

# How Artificial Intelligence is Reshaping the Dominant Discourse in Evidence-Based Medicine?

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Dear Editor,

The current integration of artificial intelligence (AI) into evidence-based medicine (EBM) marks not only a technological innovation but also a profound reconfiguration of power, knowledge, and subjectivity within clinical practice (1). From a Foucauldian critical discourse perspective, this transformation is best understood as a shift in the regimes of truth and the modalities of governance that structure medical discourse and practice (2).

## AI and the Extension of the Clinical Gaze

Foucault's concept of the clinical gaze describes how medical knowledge objectifies patients, reducing them to a set of observable signs and symptoms (3). AI amplifies this gaze by transforming the patient into a data subject—an assemblage of biomarkers, risk scores, and algorithmic predictions. The acceleration of evidence synthesis through AI-driven “living systematic reviews” is not merely an efficiency gain; it is a mechanism by which the medical field extends its surveillance and standardization of bodies, further entrenching the authority of biomedical discourse (4).

## Biopower and the Regulation of Populations

AI's capacity to aggregate and analyse vast datasets enables new forms of biopolitical governance. By continuously updating clinical guidelines and stratifying risk at the population level, AI operationalizes Foucault's notion of Biopower—the management of life through statistical norms and regulatory interventions

(5). This process, while promising more equitable and timely care, also risks marginalizing those whose data are underrepresented, reinforcing existing health disparities under the guise of objectivity and neutrality (6).

## Discursive Shifts in Clinical Decision-Making

The promise of personalized medicine and shared decision-making, as mediated by AI-powered clinical decision support systems, must be critically examined. While these systems claim to incorporate patient preferences, they do so within the constraints of algorithmic logic and pre-defined categories (7). The subjectivity of both clinician and patient is thus reconfigured: clinicians become operators of decision-support technologies, and patients are interpellated as data points within evidence hierarchies. This shift reflects a broader transformation in the subject positions available within medical discourse, as agency is distributed between human and non-human actors (8).

## Ethical Tensions and the Production of Truth

The Foucauldian lens draws attention to the ethical and epistemological tensions inherent in AI-driven EBM. The authority of evidence is increasingly tied to the outputs of opaque algorithms, raising questions about transparency, accountability, and the very definition of “best evidence” (4). The discourse of AI as a barrier-breaker risks obscuring how new forms of surveillance, normalization, and exclusion are being enacted in the name of progress (6).

AI's integration into EBM is not a neutral or inevitable evolution; it is a discursive event that reshapes the production of medical knowledge, the exercise of clinical power, and the constitution of patient subjectivities. A Foucauldian analysis urges us to remain vigilant to how these technologies may reinforce or challenge existing hierarchies, and to interrogate the regimes of truth they produce critically.

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#### References

- Nilsen P, Sundemo D, Heintz F, Neher M, Nygren J, Svedberg P, et al. Towards evidence-based practice 2.0: leveraging artificial intelligence in healthcare. *Front Health Serv*. 2024 Jun 11;4:1368030. doi: [10.3389/frhs.2024.1368030](https://doi.org/10.3389/frhs.2024.1368030). [PMID: [38919828](https://pubmed.ncbi.nlm.nih.gov/38919828/)] [PMCID: [PMC11196845](https://pubmed.ncbi.nlm.nih.gov/PMC11196845/)]
- McGivern G. Governmentality in health care. In: Bhatti Y, Dopson S, Farchi T, Harris M. *The Oxford Handbook of Healthcare Innovation*. Oxford: Oxford University Press; 2025.
- O'Callaghan AK. 'The medical gaze': Foucault, anthropology and contemporary psychiatry in Ireland. *Ir J Med Sci*. 2022 Aug;191(4):1795-7. doi: [10.1007/s11845-021-02725-w](https://doi.org/10.1007/s11845-021-02725-w). [PMID: [34374939](https://pubmed.ncbi.nlm.nih.gov/34374939/)] [PMCID: [PMC9308586](https://pubmed.ncbi.nlm.nih.gov/PMC9308586/)]
- Zhang G, Jin Q, Jered McInerney D, Chen Y, Wang F, Cole CL, et al. Leveraging generative AI for clinical evidence synthesis needs to ensure trustworthiness. *J Biomed Inform*. 2024 May;153:104640. doi: [10.1016/j.jbi.2024.104640](https://doi.org/10.1016/j.jbi.2024.104640). [PMID: [38608915](https://pubmed.ncbi.nlm.nih.gov/38608915/)] [PMCID: [PMC11217921](https://pubmed.ncbi.nlm.nih.gov/PMC11217921/)]
- Suijker CA. Foucault and medicine: challenging normative claims. *Med Health Care Philos*. 2023 Dec;26(4):539-548. doi: [10.1007/s11019-023-10170-y](https://doi.org/10.1007/s11019-023-10170-y). [PMID: [37747687](https://pubmed.ncbi.nlm.nih.gov/37747687/)] [PMCID: [PMC10725842](https://pubmed.ncbi.nlm.nih.gov/PMC10725842/)]
- Ferreira RM. New evidence-based practice: Artificial intelligence as a barrier breaker. *World J Methodol*. 2023 Dec 20;13(5):384-389. doi: [10.5662/wjm.v13.i5.384](https://doi.org/10.5662/wjm.v13.i5.384). [PMID: [38229944](https://pubmed.ncbi.nlm.nih.gov/38229944/)] [PMCID: [PMC10789101](https://pubmed.ncbi.nlm.nih.gov/PMC10789101/)]
- Peng Y, Rousseau JF, Shortliffe EH, Weng C. AI-generated text may have a role in evidence-based medicine. *Nat Med*. 2023 Jul;29(7):1593-1594. doi: [10.1038/s41591-023-02366-9](https://doi.org/10.1038/s41591-023-02366-9). [PMID: [37221382](https://pubmed.ncbi.nlm.nih.gov/37221382/)] [PMCID: [PMC11193148](https://pubmed.ncbi.nlm.nih.gov/PMC11193148/)]
- Pupic N, Ghaffari-Zadeh A, Hu R, Singla R, Darras K, Karwowska A, et al. An evidence-based approach to artificial intelligence education for medical students: A systematic review. *PLOS Digit Health*. 2023;2(11):e0000255. doi: [10.1371/journal.pdig.0000255](https://doi.org/10.1371/journal.pdig.0000255). [PMID: [38011214](https://pubmed.ncbi.nlm.nih.gov/38011214/)] [PMCID: [PMC10681314](https://pubmed.ncbi.nlm.nih.gov/PMC10681314/)]