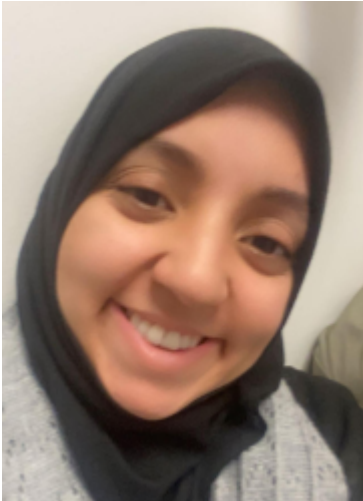




# Integrating Evidence and Practice: Implementing Physiology-Informed Maternity Care in England

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By Fedwa Harrak

The National Health Service (NHS) in England emphasises evidence-based care, with most births taking place in its facilities.<sup>[1]</sup> Nonetheless, despite much research endorsing the advantages of physiology-informed maternity services, the incorporation of this data into routine clinical practice continues to be problematic.<sup>[2]</sup> This essay examines the justification for physiology-informed care, the barriers obstructing its extensive adoption in England, and possible approaches to overcoming these difficulties.

## Understanding Maternity Care Informed by Physiology

Maternity care guided by physiology recognises birth as a natural physiological event. Care within this philosophy promotes the body's own processes, including the secretion of endorphins and oxytocin, to aid labour, birth and postpartum recovery.<sup>[3]</sup> Studies demonstrate that when labour is uninterrupted and facilitated in a suitable environment, birth generally advances more effectively, resulting in fewer difficulties.<sup>[4]</sup>

### Essential practices encompassed by this approach:

- Encouraging *movement* as well as *upright postures* during labour: Research indicates that upright positions enhance labour efficiency, decrease its duration, and lower the necessity for epidurals and assisted births.<sup>[5]</sup>

- *Midwifery continuity of care*: A recent Cochrane study on midwife-led continuity models of care by Sandall *et al* (2024) demonstrated that these models of care enhance maternal outcomes relative to standard care, increasing the chance of having a spontaneous vaginal birth and increasing maternal satisfaction with care, while decreasing the chances of a caesarean or instrumental birth. [6]
- *Supportive birth environments*: The existence of tranquil, secluded spaces with limited extraneous stimuli facilitates natural hormonal processes, enhancing labour progression and mitigating stress-related issues.<sup>3</sup>
- *Reducing routine interventions*: Use of procedures such as induction of labour only offered on an individual basis and when there is a specific medical indication other than length of pregnancy alone. [7] For example, offering intermittent auscultation rather than continuous electronic foetal monitoring to women with uncomplicated labours. [8], [9] This approach should aid in maintaining the physiological birth process. [10]

## Barriers to the Integration of Physiology-Informed Care

Despite much data endorsing these methods, certain constraints hinder the integration of physiology-informed maternity services within the NHS:

### 1. Defensive Healthcare and Over-Medicalisation

- Contemporary maternity care in England has shifted to an active management style, which, although potentially advantageous for some high-risk situations, may result in over-medicalisation. In some situations, interventions are likely to be beneficial, but standard use of interventions without good justification can interfere with birthing physiology and natural hormonal processes which are crucial for physiological labour and birth. [3]
- *Defensive Medicine*: Healthcare practitioners frequently function under the looming prospect of legal action, cultivating an environment where interventions are utilised to alleviate perceived dangers rather than being guided by empirical evidence. [11], [12] This method may lead to superfluous interventions, including caesareans, despite evidence indicating that physiological birth is safer for low-risk women. [7]

### 2. Systemic and Institutional Obstacles

- *NHS Infrastructure and Policy*: NHS maternity units are usually organised according to a medical model of care. Resource constraints, such as inadequate private labour rooms, restricted access to water births and alternative birth settings, such as homebirth or midwifery-led units, impede the adoption of physiology-informed care. [13]
- *Workforce Challenges*: A deficiency of midwives, excessive workloads, and financial limitations provide substantial obstacles to the implementation of continuity of midwifery care models. [14] The NHS has faced ongoing personnel deficiencies, with midwife vacancies exacerbating burnout in existing staff and restricting the availability of individualised care. [15]

### 3. Professional and Cultural Perspectives

- **Historical Medical Training:** Conventional medical education in England has prioritised risk-averse attitudes towards birth, reflected in current maternity policies. A multitude of healthcare practitioners are educated in intervention-centric paradigms instead of being trained in physiological birth.<sup>[16]</sup> Altering entrenched professional procedures and cultural norms within the medical community is a gradual endeavour.
- **Patient Expectations:** Societal narratives associate advanced technological interventions with increased safety, even when this may not always be the case.<sup>[17]</sup> Maternity care systems must provide women with comprehensive, evidence-based education regarding the safety and advantages of physiology-informed care.

