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Editorial

Against research: a case for the scholarship of application in Medical Education

Contre la recherche : plaidoyer pour la valorisation de l'érudition appliquée en éducation médicale

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As the title and theme of an editorial in an academic journal, "Against Research" is both shocking and scandalous. Indeed, it is meant to grab your attention and inform you, but it also carries an important, though subtle, message.

In Paul Bloom's 2017 book *Against Empathy: The Case for Rational Compassion*,[1] Bloom challenges the widely held belief that empathy is a necessary virtue for moral decision-making and pro-social behaviour. He argues that empathy, which he defines as the ability to feel another person's pain or emotions, can lead to partiality, irrationality, and poor judgment. He posits that decisions based on empathy often prioritize immediate emotional responses over long-term consequences, favouring individuals who are closer or more relatable over those outside one's circle of influence Bloom advocates for rational compassion as a more effective alternative—a mode of thinking that allows for kindness and understanding, but is rooted in logic and fairness rather than emotional experiences. *Against Empathy* ultimately calls for a reassessment of how we view emotional connection in ethical decision-making, proposing that a balance of reasoned thought and compassion can better serve humanity's most challenging problems.

My short essay will try to do with research in medical education what Bloom did with empathy: cut upstream, suggest some strengths and weaknesses, and leave us with a way forward. Bloom was not without his critics, and I am sure (hoping, actually) that many of you will similarly engage with this piece. Criticism can help strengthen and improve an argument. Is that not the main hope of peer review? Some readers may even be inspired by the ideas found here. Let's start.

Research—like learning—is foundational and essential for human growth and flourishment, but it is not sufficient on its own. Why would I claim, "against research"? My intention is not to dismiss research, but rather to argue that in medical education, applied research should be given a prominent role in our scholarship. This is not the first time I have written an editorial about the importance of applied research.[2] In that editorial, I advocated for research in the messy environment of medical schools, rather than in laboratories, as some psychology-trained researchers had suggested. Today, I am arguing again for more applied research in messy medical schools with the addition that we use what we already know from fields of education, psychology, cognitive science, and other social sciences and humanities. I'm leaning into Boyer's model, highlighting the scholarship of application.[3] We don't need to rediscover the principles of learning or teaching, motivation, and humanism, among others. We would be better served by spending our time applying and testing their implementation in medical education settings.

There is some empirical data that a great deal of health professions research is applied, exploring topics such as teaching methods, developing clinical skills, curriculum,

workplace-based learning, resiliency and well-being in students, and the important role of approaches to assessment.[4] But are researchers taking advantage of existing theories and frameworks of teaching and learning, curriculum development, student health, and other areas of inquiry? From my vantage point as an editor, I see that many are trying out good ideas they encountered or thought of that are not grounded in knowledge or theory from other disciplines. Our research may be searching for teaching and learning principles that have already been well established or floundering since they are not built on prior research. Perhaps we believe we are the first to come up with a great idea or insight only to find that there are many flags already planted at the peak. It has happened to me, especially in my early career years. Let's not be so full of ourselves that we fail to look for and use the rich scholarship of our sister disciplines. To do otherwise would be a misuse of resources that could be better spent on applying what scholars from many related fields have already done.

Researchers have commented on how to make medical education research better with more training in research, PhD-clinician teams, more and different perspectives,[5] and better coordinated, community-level lines of programmatic research.[6] I cannot disagree that better research will eventually improve medical education. I fear we could be in danger of paralysis by analysis. Knowing more and knowing we cannot know it all might lead to greater and better research output before using what we have learned to advance medical education for medical students and residents (and eventually patients), which is ultimately what I believe to be the purpose of our research. How certain do we have to be? There is an urgent need to make medical education better, now and in the future, so I ask, why wait?

