From mentee to mentor: reflections on a pre-medical student mentorship program for underrepresented groups in medicine

Du mentoré au mentor : réflexions sur un programme de mentorat d'étudiants en prémédecine pour les groupes sous-représentés en médecine

Carl Zhou,^{1,2} Andrew Toyin Olagunju^{2,3}

¹Michael G. Degroote School of Medicine, McMaster University, Ontario, Canada; ²Department of Psychiatry and Behavioral Neurosciences, McMaster University/St. Joseph's Healthcare Hamilton, Ontario, Canada; ³Discipline of Psychiatry, The University of Adelaide, Adelaide, SA 5000, Australia

Correspondence to: Andrew Toyin Olagunju, MBBS, MSc, PhD, Department of Psychiatry and Behavioral Neurosciences, McMaster University, 100 West 5th Street, Hamilton, Ontario, L8N 3K7; email: olagunja@mcmaster.ca

Published ahead of issue: Dec 5, 2022; published: Sept 8, 2023. CMEJ 2023, 14(4). Available at https://doi.org/10.36834/cmej.76360
© 2023 Zhou, Olagunju; licensee Synergies Partners. This is an Open Journal Systems article distributed under the terms of the Creative Commons Attribution License. (https://creativecommons.org/licenses/by-nc-nd/4.0) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is cited.

Introduction

Governed by the tenets of social accountability, the Association of Faculties of Medicine of Canada (AFMC) pledged in its *Future of Medical Education in Canada* report to increase diversity among medical students by advocating for eliminating barriers to admission.¹ The AFMC's focus on diversity is guided by the understanding that a physician workforce representative of Canadian society would serve the population's health care needs more effectively.¹

Today, Canadian medical students disproportionately hail from the highest income-earning families, whereas certain sociocultural and economic groups are underrepresented.² In light of these disparities, medical schools must devise innovative methods to improve diversity should they hope to achieve their stated mission. One such innovation is the development of pipeline mentorship programs, such as the Community of Support (COS), to connect students from underrepresented communities with a career interest in medicine with those within the medical education system.¹

COS is a University of Toronto Faculty of Medicine affiliated initiative that provides longitudinal medical school application support to students who identify as black,

Indigenous, and people of colour (BIPOC), persons with disability, or economically disadvantaged.³ It serves as an umbrella program for several initiatives focusing on premedical student mentorship, Medical College Admission Test (MCAT)⁴ support, and networking opportunities.

Based on my experience (CZ) as both a mentee and now as a mentor in COS, we present a narrative analysis of the Canadian medical school application process. Included in this paper are the most impactful issues that I encountered as a COS mentee-medical school applicant and later as a COS mentor, as well as suggestions to improve the experiences of both mentees and mentors within similar programs.

The applicant-mentee experience

The resources that describe the path toward gaining admission into Canadian medical schools are often limited, involving broad searches for information online or by word of mouth. These sources are also often time-consuming while yielding incomplete results. While the availability of information has increased with the proliferation of multimedia content and the expansion of education, diversity, and inclusivity (EDI) initiatives in medicine, reliable resources remain scarce. It would be helpful to

have a compendium of Canadian application-related information assembled from reliable sources.

The accessibility of information is another area in need of improvement. Official sources often do not publish detailed know-how and hidden-curriculum knowledge concerning the admissions process.⁵ This information is best elicited from current medical students. Unfortunately, underprivileged students are more likely to lack the relevant social capital compared to their more privileged peers to access the information easily.⁶ Thankfully, COS's mentorship program has been especially effective in bridging this gap. Through its student-run chapters at various universities, COS has been able to recruit premedical students and pair them with medical student mentors.³ Some chapters have also received government funding to run mentorship programs for high school students.3 Other mentorship programs should adopt this or similar models.

Stakeholder organizations should prioritize financial aid to pre-medical students for the costs associated with the application process. Government loans do not cover extracurricular expenses such as assessment fees (e.g., MCAT, Computer-Based Assessment for Sampling Personal Characteristics),7 application fees, and transportation/accommodation costs for interviews. Students from underprivileged backgrounds may be discouraged from applying as a result.8 COS has supported this end via its MCAT fee assistance program. Although initially underused, the program saw an increase in users within one year following the inclusion of both pre-medical students and former medical school applicants on the outreach committee.9 Medical schools and mentorship programs should include student and trainee stakeholders in their decision-making bodies regarding financial aid.

The mentor experience

Diversity within the mentor community should be encouraged. It is easier for mentors to empathize with mentees in their shared experiences of underrepresentation.¹⁰ Correspondingly, mentees expressed that when there was a representation of communities they identified with among the mentors, they were more willing to be open due to feeling safer and more accepted. This sentiment also holds true for patient attitudes toward physician diversity. 11 Increased diversity among mentors would allow mentees to select their mentors based on shared identities. Ultimately, increasing diversity within the medical community is crucial for

realizing equity in our education and health care delivery;¹² encouraging diversity among mentors would further this goal.

