

## Engaging intersectionality in medical education

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### Abstract

Medical education (ME) plays a critical role in shaping future healthcare providers; however, systemic inequities persist due to biases embedded in both the formal and hidden curricula. The hidden curriculum—unspoken values, norms, and structural inequalities—reinforces implicit biases that influence professional identity formation, clinical decision-making, and patient outcomes. This theoretical paper examines how overlapping social identities can shape health experiences and access to care, and establishes a foundation for tackling systemic inequalities by advocating for the integration of an intersectional framework into ME. As healthcare institutions increasingly focus on diversity and inclusion, we aim to demonstrate that integrating intersectionality theory into ME is a timely and necessary step towards training physicians to meet the needs of diverse patient populations and reduce care disparities. We highlight how the absence of intersectional perspectives in medical training results in narrow clinical frameworks, reduced cultural competency, and the perpetuation of health disparities through the hidden curriculum. Furthermore, we outline practical strategies for embedding intersectionality into ME, such as building an intersectional curriculum, incorporating diverse case scenarios, and establishing institutional task forces. Despite potential challenges, such as resistance to change and resource constraints, implementing intersectionality in ME remains essential and can be attainable through institutional commitment and collaborative approaches. By using intersectionality as a guiding framework, ME can better prepare future healthcare providers to deliver equitable patient centered care while reducing the systemic disparities in healthcare.

### Résumé

*Résumé français à venir.*

## Introduction

Medical Education (ME) plays a vital role in developing future leaders and practitioners of healthcare. However, the persistence of systemic disparities poses a significant challenge and reveals notable gaps in diversity within academic medicine.<sup>1</sup> A 2023 policy report on the state of women and leadership in global health showed that while women hold 70% of health care worker jobs globally, they only hold 25% of health care leadership roles and face a 'glass ceiling' when attempting to enter leadership roles.<sup>2</sup> This lack of sex/gender equity is even more pronounced when considering other social factors such as race, disability, sexual orientation, socioeconomic status, immigration status, and so much more.<sup>3</sup> Studies investigating the intersection of race and sex/gender in the context of wage disparities reveal that women of colour earn significantly less than white women, men of colour, and white men.<sup>3</sup> Turning our focus to the patient experience, research shows that the implicit biases of healthcare providers can strongly affect their interactions with patients.<sup>4</sup> For instance, BIPOC (Black, Indigenous, and People of Colour) patients are less likely to receive adequate pain management compared to white patients, and Lesbian, Gay, Bisexual, Trans, Queer, and Two-spirit (LGBTQ2S+) patients face worse health outcomes compared to their heterosexual and cisgender peers.<sup>4,5</sup> These disparities highlight the influence of the hidden curriculum and unspoken biases ingrained within ME, which can shape the experiences and professional identities of medical learners.<sup>6</sup> To address these inequalities, it is essential to incorporate social justice and equity into ME. By adopting an intersectional lens, medical educators and institutional leaders can gain a deeper understanding of how various levels of power and discrimination influence patient outcomes as well as the professional identity development of physicians.<sup>6,7</sup>

Specifically, interdisciplinary conversations around intersectionality open the door to essential reflections on the social principles we instill in medical students and residents and how these principles influence healthcare decisions and patient care. A recent study assessed the beliefs that Canadian medical students have about LGBTQ2S+ patients.<sup>5</sup> These students were separated into an intervention group that received training sessions from LGBTQ2S+ experts and community leaders and a control group with no interventions.<sup>5</sup> Their findings not only confirmed the presence of implicit biases but also demonstrated that education can reduce them.<sup>5</sup> Students in the intervention group significantly improved their

attitudes towards LGBTQ2S+ populations, and there were measurable improvements in their performance during simulated clinical encounters.<sup>5</sup> These findings highlight both the potential and the need for improvement in ME. A few studies have explored the integration of intersectionality into ME; however, they have primarily focused on defining intersectionality in the context of ME and emphasizing its potential value for medical training.<sup>8-10</sup> Research in ME has rarely explored the discourse on translating theory into practice. ME can be significantly advanced by research that examines the gaps intersectionality could address in conception and practice, establishes ground rules for the basic tenets of practice, maps out reasonable goals and manageable, achievable targets, and identifies potential challenges to realizing these goals.<sup>11</sup> In this regard, it is important to probe how social oppressive structures shape exclusion and inclusion, and how to practically change the system through expansive inclusion to realize value at the individual and institutional levels. The conscious, intentional inclusion of diverse social identities in research design and practice could vastly inform ME in many ways. The beginning stages may be challenging and uncomfortable, as this would require acknowledgment of the medical profession's historical roots in hierarchical and exclusionary practices.<sup>12</sup> However, the research findings and the tools they fashion could lead to greater outcomes in the design and content of medical education. As healthcare institutions increasingly focus on diversity and inclusion, our objective is to show that integrating intersectionality into ME is a timely and necessary step toward training physicians who can address diverse patient populations' needs and reduce care disparities.

