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Canadian Medical Education Journal

Editorial

Equity, diversion, and inclusion in medical school teaching

Équité, diversité et l'inclusion dans la formation médicale

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Leaders are generally thought of as extroverts: energetic, outgoing, and comfortable in front of a crowd.[1] Indeed, extroverts disproportionately are appointed to leadership positions compared to their prevalence in the general population.[2] While extroverts have many qualities that can contribute to leadership roles, introverts also have several qualities suitable for leadership positions: thoughtful and reflective with strong emotional intelligence.[3,4] Instead, introverts are considered shy, quiet, and lacking the confidence leaders should have. Faculty leaders and teachers may discriminate against introverted individuals based on these misunderstandings. This is an equity issue that has consequences for medicine and medical education.

We see this as a larger problem. Often, students and residents are described as "quiet" with negative connotations.[5] Trainees may be quiet due to a tendency towards introversion but there are other reasons. They may be preoccupied with other worries, feeling ill, or concerned about getting the wrong answer. Many individuals who, from time to time, find themselves quiet are harmed by the assumptions and inferences that we make about their behaviour. However, individuals from minorities, women, and underprivileged groups pay a higher price.[6] If medical education is to truly embrace the principles of equity, diversity, and inclusion, we must recognize the intersectionality between introversion, gender, and culture to stand against the stereotypes and discrimination introverted individuals face.

Therefore, medical education leaders and faculty teachers must not simply dismiss individuals as "quiet," but instead focus on the diversity of strengths within groups and embrace new ways of thinking and working with them. For example, much of medical education in the pre-clerkship years occurs in group settings in which introverted individuals and other quieter students may participate less compared to more extroverted classmates. As a result, quiet individuals are often dismissed as lacking knowledge and/or interest. Many small group activities are biased in favour of extroverted students and may put individuals who benefit from careful reflection and learning at a disadvantage.[7] We need to bust the myth that silence may not indicate disengagement nor a lack of knowledge.

To truly embrace the principles of equity, diversity, and inclusion, medical educators need to respect all their learners and become adept at teaching strategies that can benefit a diverse student body. This may be done by giving students the flexibility to choose learning activities and/or by using different approaches to increase participation from quieter individuals (which, happily, also have many benefits for all learners). Teachers could divide larger groups into smaller groups (≤5 individuals), encouraging increased participation of quieter students. Some polling technology allows all individuals to contribute to discussions rather than simply those who speak up first. Teachers could use written activities in small groups where all students write out their thoughts on a particular question and share them with partners. This approach might take the form of "think pair share" or the more active and lesser-known "silent brainstorming." In addition, courses could include chat functions or online quiz games. Improving participation among quieter students removes unnecessary barriers to success while improving the education of all learners.

Quieter trainees in medicine and medical training are the object of negative assumptions and inferences and, therefore, inappropriate discrimination and lack of advancement. We must combat this situation by recognizing that introverted and quieter learners possess many positive qualities desirable in physicians and physician leaders. We should also adopt different approaches to groups and teams that encourage and support the participation, introverts and other quieter individuals included. By recognizing the value of contributions from more trainees and group members and taking steps to make participation in learning more accessible, medical education can advance equity, diversity, and inclusion in its teaching spaces and through its practices.

In this issue of the CMEJ there are, coincidentally, several articles that deal with issues of equity, diversity, and inclusion. From Schrewe et al. (training for francophone communities) to Marthyman and Nimmon (socio cultural challenges of immigrant international students), Madani Kia (including newcomer care in medical education), Kristin Black and team (postgraduate indigenous admissions pathway).

Original Research

Protection, freedom, stigma: a critical discourse analysis of face masks in the first wave of the COVID-19 pandemic and implications for medical education by Huo and Martimianakis[9] highlighted how discussions around face masks evolved throughout the COVID-19 pandemic. Initially seen as protective gear, they became symbols of rights, politics, and stigma. The study suggested that medical education needs to include a broader understanding of masks, recognizing their roles in healthcare during pandemics.

Schrewe et al. wrote Educating future physicians for francophone official language minority communities in Canada: a case study.[10] They explored participants' experiences with FrancoDoc—a program designed to address health equity gaps by aiding francophone medical students in English-language medical faculties. Despite high motivation among participants, barriers like time constraints still posed challenges. Their results highlighted the need for enhanced support for initiatives like FrancoDoc.

The race that never slows: Otolaryngology - Head and Neck Surgery residency applicant parameters over time by Kaylie Schachter and co-authors[11] explored what types of extracurricular activities students are doing to try and increase their likelihood of a successful match to Otolaryngology–Head and Neck Surgery programs. They found that applicants reported consistently high extracurricular activities and invested considerable time and energy in activities beyond the formal curriculum–possibly contributing to medical student burnout.

Exploring how Immigrant international medical graduates successfully manage complex sociocultural challenges by Marthyman and Nimmon[12] used the lens of sociocultural learning theory to gain insights into how immigrant international medical graduates (I-IMGs) successfully manage sociocultural challenges. One common theme of participants was the humbling experience of grappling with inner struggles and emotions.

