



FEMINIST PERSPECTIVES ON AI IN WOMEN’S HEALTH

Theoretical framework for a critical scoping review

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INTRODUCTION

- AI is **reshaping clinical practice in women’s health** and influences who receives what care, when, under what conditions [1,2]
- AI systems do **not operate in a social vacuum**: biases are reproduced, power relations manifested [3]
- Rooted in **intersectionality and health equity**, **feminist perspectives** focus on power asymmetries and provide more just alternatives

METHODOLOGICAL APPROACH & RESEARCH QUESTION

The theoretical framework for a critical scoping review

- Is designed to be both analytically rigorous and purposefully open
- Provides deductive, stable conceptual lenses that can be applied consistently across a heterogeneous literature
- Remains receptive to themes that extend beyond its initial boundaries

HOW DOES FEMINIST SCHOLARSHIP CHARACTERIZE THE CHALLENGES AND OPPORTUNITIES OF AI DEPLOYMENT IN WOMEN’S HEALTH?

THE ANALYTICAL FRAMEWORK

- Integrates concepts of Data Feminism [4], intersectional feminist theory [5,6], health equity [7,8] and epistemic injustice [9]
- Centres around three analytical dimensions:

Power

- Who designs, governs, and benefits from AI systems in women’s health, who bears the risks?
- Who controls AI when deployed in women’s health?

Knowledge

- What counts as evidence in women’s health AI?
- What kind of knowledge is encoded in AI systems, what is rendered invisible, what ways of knowing are excluded?

Justice

- What would equitable AI in women’s health look like?
- How does feminist scholarship imagine for AI systems that challenge health inequities?

Intersectionality

- Non-negotiable meta-framework spanning all three dimensions
- Are women regarded as a category or homogenous group, or are intersecting axes of social position considered?

RECOMMENDATIONS FOR APPLICATION

- The framework will be applied in the critical scoping review.
- The three dimensions structure both the coding framework and output themes.
- Conceptual infrastructure presented ahead of results to invite scholarly dialogue before synthesis is complete.

Sources

1. Aftab N. (2025). Artificial Intelligence in Obstetrics and Gynaecology: Advancing Precision and Personalised Care. Cureus, 17(6), e86929. doi.org/10.7759/cureus.86929
2. Torumtay Aliç, S. B. (2026). The role of artificial intelligence in obstetrics and gynecology: Innovations, challenges, and opportunities explored through a bibliometric analysis. International Journal of Gynecology & Obstetrics:1-9. doi.org/10.1002/ijgo.70797
3. Chen, F., Wang, L., Hong, J., Jiang, J., & Zhou, L. (2024). Unmasking bias in artificial intelligence: a systematic review of bias detection and mitigation strategies in electronic health record-based models. Journal of the American Medical Informatics Association, 31(5), 1172-1183. <https://doi.org/10.1093/jamia/ocae060>
4. D'Ignazio, C., & Klein, L. F. (2020). Data feminism. MIT Press.
5. Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. University of Chicago Legal Forum, 8, 139–167.
6. Collins, P. H. (2008). Black feminist thought: Knowledge, consciousness, and the politics of empowerment (2nd ed.). Routledge.
7. World Health Organization. (2024). Health equity: Concepts and frameworks. Retrieved from <https://www.who.int/health-topics/health-equity>
8. National Collaborating Centre for Determinants of Health. (2024). Health equity glossary. Retrieved from <https://nccdh.ca/learn/glossary/>
9. Fricker, M. (2007). Epistemic injustice: Power and the ethics of knowing.

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