

Building a Health Promoting Learning Environment in Canadian Undergraduate Medical Education

April (YiChen) Liu (Michael G. DeGroot School of Medicine, McMaster University)

Jacqueline Mincer (Dalhousie University)

Rena Far (Cumming School of Medicine, University of Calgary)

John Talia (Schulich School of Medicine, Western University)

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POSITION PAPER

Summary of Position paper (150 words)

Medical training is a stressful time for soon-to-be physicians and medical faculties are becoming more conscious of the importance of addressing student health. In this paper, we examine strategies to facilitate a health promoting learning environment specific to undergraduate medical education, defined by the World Health Organization as “one that constantly strengthens its capacity as a healthy setting for living, learning and working.” These strategies can be categorized into individual-targeted strategies and systems-targeted strategies. Strategies centered on the individual encourage personal development among students and supports that should be available. Systems-targeted strategies, on the other hand, consider the multiple elements involved in creating a health promoting learning environment and includes policies that impact the entire learning environment. There are also specific time points that serve as unique opportunities to foster a health promoting learning environment. These time points are broken down into preclerkship, transition to clerkship, clerkship, and transition into residency.

CONCERNS

1. Medical students suffer higher rates of anxiety, depression, and burnout compared to the general population.
2. There is a lack of standardization across Canadian medical schools for adoption of evidence-based approaches that promote medical student wellness.
3. There are opportunities for raising awareness among medical students and faculty about identifiable and modifiable stressors that exist within medical training, and particularly, how to address them.
4. Failure to address student wellness early on in medical training risks exacerbating health outcomes for future physicians and their patients.

Background

Medical training is a stressful and challenging time for soon-to-be physicians. During medical school, students grasp the idea of having patients' lives in their hands and experience the stress of changing clinical environments on a weekly basis. At the same time, students may feel social isolation from decreased time for personal care and frequent relocations. This leaves students vulnerable to psychological distress including depression, anxiety, and burnout [1]. In a Canadian Federation of Medical Students survey set out to medical students in 2017, 37% of Canadian medical students met the criteria for burnout [2].

Medical faculties are becoming more conscious of the importance of addressing student health and challenging the culture in medicine that has traditionally put a lower priority to physician health [3]. In this position paper, we examine strategies that facilitate a health promoting learning environment (HPLE). A HPLE is defined by the World Health Organization as "one that constantly strengthens its capacity as a healthy setting for living, learning and working [4]."

These strategies can be categorized into individual-targeted strategies and systems-targeted strategies. Strategies centered on the individual include policies and procedures designed to encourage personal development among students as well as outline opportunities for faculty training, to ultimately foster a health promoting learning environment. Systems-targeted strategies, on the other hand, consider the multiple elements involved in creating a health promoting learning environment and includes policies that support educational pedagogy and impacts the entire medical learning environment. There are also specific time points during the undergraduate medical training that serve as unique opportunities to foster a health promoting learning environment. These time points are broken down into preclerkship, transition to clerkship, clerkship, and transition into residency. Targeted interventions should be put in place in response to specific stressors, such as the residency matching process. The CFMS endorses the following statements to support the promotion of a HPLE across Canadian medical schools.

Principles/Stance

1. Educational programs on topics such as self-regulated learning habits and personal health promotion are important in undergraduate medical education to teach students about health promoting topics.
2. Faculty mentorship and peer support help provide support for students.
3. Accessible career exploration opportunities and career planning/academic advising services are important for students.
4. It is important to have clear, visible, and accessible standardized policies for students through all stages of training. These include policies to address student accommodation, student safety, and student mistreatment.
5. Transparency, clear expectations, and bidirectional feedback help improve students' experiences through clinical rotations.
6. Ongoing feedback and research is important to formally assess and improve the effects of wellness initiatives.

