. For example, in many Jewish communities, women must bathe in a 'mikveh' to restore ritual purity following childbirth (Zanbar et al., p. 296, 2022). Additionally, in some rural Nepalese communities, a ceremony known as 'nwaran' takes place to purify the parent, house, and name the child. In this tradition, no one is permitted to touch the parent or child directly because vaginal childbirth is considered dirty and unclean (Sharma et al., p. 4, 2016)

At the heart of these traditions is the perception of purity within the female existence. Although it manifests differently across cultures, ultimately the notions of 'pure' and 'impure' represent complex ideas that particular environments or individuals are free from contaminants, or can become liberated from impurities as long as certain actions take place. This can also emerge from concerns more grounded in secular logic, such as removing potential exposure to toxins in the environment in which the childbearing parent is particularly vulnerable. Moreover, increased interest in environmentally-friendly products, services, and treatments can lead to less pollution being produced and disposed of in local ecosystems. In this context, the practice of sustainable midwifery can therefore be viewed as a means of preserving and promoting the purity of the natural world.

Discussion

No laboring body should be branded in need of a financially and environmentally costly medical intervention for failing to abide by a standard clinical timeline that does not take their informed consent, needs, wishes, and ability to experience a physiologic birth into account. This is where midwifery comes in, to center the narrative back onto the patient and utilize a holistic approach that prioritizes their patient's physiological and psychological well-being outside of a strictly clinical perspective. Therein lies the momentous value of midwifery practice, which places due care on the interconnectedness of environmental, public, and individual health that lends itself to advocacy work inside and outside of the birthing room. Recognizing childbirth as a natural process that should be facilitated rather than manipulated goes against the rampant medicalization of childbirth and normalization of unnecessary, invasive, procedures on expectant parents. By taking actionable steps to create a safe, comfortable, and affirming environment for patients, many of the stressors that lead to the overuse of medical equipment and pharmaceuticals can be effectively avoided. Furthermore, in the event of a crisis that requires medical intervention, the existing foundation of holistic care and consistent patient advocacy will support improved outcomes for both the parent and child.

While this paper does not provide a detailed account of the specific environmental impact caused by traditional obstetric care departments and facilities due to a lack of accessible and relevant data, there are clear areas for improvement that relate specifically to shortcomings in this field. These include but are not limited to:

- Codification of inclusive language into policy standards,
- Deconstructing cultures of fear surrounding childbirth,

- Promoting non-invasive pain management tools and methodologies with minimal to zero pollutant output (ex: reflexology, aromatherapy, breathing exercises, etc.),
- Educating parents on the biological and ecological benefits of breastfeeding,
- Combating trauma-inducing medical environments, &
- Establishing departmental goals for reducing medical waste and energy consumption.

Considering these factors, there must be further investment into the promotion of midwifery, non-clinical birthworkers, and systematic pollution reduction objectives to achieve the highest quality and standard of obstetric care for everyone who needs it.

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Figure 1. Doctor's, Doulas, and Midwives…What's the Difference? (2023). Created by Liv Delgado using Canva.

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