## Intersectionality: a brief theoretical overview

Intersectionality, first conceptualized by Kimberle Crenshaw and bell hooks,<sup>13,14</sup> provides a critical lens for understanding how multiple, overlapping identities shape individual experiences and systemic inequities. The ontological and epistemological underpinnings of intersectionality form a framework that provides a crucial lens for examining how power, privilege, and oppression operate.<sup>13</sup> Ontologically, intersectionality rejects the idea that social categories such as race, sex/gender, and class exist as independent entities.<sup>13</sup> Crenshaw emphasizes that these social factors do not operate independently; rather, they intersect to create unique forms of oppression and privilege that influence an individual's experiences.<sup>13</sup>

Medical learners encounter varying challenges depending on their intersecting identities, and this shapes their professional paths. For instance, Black female physicians navigate both racial and gendered biases, which may affect their mentorship opportunities, professional evaluations, and career advancement.

It is important to note that the conceptual framework and the practical application of this concept are not without controversy. There are limitations in current understandings of social identities and the oppressive structures they are embedded in. Critics such as Rekia Jibrin and Sara Salem argue that intersectionality could easily be misunderstood owing to a misperception that multiple identities contribute to an accumulative form of oppression.<sup>15</sup> These identities could be a site for competing discourses of power struggle for dominance that focus on symbolic forms rather than the core meaning behind their oppressions.<sup>15,16</sup> Conceptualization of intersectionality in clearly defined social categories such as race, class, and sex/gender might generate the identity it purports to overcome.<sup>17</sup> Moreover, the social categories that intersectionality employs to define forms of oppression or discrimination, other scholars point out, may not readily allow the representation of the diversity and heterogeneity of experience.<sup>17</sup>

These concerns do not in any way call for a rejection of social constructs that enable scholarly interrogations of intersectionality. As many advocates argue, intersectionality is not a simplistic summation of social categories that are hardly exclusive to each other. Rather, the interrogation of social identities that intersectionality affords provides a crucial platform for probing the complexities of individual self and identity.<sup>15</sup> What should remain on the research agenda is a focus on how specific intersections of social identities produce unique experiences of oppression. Healthcare personnel need to be reasonably educated about and properly equipped to address the various ways that social disadvantage impacts the capacity of marginalized people to access the healthcare system. How this social disadvantage is produced, experienced, reproduced, and resisted in everyday life must be prioritized in health education research.

In addition to gaining an understanding of social constructs, health professionals would benefit from a deeper understanding of theoretical frameworks such as corporealism materialism. This perspective suggests that the human body and the mind are entirely physical and embodied.<sup>18</sup> According to theory, our thoughts, emotions,

and awareness arise from physical processes, blurring the distinction between mind and body.<sup>18</sup> This unified understanding of the body as the governing faculty shaping our interactions and identities impacts how our experiences are rooted in our physical presence within specific historical and environmental contexts.<sup>18</sup> More information on intersectionality and valuable resources have been provided in Table 1.

*Table 1. Summary of four key resources that provide an introduction to intersectionality and explain how overlapping identities shape people's life experiences.*

Resource	What It Explains About Intersectionality
Crenshaw (1989) <sup>7</sup> Demarginalizing the Intersection of Race and Sex	The foundational work that first introduced intersectionality explains that looking at race and sex/gender separately can miss the unique struggles of individuals.
Hankivsky (2014) <sup>8</sup> Intersectionality 101	A simple introduction to intersectionality that shows how different parts of a person's identity ( race, sex/gender, and class) overlap and work together to shape their life experiences.
Bowleg (2012) <sup>9</sup> The Problem with "Women and Minorities"	Explains why simply grouping people as "women" or "minorities" misses important differences and shows that overlapping identities can create unique challenges.
Samra et al. (2021) <sup>19</sup> Adopting an Intersectionality Framework in Medicine	Applies the idea of intersectionality to healthcare, explaining that patients have multiple identities that affect their health and that doctors need to understand these overlaps for better care.