There remain pre-medical students who are unaware of the resources to support them. Most of my mentees learned about COS in their third or fourth years of university. Some expressed that they would have made fewer application-related mistakes if they had received guidance when they first decided to pursue medicine. Thus, accessing the value offered by COS early in one's academic career should be prioritized. Although mentorship initiatives continue to grow,³ further outreach that is targeted and effective would be beneficial to pre-medical students. Existing university chapters should take on this task with guidance from the COS leadership.

Conclusion

We highlighted some of the most impactful issues encountered as both a COS mentee and mentor. A strength of the pipeline mentorship model is that it promotes program self-sustenance, with cycles of underrepresented students joining as mentees, gaining admission to medical school, and subsequently becoming mentors, thereby ensuring program longevity and establishing a "community of support." Similar initiatives should consider expanding to include other healthcare professional programs since sociocultural and economic disparities are not limited to the field of medicine. 13,14 Although mentorship programs continue to tackle the challenges described in this paper, official support from universities and medical schools would likely amplify the impact of these programs. This support might include financial aid, information sharing, institutional endorsement or ownership, and support for mentors to encourage their engagement (e.g., academic credit, official acknowledgment). Hopefully, these recommendations promote the goal of increasing diversity among medical students through the reduction of barriers to admissions.

Acknowledgments: We would like to thank the Community of Support team for their continued work in helping underrepresented and underprivileged students achieve their dreams.

Conflicts of Interest: None. Funding: None.

References

- Association of Faculties of Medicine of Canada. The Future of Medical Education in Canada (FMEC): A collective vision for MD education. 2010. Available at: https://www.afmc.ca/sites/default/files/pdf/2010-FMEC-MD EN.pdf [Accessed Nov 10, 2022].
- Khan R, Apramian T, Kang JH, Gustafson J, Sibbald S.
 Demographic and socioeconomic characteristics of Canadian medical students: a cross-sectional study. *BMC Med Educ*. 2020;20(151). https://doi.org/10.1186/s12909-020-02056-x
- Okafor I, Phillips L. Shifting the paradigm in outreach to underrepresented groups [version 1]. MedEdPublish. 2018;7:286. https://doi.org/10.15694/mep.2018.0000286.1
- Association of American Medical Colleges. 2022. Taking the MCAT® Exam. [Internet] Available at: https://studentsresidents.aamc.org/taking-mcat-exam/taking-mcat-exam [Accessed Nov 10, 2022].
- Lawrence C, Mhlaba T, Stewart KA, Moletsane R, Gaede B, Moshabela M. The hidden curricula of medical education: a Scoping Review. *Acad Med: J Assoc Am Med Coll*. 2018;93(4):648–656. https://doi.org/10.1097/ACM.00000000000002004
- Vaughan S, Sanders T, Crossley N, O'Neill P, Wass V. Bridging the gap: the roles of social capital and ethnicity in medical student achievement. *Med Educ*. 2014;49(1):114-123. https://doi.org/10.1111/medu.12597
- Altus Assessments. 2022. What is Casper? [Internet] Available at: https://takealtus.com/casper/ [Accessed Nov 10, 2022].

- 8. Christophers B, Marr MC, Pendergrast TR. Medical school admission policies disadvantage low-income applicants. *Perm J*. 2022;26(2):172-176. https://doi.org/10.7812/TPP/21.181
- Phillips C, Olaiya OR. Making room at the table: expanding the MCAT fee assistance program in Canada via student and trainee representation. *Acad Med: J Assoc Am Med Coll*. 2022;97(8):1098–1099. https://doi.org/10.1097/ACM.00000000000004479
- Smith SS. Race and trust. *Annu Rev Sociol*. 2010;36(1):453–475. https://doi.org/10.1146/annurev.soc.012809.102526
- Traylor AH, Schmittdiel JA, Uratsu CS, Mangione CM, Subramanian U. The predictors of patient-physician race and ethnic concordance:a medical facility fixed-effects approach. *Health Serv Res.* 2010;45(3):762-805. https://doi.org/10.1111/j.1475-6773.2010.01086.x
- Saddler N, Adams S, Robinson LA, Okafor I. Taking initiative in addressing diversity in medicine. Can J Sci Math Tech Educ. 2021;21:309–320. https://doi.org/10.1007/s42330-021-00154-6
- Englund H. Relationship between marginality and minority status in undergraduate nursing students. *J Nurs Educ*. 2018;57(6):339-346. https://doi.org/10.3928/01484834-20180522-04
- Hammond JA, Williams A, Walker S, Norris M. Working hard to belong: a qualitative study exploring students from black, Asian and minority ethnic backgrounds experiences of preregistration physiotherapy education. *BMC Med Educ*. 2019;19:372. https://doi.org/10.1186/s12909-019-1821-6