Concerns

1. Medical students suffer higher rates of anxiety, depression, and burnout compared to the general population.
2. There is a lack of standardization across Canadian medical schools for adoption of evidence-based approaches that promote medical student wellness.
3. There are opportunities for raising awareness among medical students and faculty about identifiable and modifiable stressors that exist within medical training, and particularly, how to address them.

4. Failure to address student wellness early on in medical training risks exacerbating health outcomes for future physicians and their patients.

Individual-Targeted Recommendations

1. Throughout medical school, students should receive training and education about how to manage their personal health through the development of a wellness curriculum. This can be broken down into two concrete suggestions as outlined below:

1a. "Self-regulated" learning are teachable habits that should be promoted [5].

Poor mental health outcomes such as anxiety, depression, and suicidal ideation are unfortunately more prevalent among medical students than the general population. A proactive approach must be taken by schools to promote self-regulated learning strategies that are protective towards students' mental health. These self-regulated habits encourage students to take ownership of their own learning through self-setting realistic goals and reflection [6-7] and have been shown to facilitate positive knowledge-seeking behaviours that maximize outcomes [8]. Evidence-based interventions that have been shown to further strengthen self-regulation include relaxation, mindfulness and cognitive behavioural strategies [9].

1b. Risk factors of burnout should be acknowledged and health-protective strategies should be taught throughout medical school.

To decrease rates of burnout, faculty and students should be made aware of the risk factors that increase burnout at specific stages of training. Teaching sessions should be incorporated into and offered throughout the curriculum. Students should be provided with guidance to reflect on the intrinsic and extrinsic risk factors linked to poor mental health outcomes, and the opportunity to take ownership of these factors [10].

Wellness education in medical school should include exploration of self-care practices, with emphasis on helping students develop individual practices rather than teaching predetermined activities. Health-promoting topics such as sleep hygiene, mental health, fitness and nutrition should also be included in the curriculum as a foundation on which to build healthy lifestyle habits [11]. As Canadian medical schools gradually begin to transition to competency-based evaluation models, there is an opportunity to incorporate teaching and supporting personal wellness as a core competency in medical training [12].

2. Canadian medical faculties should develop and provide students with a formal, longitudinal, faculty mentorship program.

Formal faculty mentorship programs are an avenue to provide safe mechanisms for students to seek personal advice without worries about impacting their progression. Faculty advisors should set aside time for regular meetings with their mentee(s), and, to avoid any conflicts of interest, should not be involved in student assessments [13]. Mentors facilitate student support through offering insight on the students' situation, assisting the student to learn self-care strategies, and providing information on external resources such as counselling. Mentors should be recognized for the effort invested into this program so that continuous faculty involvement can be maintained [14].

3. Canadian Medical Faculties should provide accessible peer support groups for students across the different stages of medical education.

Support by peers is a method by which Canadian medical schools encourage discussion about current struggles to normalize fears and insecurities about their educations and futures and to encourage help-seeking behaviours [15-17]. The goal of peer support is to encourage students to share their thoughts and feelings, normalize emotional barriers to progression, and negative feelings of isolation [18-19].

4. Access to support services and wellness check-ins should be strongly suggested across Canada. When designing wellness-based initiatives, students should be consulted and involved in their design, implementation and follow-up evaluation.

Student Affairs should facilitate routine check-ins with students throughout medical training, especially during identified risk points (e.g. examination periods) [20]. Additional wellness-based initiatives should be provided to supplement these check-ins. These wellness-based initiatives are most effective when key stakeholders are involved in their design and implementation. Student input can help identify stress factors specific to medical trainees and guide development of self-care, health promotion and burnout prevention activities to best suit students' interests and needs [21]. When assessing the effectiveness of wellness programs, evaluations should focus on skills learned, not just student participation [12].

5. To address the feelings of uncertainty and anxiety around career planning, Canadian Medical Faculties should strive to provide:

5a. career planning services and academic advising for all students

Career planning services and academic advising [22] should be available to all students with in-person meetings being the goal, but offering email, phone and video conferencing when in-person meetings are not achievable [23]. These services should be accessible to students and compatible with the students' schedule [23].