### Positionality statement

As authors, we believe it is important to situate ourselves within this work; the following positionality statements reflect our perspectives and commitments.

PE is a Black African woman and settler in Canada:

*Having been born and raised in post-colonial Nigeria before moving to Canada at a young age, I am deeply aware of the challenges that immigrants, visible minorities, and women often face. These lived experiences ground my perspective and fuel my work as an advocate, scholar, and medical student. They motivate me to better understand the systemic and social factors that shape health and access to care, and to use my voice to push for equity, representation, and meaningful change.*

SF is a South Indian mixed-race woman:

*I was raised in northern Canada and educated in postsecondary institutions across Canada, the United States and Europe. These experiences have shaped my understanding of cultural diversity, systemic inequities, and global health. As a physician, professor, and academic Dean, through ongoing reflection and empathy, I strive to conduct research that is ethical, inclusive, and responsive to the communities it serves.*

PI is a continental Black African woman and settler in Canada:

*Born and raised in post-colonial Nigeria with all the markers of gender, class, and religion, among others, and transplanted into a Western scholarly architecture, I am keenly aware of the intersectionalities embedded in social inequities. My role as an advocate, scholar and community worker also humbles me as it brings to light my privileged status in exploring & interpreting voices from the margins.*

MR is a woman of visible minority status and a settler in Canada:

*Born in Afghanistan and raised in India, I am well aware of the injustices and microaggressions faced by racialized groups. I am an assistant professor, and my work focuses on exploring the experiences of health professionals from visible minorities and Indigenous communities. I understand my privileged position, which allows me to bring an inclusive perspective to my work, emphasising the need for a broader, equitable, and ethically sound approach that will shape health care delivery for everyone.*

## Intersectionality: hidden curricula and gaps

The hidden curriculum, a term coined by educational scholar Philip W. Jackson, refers to the unspoken values, norms, and behaviors that shape learners' professional identities and clinical decision-making outside the formal curriculum.<sup>19,20</sup> Unlike coursework, the hidden curriculum is intertwined with the institution's culture, daily interactions among learners, and role modelling by faculty. It influences what medical learners define as professionalism, their attitudes toward patient care, and their perceptions of one another. The hidden curriculum can reinforce positive traits such as teamwork and professionalism,<sup>21</sup> but can also promote implicit biases and systemic inequalities.<sup>22</sup> For example, if learners consistently receive clinical cases where the only time 2SLGBTQIA+ patients are included is in the context of particular diseases (e.g., HIV infection), while excluding the diversity of identities within this population, for example, socioeconomic status, disability, or immigration background, this may encourage implicit biases in the learners and lead to disparities in care. A crucial way to address the negative consequences of the hidden curriculum is by integrating intersectionality into ME. Intersectional approaches to content and design can reveal the implicit biases, stereotypes, and inequalities

embedded in medical training environments.<sup>6,13</sup> When an intersectional lens is employed, it is easier to see that ME often normalizes specific patient identities while ignoring or marginalizing others. For example, many clinical questions in undergraduate medical education will depict white, male, able-bodied individuals as the typical patient. This is a reflection of the longstanding androcentrism in medicine, ME, and medical research.<sup>23</sup> This deliberate or unintentional exclusion of diverse identities in something as simple as test questions for learners can lead to gaps in ME.

Furthermore, when we neglect intersectionality in ME, we risk perpetuating healthcare disparities and negatively impacting the cultural competency of physicians. Without intersectional training, medical learners may default to a stereotypical approach to medical treatment or have biased diagnostic assumptions.<sup>24,25</sup> For example, the common misconception that black people feel less pain has led to the undertreatment of pain in black individuals and plays a key role in the higher maternal mortality rates seen in black women.<sup>25</sup> In another study, Pourat et al. found that Hispanic, African American patients in the U.S. are less likely to receive cholesterol checks in diabetes management compared to their white counterparts.<sup>26</sup> These examples highlight how implicit biases in medical practitioners can contribute to healthcare disparities; therefore, addressing these biases during ME is essential. If medical learners are not challenged and taught how to navigate their biases (either in the written curriculum or in the hidden curriculum), they may perpetuate existing inequitable treatment practices. Additionally, when physicians are not exposed to different patient groups or trained in intersectional thinking, they may lack the communication skills needed to serve diverse populations. For example, 2SLGBTQIA+ patients often report feeling discomfort in healthcare settings, which results in an avoidance of care.<sup>27</sup> This is largely due to health practitioners' lack of knowledge about 2SLGBTQIA+ issues, leading to discomfort on the part of the patient and the healthcare provider.<sup>27</sup> Ultimately, patient outcomes are directly tied to the competence of their healthcare provider, and being able to serve a diverse population of patients is a key part of what makes a competent physician.<sup>28</sup>

