Examining health equity in resident teaching: a qualitative analysis of a family medicine residency program's teaching material

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Abstract

Background: Family Medicine (FM) residency training should include teaching on Indigeneity, Equity, Diversity, Inclusivity, Anti-Racism and Accessibility (I-EDIAA). Although lecture-style teaching sessions are a core component of residency training, little is known about how these sessions integrate principles of I-EDIAA. This research aims to explore how lecture teaching materials in a first year FM Residency Program integrate I-EDIAA. **Methods:** A qualitative descriptive study design was used. Data was collected from content of lecture teaching sessions for first-year residents at Queen's Department of FM Kingston and the Thousand Islands site for the 2023/2024 academic year. A content and thematic analysis was completed based on an equity style guide. **Results:** The sample included 54 lectures. 48 (89%) incorporated at least one key equity topic. Four themes emerged: 1) Diverse case representation, 2) Preferred language and terminology, 3) Identities as risk factors for health outcomes, and 4) Impact of identity on approach to clinical scenarios. **Discussion:** These findings highlight strengths in incorporating I-EDIAA in FM training, including diverse case representation and appropriate terminology. Areas for improvement are further inclusion of health equity considerations, in particular for Indigenous Peoples, and elucidation of structural factors relating to health equity and adverse health outcomes.

Keywords: Equity, Family Medicine, Residency, Diversity, Inclusivity, Anti-racism, Accessibility, Indigeneity

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Background

The practice of Family Medicine (FM) in Canada, guided by the CanMEDS-FM roles,[1] should include providing culturally responsive, patient-centered care that integrates an understanding of Indigeneity, Equity, Diversity, Inclusivity, Anti-Racism and Accessibility (I-EDIAA).[1-4] Little is known about how FM residency training programs in Canada integrate and address I-EDIAA. The existing literature solely comments on if such curricula exist and its mode of delivery, but not on what or how content was included, [5-7] or on how I-EDIAA content is mainstreamed throughout the core curriculum.

Culturally relevant pedagogy is a framework that takes the position that students should learn content that reflects their experience and that of their communities, and that educators should consider how their teaching within their field interacts with various identities and equity-deserving groups.[8-10] Culturally relevant pedagogy is based on three core tenets: 1) The Learners should be successful; 2) The Learners should develop and maintain cultural competence; and 3) Learners must develop a critical lens through which they critically think about and challenge the 'status quo' of current social order.[8,9] In the setting of family medicine residents, applying a culturally relevant approach ensures that learners develop and maintain cultural competencies and an understanding of how health equity applies across various family medicine topics.[8,9] Applying a culturally relevant perspective in medical education therefore aims not to assess teaching on explicit I-EDIAA content, but rather how I-EDIAA is built into, or mainstreamed throughout, core curriculum to reflect diverse populations.

The objective of this research is to apply a culturally relevant framework to understand how the current lecture teaching materials used throughout core curriculum in a Canadian FM residency teaching program include and address I-EDIAA.

Methods

Study Design and Population

This study used a qualitative descriptive study design to understand how a FM residency program applies and includes I-EDIAA within teaching content in alignment with the COREQ checklist for qualitative data. Data was collected from the Queen's Department of FM residency program at the Kingston and the Thousand Islands (KTI) training site in Kingston, Ontario, Canada. Slide decks of academic lecture-style teaching sessions were analyzed for postgraduate year 1 (PGY1) residents from the 2023/2024 academic year.

Data Collection

Slide decks for lectures by faculty members teaching FM core content from the PGY1 2023/2024 academic year were included in the analysis. Resident-led presentations, self-study modules, procedural skills sessions, and orientation sessions were excluded. Presentations solely on I-EDIAA were not included to better understand how I-EDIAA was incorporated throughout general teaching sessions.

Data Analysis

A qualitative conceptual content analysis was used to identify which I-EDIAA concepts were incorporated into lecture presentations, and how frequently each concept was included. A conceptual content analysis is used to identify the existence of concepts or words in a given data set to identify patterns based on both the presence of terms.[11] The I-EDIAA items assessed were based on the Queen's EDI Style Guide priority topics for reviewing course content[12] and included 1) race and ethnicity; 2) Indigenous identity; 3) gender identity, gender expression and sexual orientation; 4) presence of an intellectual or physical disability; 5) mental health condition; 6) age; and 7) socioeconomic background. The assessment of both the existence and frequency of various I-EDIAA concepts and terms in presentations was used to identify patterns in content inclusion.