5b. opportunities to explore the fields of medical specialties through protected time for conferences and other academic events

To explore the vast field of medical specialties, students should be encouraged to engage in extracurricular learning opportunities, including conferences, seminars, committee/organizational meetings. Undergraduate Medical Education should offer protected time for students to participate in conferences, seminars, or any other teaching sessions.

5c. early exposure to clinical activities

Medical schools should foster and provide opportunities for preclerkship students to participate in longitudinal electives to be able to further explore specialties while creating mentorship relationships with faculty [7]. Additionally, early introduction to clinical settings has been shown to reduce symptoms of depression, anxiety and stress in preclerkship students as they transition to clerkship [12].

6. Canadian Medical Faculties should try to provide support and avenues to reduce the financial burden for students through guidance and financial assistance.

According to the Association of Faculties of Medicine of Canada, medical school graduates have the median debt of \$100,000 and 42% of students reporting debt of \$120,000 or more [24]. Medical schools should encourage students to start financial planning before starting medical school, which can include:

- Arranging a meeting with a financial advisor that specializes in medical education
- Exploring and applying for a Line of Credit
- Creating a budget for their time in medical school
- Applying for available bursaries, grants and scholarships including government loans

During clerkship, students are introduced to mandatory away-rotations, where students are expected to absorb the associated financial costs, further adding to students' financial burdens. Where possible, medical schools should try to mitigate unnecessary stress by providing financial coverage for accommodations and travel expenses during these away rotations.

Systems-Targeted Recommendations

7. Canadian Medical Faculties should have standardized, student-centred, and highly visible policies for:

7a. accommodating students' needs

A standardized, student-centred accommodations policy should be in place to assist students dealing with illness or emergencies in determining how best to proceed forward with their studies. Additionally, numerous statements have endorsed standardizing university policies for medical schools to accommodate disabilities for all stages of training [22]. These policies help to ensure flexibility in medical education so that students' needs and interests are protected when they are faced with adverse events or periods of suboptimal health, and ultimately still receive proper training in becoming competent healthcare professionals.

7b. reporting student mistreatment

Medical students report significant harassment, mistreatment, discrimination, and hazards [25-28]. This adds an additional layer of pressure that many students are not prepared for nor do they have the necessary resources to prevent. As such, students should be made aware of reporting policies for misconduct. It is imperative that these processes are easily accessible and transparent. Additionally, responses to these reports should be prompt and achieve a fair and just solution to ensure that the student in question does not have any reservations in continuing their medical education.

8. Medical faculties and hospitals should update policies concerning safety and security of students.

At different stages in training, students will rotate through different clinics, hospitals or other off-site locations. To offer a healthy learning environment, it is important to ensure that students feel safe and secure in all training locations. This includes offering secure areas to store belongings, safe sleeping areas during on-call shifts (e.g. equipped with locked doors and storage areas), offering after-hours support for late-night shifts (e.g. security escorts and/or safe transportation home).

9. Undergraduate medical offices should improve transparency about students' roles and responsibilities at each level of training as well as clearly outline students' expected scopes of practice.

Staff and residents should be made aware of, understand, and respect students' limited scopes of practice. Students should not be expected to, or be penalized for, refusing to make clinical decisions beyond their level of training. Creation and distribution of orientation manuals outlining expectations, responsibilities, and work schedules can improve transparency and relieve feelings of uncertainty.

10. Canadian Medical Faculties and hospitals should mandate continuous verbal and written feedback related to student and staff performance.

Routine exchange of prompt, constructive feedback between students and tutors/preceptors can help encourage and normalize bidirectional feedback. To keep faculty accountable, there should be semi-annual teaching evaluations of preceptors by program directors at each level of training. Preceptor evaluations should include a summary of student feedback as well as constructive "teaching tips" for improvement [29].