## Strategies for improvement and curriculum reform

A survey conducted in 27 different nations, including Canada, Germany, Indonesia, Kenya and many others,



showed that in the last 20 years, most populations have become increasingly diverse with regard to their cultures, languages, ethnicities and backgrounds (median of 69%).<sup>29</sup> This impacts classrooms at all levels, including those in medical schools. In his book *Pedagogy of the Oppressed*, Paulo Freire famously states, “There is no such thing as a *neutral* education process.”<sup>30,p13-14</sup> bell hooks echoes this sentiment in her book *Teaching to Transgress*, where she emphasizes that education is never apolitical and instead should be used as a tool to promote freedom.<sup>31,p12-13</sup> Education either functions as an instrument to bring about conformity or freedom. Hence, medical educators should work towards creating more inclusive and diverse classrooms and transforming teaching and learning in medical education.

To develop intersectional educational content, we suggest using the six methodological tenets outlined by Misra et al. as a framework:<sup>32</sup>

1. **Oppression:** is an association between power and inequality; inequality becomes prevalent when powerful individuals subjugate the less powerful.
2. **Relationality:** repression for some groups is consistent with opportunity for others.
3. **Complexity:** social inequality is complex.
4. **Context:** context is vital, and we must identify the specific contexts in which privilege and disadvantage interact.
5. **Comparison:** comparing outcomes for diverse groups.
6. **Deconstruction:** a critical approach to understanding complexities and contradictions within a group/category.<sup>32</sup>

Building an intersectional curriculum requires the incorporation of these tenets to create evidence-based teaching interventions that are fair and just for all. Once these six tenets have been incorporated, a method for evaluating the effectiveness of intersectional curriculum changes needs to be developed. To obtain a full picture of the effectiveness of these changes, an approach that results in measurable outcomes while incorporating learners' subjective experiences will be required. To do this, institutions could implement pre- and post-training surveys and focus groups to assess learners' knowledge about topics like intersectionality, cultural competence and social justice before and after implementing curriculum changes.<sup>5</sup> This approach, using pre- and post-training assessments, interviews, and surveys, has proven effective

in other areas of ME, such as teaching basic life support skills, and in the study we mentioned earlier that improved the LGBTQ2S+ cultural competency of medical students.<sup>5,33</sup> Another method would be to conduct focus groups with learners to get direct feedback about how the curriculum changes have affected their understanding of intersectionality, their approach to patients, and their professional identity. Research has supported the use of reflective assessments like focus groups as an effective method to enhance learning, empathy, communication skills, and professional identity development in medical learners<sup>34</sup> are key components of intersectional education (recognizing that learners have many social identities, such as their race, class, gender, and that these social identities do not exist in isolation; rather, to gather they shape a learner's experiences). When it comes to learner assessments, scenarios incorporating intersectionality can be integrated into the learners' Objective Structured Clinical Examinations (OSCEs) [for example, a queer immigrant patient with limited English proficiency comes into the clinic with heart palpitations].<sup>35</sup> This way, learners can apply their new learning and receive guided feedback from faculty and peers about how they communicate and empathize with patients.

Finally, institutions themselves can be assessed by a task force or collective consisting of learners, professors and members of external organizations that have more experience with topics like intersectionality and social justice. A similar strategy was employed at the University of Cincinnati College of Medicine with their Advancing Inclusion in Medical Education (AIME) Task Force, created in response to the death of George Floyd, a Black man whose death due to police brutality sparked massive protests against systemic racism.<sup>36</sup> A group of this nature can evaluate the curriculum changes and provide the institution with feedback to address remaining gaps and improve the level of education. In addition to evaluation, a task force like this could recommend policy reforms, encourage accountability, and ensure that changes are sustained. By including the perspectives of medical learners at various stages, faculty, and external members, the task force ensures that diverse voices are heard and that those most impacted by these changes have a say.