Once work on the frequency and existence of I-EDIAA concepts in the slide decks was completed, the authors completed a qualitative thematic analysis to describe how I-EDIAA topics were being incorporated. A thematic analysis using inductive and deductive coding of the slide decks was completed. First, a codebook was modelled after the Queen's EDI Style Guide[12] and the University of Wisconsin Equity Review Tool[10] to identify key themes relating to incorporation of I-EDIAA content. The Queen's EDI Style Guide emphasizes multiple key principles for incorporating I-EDIAA in teaching content, including using appropriate terminology, including information pertaining to I-EDIAA identities only if relevant to the content or context, and striving for inclusivity in content. The Wisconsin Equity Review Tool[10] provides guidance on creating culturally relevant content, which includes content that is representative and captures a variety of individuals that are presented in a way that does not further perpetuate stereotypes and bias.

Both guides also emphasize appropriate, preferred terminology and highlight non-preferred terminology that should be avoided. Based on these standards, a description, general guiding principles, and examples were created for three general categories: 1) Appropriate use of terminology; 2) Responsible and fair incorporation of a variety of Equity deserving groups (EDG); and 3) Harmful language and stereotypes.

The codebook is presented in Table 1, with supplementary examples by I-EDIAA category presented in Table 2.

Next, amongst the slide decks that incorporated I-EDIAA concepts, the content from each slide of the presentation was deductively coded under each category in an Excel file using the codebook. Content from the same presentation could be coded under any of the three categories. Then, within each of these three categories, the data was inductively coded using a constant comparative approach to generate key themes relating to incorporation of I-EDIAA content.[13] The primary author (LW) coded the data and grouped codes thematically, which were then reviewed and agreed upon by both authors.

Table 1: Codebook for deductive coding analysis created using various I-EDIAA style guides.

Code	Description	General Principles
Appropriate use of terminology	Ensure material and content are presented in a way that does not reflect bias or stereotypes, and uses preferred terminology.	Include prefer terms, appropriate capitalization, and appropriate grammar. Use neutral language if things must be compared to exclude personal feelings about the topic. Be specific when writing about a person's race, ethnicity, culture, age, gender, etc. Use "people-first" language to avoid reducing a person to a single trait.
Responsible and fair incorporation of a variety of equity-deserving groups.	In general, a variety of perspectives from various equity-deserving groups are included where possible. Images, descriptions, and case examples used are depicted in a fair, responsible and appropriate way **Ensure communities and individuals within the materials are presented in a way that does not reflect bias or stereotypes.**	Use a third-person point of view to avoid assuming that writer and reader share a perspective. Use neutral language if things must be compared to exclude personal feelings about the topic. Seek permission from individuals and input from community members where possible prior to including images, phrases, and descriptions in content. Highlight non-dominant populations and their strengths and assets, so that students of diverse race, class, gender, ability, native language and sexual orientation can relate and participate fully. Source and include photos/pictures, names, scenarios, and text that reflect the experiences and interest of racially minoritized students at the college and in the community. Acknowledge and incorporate the expertise of diverse communities, their cultures, and their historical and/or contemporary experiences
Harmful language and stereotypes	In general the use of harmful language and terminology that may perpetuate stereotypes should be avoided.	See specific group examples.