11. Canadian Medical Faculties and health partners should support research in the areas of:

11a. understanding methods to promote wellness in medical learners

Researchers worldwide continue to investigate the disproportionate incidence of mental illness in medical students compared to the general population. Similarly, Canadian research on mental health outcomes in medical students should remain ongoing. This research helps ensure that wellness initiatives are evidence based.

11b. evaluating the impact of their initiatives.

Additionally, to understand the impact of these wellness initiatives, they should be evaluated after their implementation. Medical schools should be champions of continued research in medical student health and further development of evidence-based strategies to improve medical student wellness.

Time point Specific Recommendations:

12. Preclerkship: Canadian medical school curricula should be structured in a student-centred manner that is organized, concise, and clinically relevant.

Academic pressure is among the chief sources of stress for medical students, especially at the preclerkship level [30]. Elements of the medical school curriculum itself, including the content, organization, and evaluation methods, all have an influence on academic pressure and should therefore be designed as much as possible with student wellness in mind.

Curriculum content is a vast, nuanced topic difficult to cover comprehensively in this context; however the general approach we recommend is to increase student self-motivation and engagement with the content through using more active learning modalities such as problem-solving or team-based learning sessions, in contrast to the traditional lecture [12]. Regarding curriculum organization, schools should aim to reduce unnecessary cognitive burden on students through efficient, consistent class scheduling [23] and through decreasing redundancy in the curriculum [7]. Finally, we support continued use of a pass-fail grading system in Canadian medical schools as this has been shown to be beneficial for student wellbeing [6].

13: Transition to Clerkship: Canadian Medical Faculties should provide transition courses to ease transitioning from preclerkship to clerkship [31].

These courses should: 1) educate students on their clinical duties; 2) expose students to the routines and norms of professionals the students may work with (e.g. interdisciplinary shadowing opportunities with other healthcare team members) [29]; and 3) provide students with training on patient safety, occupational health, electronic health records, and discharge planning [32]. Knowledge about these matters will reduce levels of self-reported uncertainty and help students to better understand their role in healthcare settings [33].

14. Clerkship: Canadian Medical Faculties should take an active role in protecting clerks from mistreatment during rotations through the use of policies and clear communication with the healthcare team.

During clerkship, students begin taking on a more active role in patient care and interact more frequently with other members of the healthcare team. Policies should explicitly warn against mistreatment of clerks (e.g. harassment, coercion, intimidation etc.) by peers, staff, residents and/or supervisors as well as provide instructions about reporting mistreatment while protecting learner confidentiality. At the start of each rotation, clerks should receive clear instructions about their upcoming rotation, including but not limited to preceptor expectations, on-call schedules and post-call rules. Clerks should not be coerced into working longer than expected hours.

15: Clerkship: Canadian Medical Faculties should develop and provide its students with a rotation-specific liaison programs.

During clerkship placements and electives, a formal position should be established among residents to serve as a liaison to students. Resident positions could be specific to specialty departments, and where unavailable, could be filled by staff physicians [29].

16. Transition to Residency: Canadian Medical Faculties should ensure that soon-to-be residents are sufficiently prepared for their next stage of medical education in aspects beyond medical knowledge, including those pertaining to long-term personal wellness.

It is imperative that we become aware that medical education and the concomitant impacts it has on mental health and wellness do not end with clerkship; it continues well into residency and into practice [34]. It is important to:

- Advertise mental health initiatives amongst residency programs during CaRMS tours to prevent pre-emptive stress and to prevent deterrence of students from a specialty because of mental health concerns [35].
- Survey students during high stress and burnout-prone times to ensure that discreet burnout is not occurring and to promote student well-being [35].
- Educate residents-to-be on common topics of concern, such as: proper shift work and work-life balance, personal safety with aggressive patients, proper personal protective equipment usage, personal and professional conflict resolution, and non-medical aspects of transition to practice (billing practices, modelling, hiring, etc.) as part of a formal wellness curriculum [35]

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