## Strategies for Transformation: Executing Evidence-Based, Physiology-Informed Maternity Care

Possible ways to reconcile this disparity between evidence and practice:

#### 1. Improving Training and Education

Implementing physiology-based birth training for midwives and obstetricians, to incorporate the most recent data on birth physiology, may enhance clinical confidence in facilitating physiological birth<sup>[2]</sup>

#### 2. Reallocation of Resources

Investment in midwifery-led units, birth centres, and homebirth, to ensure that women can access alternatives to the highly medicalised hospital environment. Studies demonstrate that birth centres decrease intervention rates while ensuring safety, enhancing overall maternal satisfaction and outcomes.<sup>[18]</sup>

#### 3. Reinforcement of Policies and Guidelines

Aligning local NHS trust policies with NICE guidelines on low-risk maternity care can promote systemic change. Enhancing accountability mechanisms<sup>[19]</sup> for the implementation of midwifery-led care models, for example, could improve compliance with the most evidence-based practices<sup>[7]</sup>

#### 4. Public Awareness Initiatives

Increasing education to inform prospective parents about the latest evidence showing the advantages of physiology-informed care. Research indicates that knowledgeable women are more inclined to choose physiological delivery when adequately supported.<sup>[14]</sup>

#### 5. Advocating for Collaborative Care Models

Promoting enhanced collaboration between obstetricians and midwives cultivates improvements in maternity care, guaranteeing that interventions are employed solely when clinically warranted<sup>[13]</sup>

Implementing collaborative decision-making models can enhance patient outcomes and satisfaction<sup>[9]</sup>

## Conclusion

Transitioning to a physiology-informed maternity care model in England is both essential and complex. Despite overwhelming evidence supporting the benefits of such an approach, systemic, cultural, and institutional barriers have hindered its widespread adoption. By investing in targeted education, enhancing resources, and realigning policies with best practices, the NHS can improve maternity services to better support physiological birth processes. This shift has the potential to enhance outcomes for mothers, infants, and families, ultimately strengthening the overall quality of maternity care in England.

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**Author Bio:** Fedwa Harrak is a skilled midwife, educator, and public health advocate based in North London. She is passionate about improving maternity care and providing evidence-based knowledge to families. Fedwa also offers midwifery tutoring and organises clinical seminars to help student midwives learn.

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[1] Office for National Statistics (2024) 'Birth characteristics in England and Wales: 2022: [www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/bulletins/birthcharacteristicsinenglandandwales/2022](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/bulletins/birthcharacteristicsinenglandandwales/2022)

[2] Walsh, D., & Devane, D. (2012) 'A metasynthesis of midwife-led care', *Qualitative Health Research* 22(7): 897-910. [www.researchgate.net/publication/221715866\\_A\\_Metasynthesis\\_of\\_Midwife-Led\\_Care](https://www.researchgate.net/publication/221715866_A_Metasynthesis_of_Midwife-Led_Care)

[3] Buckley, S. J. (2015) *Hormonal physiology of childbearing: Evidence and implications for women, babies, and maternity care* Childbirth Connection. <https://nationalpartnership.org/wp-content/uploads/2023/02/hormonal-physiology-of-childbearing-full-recommendations.pdf>

[4] Odent, M. (2014), *Childbirth and the Evolution of Homo sapiens* (London: Pinter & Martin)

[5] Lawrence, A. *et al* (2013) 'Maternal positions and mobility during first stage labour', *Cochrane database of systematic reviews* (8)

[6] Sandall, J. *et al.* (2024). Midwife continuity of care models versus other models of care for childbearing women. *Cochrane database of systematic reviews* (4). [https://www.cochrane.org/evidence/CD004667\\_are-midwife-continuity-care-models-versus-other-models-care-childbearing-women-better-women-and](https://www.cochrane.org/evidence/CD004667_are-midwife-continuity-care-models-versus-other-models-care-childbearing-women-better-women-and)

[7] Editor's note: Perhaps it would be better to emphasise that rather than pressuring women into inductions in situations where the risk is low and/or the evidence is weak, staff should (as the NICE

guidelines recommend) have a discussion about the reasons for suggesting it, the risks and the alternatives and then support the woman's decision. "Explain to women that induction of labour is a medical intervention that will affect their birth options and their experience of the birth process." and "recognise that women can decide to proceed with, delay, decline or stop an induction. Respect the woman's decision, even if healthcare professionals disagree with it, and do not allow personal views to influence the care they are given."

