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LETTERS

CRISIS IN EVIDENCE BASED MEDICINE

Renaissance or reformation for evidence based medicine?

Jonathan Fuller *MD/PhD student*¹, Luis J Flores *PhD candidate*², Ross E G Upshur *professor*³, Maya J Goldenberg *associate professor*⁴

¹Faculty of Medicine, University of Toronto, Toronto, ON, Canada M5S 1A8; ²Department of Philosophy, King's College London, London, UK;

³Department of Family and Community Medicine, University of Toronto, Toronto, ON, Canada; ⁴Department of Philosophy, University of Guelph, Guelph, ON, Canada

We welcome the new directions for evidence based medicine sketched out by Greenhalgh and colleagues on behalf of the Evidence Based Medicine Renaissance Group.¹ However, we wonder whether their movement will represent a renaissance—or a sweeping intellectual revival for evidence based medicine—or a reformation—the breakaway of a group of concerned followers from orthodoxy to form a separate school of thought. Meaningful, far reaching change will require a cooperative refocusing of the evidence based medicine movement. We would like to pick up on two crucial impasses identified in their article—multimorbidity and the distortion of the evidence base by financial interests¹—and illustrate the roles that different stakeholders must fulfil.

The first challenge is multimorbidity, which increasingly describes typical patients. Yet, most clinical trials exclude patients with multiple diseases.² Publishers and regulators should demand that investigators match the trial population to the target population for the intervention. Of course, increasing representativeness also increases heterogeneity. This heterogeneity in patient characteristics and preferences demands heterogeneity in clinical management across patients—an unavoidable consequence of individualising care.³ Certain financial incentives and the prescriptive nature of practice guidelines of the past promoted standardisation rather than judgment and flexibility.⁴

Another serious problem is the distortion of the evidence base by financial interests. Greenhalgh and colleagues indicate the

need to study hidden biases in sponsored research.¹ However, these biases will remain hidden unless doctors, publishers, and regulators demand full access to raw study data, the registration and publication of all trials, and the complete independence of study investigators in designing and executing industry funded trials. Furthermore, given the social context of medical evidence, educators must train doctors to assess the trustworthiness of evidence, guidelines, and continuing education,⁵ not only the methodological rigor of studies.

Evidence based medicine was originally described as a revolution in medicine. Its renaissance will require changes in research and practice that are no less radical.

Competing interests: None declared.

Full response at: www.bmj.com/content/348/bmj.g3725/rr/760879.

- 1 Greenhalgh T, Howick J, Maskrey N. Evidence based medicine: a movement in crisis? *BMJ* 2014;348:g3725. (13 June.)
- 2 Van Spall HGC, Toren A, Kiss A, Fowler RA. Eligibility criteria of randomized controlled trials published in high impact general medical journals: a systematic sampling review. *JAMA* 2007;297:1233-40.
- 3 Upshur RE. Do guidelines still make sense? No. *Ann Fam Med* 2014;12:202-3.
- 4 Fuller J. Argumentation and rhetoric: how clinical practice guidelines think. *J Eval Clin Pract* 2013;19:433-41.
- 5 Upshur RE. Making the grade: assuring trustworthiness in evidence. *Perspect Biol Med* 2009;52:264-75.

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