

Editorial

The significance of student-operated medical journals

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Peer-reviewed medical journals are essential to the dissemination of literature upon which the current and future understanding of medical practice is founded. These journals present an important, established, credible means of communicating the findings of clinical trials and other relevant scientific information with the medical community.^{1,2} Pertaining to medical schools, there is an emphasis placed on learners in today's curriculum which promotes the development of competencies required not only of skilled clinicians, but that of clinician researchers and health scientists as well.^{3,4} As such, the role of research within medical school curricula has been receiving greater attention with increasing expectations of students in regard to these academic endeavours. As an extension of the expanding role of research in undergraduate medical curriculums, there has been a global increase in the presence of student-run medical journals as a component of medical schools over the past thirty years.⁵

In Canada, student medical journals present with diverse scopes, structures and policies while operating in a dynamic setting that facilitates rapid staff turnover. However, these journals constitute an important training and mentoring opportunity for students not provided in other extracurricular activities.⁶ Recently, Al-Busaidi et al. (2019) noted that in addition to playing a critical role in promoting academic research and publishing amongst medical students, publication in medical student journals was also a positive predictor of short- and long-term academic success.⁷ Further, The Royal College of Physicians and Surgeons of Canada devised the CanMEDS framework which outlines the competencies required of physicians in effectively meeting the healthcare needs of the populations they serve. The core tenets of this framework include seven broad areas of professional, communicator, collaborator, leader, health advocate and scholar which integrate into the overall medical expert role.⁸ It has been posited that medical student journals play an important role in building the capacity required of students in meeting the standards of the scholar, communicator and medical expert roles through the

provision of training in academic writing and editing.⁶ The presence of a medical journal provides an invaluable opportunity for medical trainees to gain first-hand experience in the research review process while being held accountable for research findings and study recommendations.

There are currently eleven Canadian medical schools with their own student-run medical or health sciences journals, with the University of Manitoba and Memorial University having composed their inaugural issue within the past five years. An overview of Canadian medical school journals can be seen in Table 1.

Table 1. Summary of Canadian Medical School Journals by Years in Operation (Adapted from Verma et al., 2011)⁶

School	Years in Operation (as of 2024)	Journal Discipline	Average Number of Issues/Year
University of Toronto	99	Medical Journal	3
Western University	92	Medical Journal	3
Dalhousie University	65	Medical Journal	2
McGill University	28	Medical Journal	2
Queen's University	25	Health Science Journal	2
University of British Columbia	21	Medical Journal	2
University of Alberta	18	Health Science Journal	2
McMaster University	18	Medical Journal	1
University of Ottawa	12	Medical Journal	2
University of Manitoba	5	Medical Journal	2
Memorial University	2	Medical Journal	2

The presence of student-run medical journals at several institutions across Canada has served as an outlet for students to foster creativity and develop original ideas individually or in collaboration with peers and supervisors. These established journals have shown significant benefit for medical student development as well as medical research and practice as evidenced by their purpose and longstanding histories. Additionally, Levine et al. (2019)⁹ found that collaboration between medical and biomedical graduate students in these initiatives fostered a collaborative environment, as well as development of respect for each other's professions. These efforts may also allow for continued collaboration in professional settings important to the advancement of medical research and practice.

While most Canadian medical graduates successfully match to residency programs, the ability of students in the prior three graduating classes to participate in visiting electives was hindered by the COVID19 pandemic. This lack of opportunity, while an unfortunate yet necessary decision by The Association of Faculties of Medicine of Canada, limited the opportunity for medical students in the Canadian Residency Matching Services (CaRMS) match for disciplines not offered through their institution. Contributing to this challenging match process is the increasing level of competition to secure a residency position resulting from fewer positions available per applicant over time, and a lack of clear selection committee expectations.^{10,11} Building on this point, previously published projections indicated that the number of current year unmatched Canadian medical graduates, along with those entering the match after failing to secure a position in previous years, will be greater than 100 individuals in the next iteration of the process.¹² The opportunity to publish in and participate on a faculty-endorsed editorial board serves to increase the competitiveness of undergraduate medical students in their CaRMS applications. Results from Lakoff (2020)¹¹ found that the number of research activities undergraduate medical students were involved in was significantly associated with the odds of being matched to a first-choice iteration.

Evidently, student-led medical journals have the potential to play a significant role in fostering interdisciplinary creativity and collaboration, while simultaneously providing a boost to editorial board members competitiveness in matching to preferred residency destinations.

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