[8] Editor's note: The NICE guidelines suggest offering electronic foetal monitoring during labour if "fetal heart rate concerns arise with intermittent auscultation and are ongoing, or intrapartum maternal or fetal risk factors develop".

As far as we know there's no evidence of benefit even in 'high risk' labours. It's considered 'good practice'.

[9] AIMS (2017) Monitoring your baby's heartbeat in labour

[www.aims.org.uk/information/item/monitoring-your-babys-heartbeat-in-labour#post-heading-7](https://www.aims.org.uk/information/item/monitoring-your-babys-heartbeat-in-labour#post-heading-7)

[10] National Institute for Health and Care Excellence (NICE) (2023) *Guideline CG190, Intrapartum care for healthy women and babies*: [www.nice.org.uk/guidance/ng235/resources/intrapartum-care-pdf-66143897812933](https://www.nice.org.uk/guidance/ng235/resources/intrapartum-care-pdf-66143897812933)

[11] Johanson, R. *et al* (2002). Has the medicalisation of childbirth gone too far? *BMJ*, 324(7342), 892-895. [www.researchgate.net/publication/11415731\\_Has\\_the\\_medicalisation\\_of\\_childbirth\\_gone\\_too\\_far](https://www.researchgate.net/publication/11415731_Has_the_medicalisation_of_childbirth_gone_too_far)

[12] Studdert, D. M., Mello, M. M., Sage, W. M., DesRoches, C. M., Peugh, J., Zapert, K., & Brennan, T. A. (2005). Defensive medicine among high-risk specialist physicians in a volatile malpractice environment. *Jama*, 293(21), 2609-2617.

[13] Royal College of Midwives (RCM) (2024) *How to Fix the Midwifery staffing crisis* (London: RCM) [https://rcm.org.uk/wp-content/uploads/2024/06/rcm-how-to-fix-guide\\_-28-feb-2024-1.pdf](https://rcm.org.uk/wp-content/uploads/2024/06/rcm-how-to-fix-guide_-28-feb-2024-1.pdf)

[14] AIMS has also questioned whether these barriers have not been tackled because of a lack of effective leadership and a willingness to make fundamental organisational changes in a challenging landscape. For a more detailed analysis please see the [notes of a speech](#) AIMS volunteer Jo Dagustun gave at the ARM (Association of Radical Midwives) conference in 2022.

[15] Royal College of Midwives (RCM) (2023) *'England State of Maternity Services'* (London: RCM) <https://rcm.org.uk/wp-content/uploads/2024/06/england-soms-2023.pdf>

[16] Davis, D., & Walker, K. (2010) 'Case-loading midwifery in New Zealand: Making a difference for

women?', *Midwifery* 26(1): 13-20

[17] Houghton, G., *et al* (2008) 'Factors influencing choice in birth place: An exploration of the views of women, their partners, and professionals', *Evidence Based Midwifery* 6(2): 59-64

[18] Schroeder, E., Petrou, S., Patel, N., Hollowell, J., Puddicombe, D., Redshaw, M., & Brocklehurst, P. (2012). Cost effectiveness of alternative planned places of birth in women at low risk of complications: evidence from the Birthplace in England national prospective cohort study. *BMJ*, 344. [www.bmj.com/content/344/bmj.e2292](https://www.bmj.com/content/344/bmj.e2292)

[19] Editor's note: "Enhancing accountability mechanisms" - As Midwifery-led models of care are evidenced as improving outcomes, they are strongly recommended by NICE. Local NHS trust policies should be evidence-based and thus, aligned with NICE guidelines. Therefore there should be stronger (or enhanced) ways (or mechanisms) by which those people in the trust responsible for deciding and implementing evidence-based care can be held responsible (or accountable) for not doing so.