In this French language article, Le coaching narratif collaboratif en médecine : une étude de cas avec une médecin résidente et une médecin en pratique à l'urgence, Truong et al[13] explored the shift towards competency based medical education (CBME) in medical education, and how use of coaching can be a tool for attaining the competencies while continuing professional development.

Reviews, Theoretical Papers, and Meta-Analyses

Can you teach a hands-on skill online? A scoping review of e-learning for point-of-care ultrasound in medical education by Maya Harel-Sterling[14] explored the extensiveness of literature regarding the benefits and limitations of e-learning for teaching point-of-care ultrasounds. The author found that knowledge transfer can likely be taught exclusively online. However, skills like image interpretation may require a blended approach to teaching.

Brief Reports

Han and team wrote Investigating the experiences of medical students quarantined due to COVID-19 exposure.[15] They used students' experiences isolated due to COVID-19 exposure to provide recommendations for future interventions. Their recommendations included improved communication and support.

Ross et al wrote A geographic-location-based medical school admissions process does not influence pre-clerkship and licensing examination academic performance.[16] In their brief report, the authors explored how the admissions process at their medical school, which prioritizes candidates with ties to the region, affects students' academic performance. The results suggested that this geographic-based admission scoring does not appear to influence future academic performance.

The Quality of Assessment for Learning score for evaluating written feedback in anesthesiology postgraduate medical education: a generalizability and decision study by Choo et al.[17] studied whether Quality of Assessment for Learning (QuAL) scores align with how helpful students and competency committee members find anesthesia feedback. The findings suggested that faculty and trainees can reliably use the QuAL score to assess narrative feedback—making it a valuable tool for various postgraduate programs.

Kristin Black and team reported on Perspectives of Indigenous medical students on a postgraduate Indigenous admissions pathway[18] to explore factors influencing Indigenous medical students' choice of residency training programs. They found location, family proximity, mentorship from Indigenous physicians, and community involvement were the most important factors.

You Should Try This!

Cartographier les activités de recherche en responsabilité sociale en santé d'une communauté internationale en émergence by Dubé and team[19] used an environmental scan method to evaluate the research done by an international Francophone network on social accountability in health. The team used a questionnaire, which could serve as a reference in other institutions and networks within the international Francophone community. This is a French-language article.

Assessing the effectiveness of a cadaveric workshop in improving resident physicians' confidence in performing ultrasound-guided joint injections by Jane Thornton and team[20] shared how ultrasound-guided cadaveric workshops were a valuable educational resource for medical education. They noted that these workshops provided residents with an early introduction to the process so they could perform these injections independently in a clinic setting.

Ruparelia and co-authors wrote Creation and cost-evaluation of a student-run podcast in ophthalmology.[21] The team described their cost-efficient, high-quality, and educational ophthalmology podcast. Their methods could be used for other similar podcasts to expand technology-based medical education further.

Delivering Point-of-Care ultrasound teaching using a video conferencing technique by Tang et al.[22] outlined a method for virtually teaching point-of-care ultrasound (POCUS). Their approach, which used dual screens to view the ultrasound and instructor simultaneously, is an easily implementable solution for when a hands-on approach is not possible.

Commentary and Opinions

In their commentary, ChatGPT and medical education: a new frontier for emerging physicians, Waisberg et al.[23] described the benefits and pitfalls of using the artificial intelligence software, ChatGPT, as a medical education tool. They noted that as the use of AI rapidly increases, doctors will need to develop the skills to use and interpret AI in clinical settings while mitigating potential errors.

In A new model of understanding 'service' versus 'education' in medical education, Park, Zhou, and their team[24] presented a new framework for understanding the relationship between service and education. They proposed that service and education are interdependent for the development of medical professionals.

In the commentary, Lost in translation: the case for embedding newcomer care in medical education by Tina Madani Kia,[25] Madani Kia called for medical programs across Canada to continue to develop their curriculum on immigrant and refugee care. The author noted that migrants and refugees represent 25% of the population. As such, Canadian medical schools would benefit from developing a curriculum based on newcomer health.

It's time to rethink time (management) by Kinnear and O'Toole[26] challenged physicians to reconsider their relationships with time to re-imagine what time management really means.

Images

Yaghy's The cornerstone of medical care[27] is a digital image of a personal interaction between a doctor and patient. His image highlighted the importance of the physician-patient relationship beyond just a clinical exchange.

Rendon, Ventrella, and Donovan created a mosaic of smiling headshot portrait badges to be worn over PPE in their image, Revealing and commemorating the faces and warmth of the COVID-19 frontline.[28] This is the cover artwork for this issue that includes articles about the symbolism of wearing masks during COVID, the experiences of medical students who were quarantined, and the teaching of ultrasound techniques remotely.

Enjoy!

Marcel D'Eon
CMEJ Editor-in-Chief

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