It is possible to advance theory and practice by harnessing what we already know and applying it to real-world issues, monitoring and evaluating our interventions? Action research, quality improvement, co-production and design, and other ways of bringing in multiple perspectives are approaches to the scholarship of application that should be considered more often by medical educators. "Action research (from social psychology) aims to understand real-world practices and advocates for the formulation of doable plans through cycles of investigations, and ultimately contributes to claims of knowledge and a progression toward the goal of practice improvement."[7] Co-production from the field of implementation science is similar: the collaborative process where knowledge users, such as researchers and practitioners, work together to create knowledge or solutions that are practical and grounded in shared expertise.[8] Through applied research we are more likely to find pragmatic solutions to important and urgent issues and advance knowledge as we go.

As empathy may divert our attention and misappropriate our moral reasoning and consequent actions, an overly rigid emphasis on "research" may distract us from attending to wicked and critically important practical issues using pragmatic, applied research. I'm not against research (despite my provocative title), but I urge researchers and medical education leaders to consider funding and encouraging research that focuses on solving immediate and practical problems, standing on the bedrock of prior, high-quality research in other disciplines and fields.

In this issue you will find some similarly surprising articles about institutional harms, patient stories that stay with us long after they have left our care, trigger warnings, a new-to-us teaching method, mini-med schools and other interesting topics. So buckle up and continue reading!

Original Research

Examining the effect of a Mini Med School using social cognitive career theory by Papp and team[9] reviewed the impact of a single-day Mini Medical School (MMS) on underrepresented youth in medicine. The authors found that although it increased participants' knowledge and confidence, it did not boost their interest in a medical career.

How do medical students define a Health Promoting Learning Environments?[10] A study by Joffe and co-authors aimed to identify key factors that contribute to a health-promoting learning environment, as perceived by students. These included elements such as wellbeing-focused leadership and safe student involvement.

Brief Reports

The timing of transition to senior surgical resident: a national survey of Canadian program directors by Mitchell and co-authors[11] examined the current timing of the transition from junior to senior resident in Canadian surgical programs and the factors influencing this decision. Their study highlighted the lack of standardization, noting that earlier transitions occur in programs with formal transition curricula, and recommended further research to explore the decision factors.

Enhancing professionalism in postgraduate medical education: the initial implementation and evaluation of a longitudinal curriculum for geriatrics residents in Toronto,

Canada by Kokorelias et al.[12] developed an eight-session professionalism curriculum as a means of integrating professionalism into postgraduate medical education. The curriculum was well-received, with participants reporting improved understanding of their roles and enhanced communication skills.

Scientific Reports

A competency-based curriculum for palliative medicine in Canada by Pilkey and Herx[13] outlined the development of a competency-based curriculum for Adult and Pediatric Palliative Medicine in Canada using the Royal College's Competence by Design framework. They detailed the training objectives, assessment tools, and implementation strategies, while addressing anticipated challenges and the importance of ongoing program evaluation.

In Anti-harassment policies across Canadian and international medical programs: strengths, areas for improvement, and a need for standardization by Peters and team,[14] the authors described the development of a standardized rubric to evaluate anti-harassment policies at medical schools. Their rubric provides a structured tool for enhancing policy clarity and creating safer learning environments.

Reviews, Theoretical Papers, and Meta-Analyses

Instruction to the Double: a promising socio-constructivist method for medical education by Durand-Moreau and co-authors[15] examined a learning method based on Vygotskian socio-constructivism to help students compare their actual work with their intended actions. By describing their work process to a facilitator, learners can identify gaps in their understanding.

Black Ice

Victoria Taylor and co-authors provided Seven ways to get a grip on requests for trigger warnings in medical education.[16] The authors addressed the debate on using trigger warnings in medical education and presented several strategies for addressing requests.

Canadiana

In Educating for optimal health outcomes: training physicians to be system-level advocates, Schrewe and Moore Hepburn[17] argued that Canadian medical education continues to perform poorly in terms of health outcomes and equity. To address this issue, the authors proposed that physician training must treat system-level advocacy as a core professional competency rather than an optional one.