## Implications for the future

Integrating intersectionality into ME can offer long-term benefits, including the development of physicians who can identify and address disparities in the healthcare system.<sup>13</sup> However, some physicians, especially those without experience tackling disparities, might not appreciate the

benefits of targeted training. Similarly, institutions with limited resources or those embedded in cultures that haven't acknowledged healthcare inequities may also fail to prioritize this essential education. By adopting an intersectional framework through strategies such as building an intersectional curriculum (in reference to the 6 tenets), curriculum reforms that incorporate a diversity of patients (in reference to the OSCE) and recognizing and mitigating implicit bias (in reference to the task force), institutions will produce culturally competent physicians who can recognize how overlapping social identities shape their patients' experiences and health outcomes.<sup>11</sup> This awareness of intersectionality will better prepare learners to serve multicultural and multiracial communities in Canada's increasingly diverse landscape. For example, learners will be serving and caring for Indigenous patients who might carry a mistrust for the medical system due to Canada's history of colonization, 2SLGBTQIA+ patients from racialized backgrounds who worry about facing discrimination from their communities, or refugee patients who may have experienced trauma but are unable to share this because of language barriers.<sup>37</sup> As practicing physicians, they will be better equipped to address the complexities associated with increasingly diverse patients.

Additionally, as medical school admissions continue to promote inclusivity and diversity, incorporating intersectionality into ME can help medical learners shape their professional identity.<sup>38,39</sup> When intersectionality is embedded in coursework, it can encourage learners to examine how their race, sex/gender, sexual orientation, disability status, socioeconomic background, and other social identities intersect with their role as future healthcare providers.<sup>6</sup> This process has the potential to foster self-reflection and provide medical learners with the tools to navigate the intersection of their personal and professional lives. Incorporating intersectionality into ME also has the potential to strengthen the physician-patient relationship.<sup>28</sup> Medical professionals who understand the intertwining effects of intersectional identities can better relate to their patients who might be navigating similar complexities. This can create a more compassionate and empathetic understanding between the doctor and patient and improve the quality of care.<sup>24</sup>

Despite these benefits, implementing intersectionality into ME may present challenges that require careful planning and institutional support. Gradual introduction and active engagement of faculty members during the development of these programs will reduce resistance and allow for concerns to be discussed.<sup>35</sup> Changes that incorporate open

dialogue, shared reflection, and co-learning will allow for more buy-in for the proposed curriculum changes.<sup>35</sup>

Another challenge is having adequate resources, and institutions might struggle to find enough staff, funding or time to include intersectional frameworks into their existing curricula and specifically teach learners how overlapping social identities affect patient experiences and health outcomes. To address these concerns, it would benefit institutions to partner with organizations and professionals who are more experienced in the field of social justice and intersectionality.<sup>40</sup> For example, some European institutions have found that bringing in social workers who are specialized in providing care to marginalized populations has been useful in helping learners understand the stark realities that patients of different cultural and ethnic groups may be facing.<sup>40</sup> Furthermore, by applying for grants and advocating for funding for more staff and new educational resources, these curriculum changes can be supported. However, we do acknowledge that if early education is not culturally competent, then the impact of these efforts in medical school may be reduced. Therefore, it is important that pre-med and first year medical students are taught early about the historical colonialist roots of modern medicine.<sup>13,14</sup> Ultimately, incorporating intersectionality into ME has the potential to promote equity in healthcare and reduce disparities in patient outcomes;<sup>6,7</sup> therefore, this is an approach that should be strongly considered by educational institutions.

## Conclusion

As medicine seeks to reduce health disparities and improve patient outcomes, the integration of an intersectional framework in ME is imperative. This approach fosters a more inclusive and equitable healthcare system by recognizing the compounded effects of race, sex/gender, class, and other social determinants of health. The hidden curriculum of implicit biases and entrenched norms within institutional structures continues to reinforce healthcare disparities. The exclusion of intersectionality from ME permits implicit biases to persist unchallenged, thereby exacerbating disparities in care and contributing to adverse patient outcomes. Furthermore, this omission limits future physicians' cultural competence and impairs their ability to provide comprehensive and equitable care. Implementing an intersectional framework is, therefore, a critical strategy for addressing those issues. While challenges such as institutional resistance and limited resources may arise, incorporating intersectionality in ME is essential and achievable.

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