You Should Try This

In their article, Facilitating transition to medical school for undergraduate students through medical student-led case-based learning workshops within a combined Bachelor of Science and Doctor of Medicine program, Chauhan et al.[18] used a workshop to introduce Case-Based Learning to the premedical school students to help them with the transition to medical school. Led by medical students, participants worked through patient cases in small groups, gaining early experience with this learning method.

Engagement of students in care delivery for individuals with intellectual and developmental disabilities through interprofessional education by Jane Jomy and co-authors[19] presented a workshop designed to help build confidence and competency in caring for patients with intellectual and developmental disabilities.

Integration of Point of Care Ultrasound into an existing undergraduate medicine anatomy course by Sheppard and team[20] outlined their experience integrating point of care ultrasound (POCUS) into the undergraduate medical anatomy curriculum. They found that the experience was positive for improving medical students' physical exam confidence and accuracy.

The article Using theater to teach palliative care by Côté and team[21] described an educational initiative that used theatre to dispel myths and improve understanding of palliative care among medical and nursing students. The project demonstrated a positive impact on students' interest and knowledge, highlighting the value of the experience for both learners and educators. This article is a French publication.

Commentary and Opinions

Achunair and colleagues' commentary, Scar healing and nutrition: a missing link in medical education,[22] called for greater emphasis on nutritional education for scar healing in medical schools. The authors outlined several dietary factors involved in wound recovery and highlighted the need for education on its valuable role in patient health and overall medical care.

The silence after discharge: when patients leave, but their stories stay by Jayashree Ravikumar[22] reflects on the emotional impact doctors feel when patients are discharged without clear answers. Ravikumar calls for a broader view of healing—one that encompasses empathy and the acceptance of uncertainty as essential components of medical care.

Letters to the Editor

The letter, Toward redefining global health training: ethical practices, cultural humility, and community partnership in medical education, by Kim and team[23] was written in response to Fisher et al.'s article.[24] The authors commended Fisher's call for ethical global health training and endorsed the "Making the Links" program for its focus on community partnership and advocacy.

Quon and co-authors' letter In support of institutional self-reflection on social accountability[25] praised Cumyn et al.'s work on a Canadian medical school's approach to social accountability. They emphasized the importance of institutional commitment beyond symbolic gestures.[26]

Faculty belonging may be more important than we realize by Singh and team[27] commended Harper et al.'s mentorship strategies.[28] The authors advocated for mentorship programs that actively build this sense of connection.

Meghan Chisholm's letter, Health-promoting environments must address institutional harm[29] praised Do et al.'s work[30] for identifying the learning environment as a source of harm in medical education. Chisholm advocates for safe health-promoting learning environments and a reimagined professionalism based on trust, accountability, and dignity.

Fostering advocacy of physician health and accessibility from training into practice by Quon and Gautam[31] responded to Cochrane et al.'s article.[32] The authors applauded Cochrane for highlighting gaps in advocacy training and added that health advocacy should include advancing physician well-being, accessibility, and disability inclusion within the profession.

Images

Emily O'Reilly created her art piece, Mechanical Lichtenberg,[33] with finishing nails and stained cork to make the lightning-like pattern of a Lichtenberg Figure. O'Reilly contrasted the mechanical and creative aspects of medicine as they develop through medical training. This is the cover image for this issue.

Beyond the garden of time: where the unspoken humanity bloom through every season[34] by Bianca Shen is an image dedicated to physicians who uphold the heart of healthcare by meeting patients' vulnerability with compassion, even when the system falls short.

Conferences

Finally, we published The Association of Faculties of Medicine of Canada's International Congress on Academic Medicine 2025 conference abstracts.[35]

Enjoy!

Marcel D'Eon

CMEJ Editor-in-Chief

AI Attestation: The author directed MS Word Co-pilot to summarize in two paragraphs "Against Empathy," a book he had read two years before writing this editorial. He and others edited the paragraphs to better integrate within the theme of the editorial.

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