Table 2: Examples by I-EDIAA category in codebook

Code	Category	Examples
Appropriate use of terminology	Race and ethnicity, religion and faith	Where possible, use specific labels that identify a person's or group's nation or region of origin. Capitalize the proper names of nationalities. Capitalize "Black" when referring to an individual's culture or race. "Black" is capitalized as it reflects a shared sense of identity and community. Terms such as "multiracial," "biracial," "multi-ethnic," and so on are lower case. Avoid singling out specific cultures or drawing undue attention to ethnic or racial background. When references are relevant and necessary, find the appropriate, accepted terminology and use the language the individual or group concerned prefers. Capitalize all religions and religious groups. Consider the Christian-centric focus of language and attitudes in North America (e.g. use 'given name' rather than 'Christian name'). Use the term "Jewish" rather than "Jew" when referring to any person whose ethnicity or religion is Judaism.
	Indigenous Peoples	In all instances, capitalize "Indigenous," "First Nations," "Metis," and "Inuit." When possible, use the specific names of groups, peoples, or communities. When referring to a group generally, use nation or peoples. Use Indigenous sources such as community or council websites to assist in identifying the appropriate terminology for a group.
	LGBTQS2+	Use an individual's chosen name and pronouns when referring to them. For example, she/her/hers, he/him/his, and/or they/them/their. Use inclusive, gender-neutral terms wherever possible. When communicating with larger audiences, use "people" or "students," instead of "men and women" or "ladies and gentlemen." Use gender-neutral phrases, such as people, folks, workforce, and "staff a project" instead of terms like mankind, manpower, guy or guys, and "man a project." Most occupations/roles need not be gender-defined. Use: • Chair, not chairman/chairwoman • Police officer, not policeman/policewoman • Spokesperson, not spokesman/spokeswoman • Rephrase sentences that use the masculine pronoun as a generic pronoun. Titles/honorifics (Mr., Ms., Dr.) should be used consistently for all people mentioned in stories or articles. However, if there is objection to honorifics, respect the individual's wishes and remove the title. Mx can be used as a gender-neutral title. To avoid gender bias against women in science in any written or oral communication, use the Finkbeiner test (unless the woman explicitly requests to be identified as a woman in science). To pass the Finkbeiner test, a story/article/presentation cannot mention: • The fact that she's a woman • Her husband'sjob • Her child-care arrangements • How she nurtures her underlings • How she was taken aback by the competitiveness in her field • How she's such a role model for other women • How she's the "first woman to …" Be as specific as possible when referring to an individual's sexual orientation. For example, a person who identifies as a woman (gender identity) who is attracted to women (sexual orientation) may self-identify as "lesbian." Or someone who is attracted to men and women or people of any gender identity self-identify as "bisexual." (The latter example sometimes can refer to "pan-sexuality.") However, when in doubt, use the umbrella term 2SLGBTQIA+. Consider using gender-inclusive language where appropriate when referencing breastfeeding infant feeding
	Abilities/Disability	Capitalize a group name when stressing the fact that they are a cultural community (e.g., Deaf culture); however, when referring only to the disability itself, lower case should be used (e.g., a person who is deaf). When it concerns those with disabilities, place an emphasis on "person" first: • A person living with a disability • A person with epilepsy • The emphasis on "person" first is not a universal term. For example, some in the autism community prefer to be called "autistic person/people." As noted above, when referring to an individual's disability always ask for their preference.
	Mental Health	Mental health/illness is a broad term and does not reflect what an individual is dealing with. When possible, be specific or use the term "mental illnesses" or "mental health issues." When describing certain individuals or populations, use concepts such as "living with a mental illness," "person with a mental illness," or "person living with a mental health issue." Use "person first-" and person-centred language. When describing certain individuals or populations, use concepts such as "living with a mental illness," "person with a mental illness," or "person living with a mental health issue." Use "person first-" and person-centred language.
	Age	Employ more neutral (older people or older adults) and inclusive ("we" and "us") terms. Talk affirmatively about changing demographics: "As Canadians live longer and healthier lives …." Provide a specific age range (e.g., older adults aged 70 to 80) when describing a population.
	SES	When discussing people without a fixed, regular, or adequate or quality residence, use specific language such as "people experiencing homelessness," or "people who are homeless."

Responsible and fair incorporation of equity-deserving group.	Race and ethnicity	Ensure that headlines, images, captions, and graphics used in communications and messaging are depicting Black, Indigenous, and People of Colour in a fair and responsible manner. For example, do not use a Black student's or faculty member's photo without their permission when trying to promote diversity. When possible, try to use a multiracial and inclusive lens and consider all communities of colour. For example, ensure proper representation from all members of your department or unit. Only refer to a person's religion, belief, or faith if you have permission and it's relevant to the context. People who identify with a specific religion may not practice all aspect of their religion (e.g. not attending temple, mosque, or church on a regular basis) or can differently interpret or practice certain aspects. Ethnicity can overlap with religion, but do not make any assumptions (e.g. not all people who identify ethnically as Jewish may practice the religion of Judaism). Never assume someone's religion based on their name, nationality or appearance (e.g. not all people from a Muslim-majority country practice Islam). The concept of "belief" also includes atheism and other non-religious beliefs and philosophies. It is important to acknowledge the diversity of religion and beliefs when acknowledging holidays and specific dates (e.g. refer to the multifaith calendar) Depictions of people of various backgrounds are rooted in their own cultures and are not ambiguous. Highlight and affirms the knowledge systems of Indigenous, Black/African, Brown, and non-Western conceptions of science, technology, engineering, arts, and math (such as interdependence, sustainability, and continual change).
	Indigenous Peoples	Highlight and affirms the knowledge systems of Indigenous, Black/African, Brown, and non-Western conceptions of science, technology, engineering, arts, and math (such as interdependence, sustainability, and continual change). Depictions of Indigenous Peoples are rooted in their own cultures and are not ambiguous. Ensure that headlines, images, captions, and graphics used in communications and messaging are depicting Black, Indigenous, and People of Colour in a fair and responsible manner. For example, do not use a Black student's or faculty member's photo without their permission when trying to promote diversity.
	LGBTQS2+	Include diverse gender identities in case descriptions. Refer to gender, sexual orientation, or sexual preferences only when it is relevant to a case.
	Abilities/Disability	Refer to a disability only when it's relevant to a story or when the diagnosis comes from a reputable source (e.g., health-care professional). When referring to an individual's disability, always ask for their preference. Only make mention of the individual's disability when relevant and necessary.
	Mental Health	When possible, use descriptive language and set the context. Rather than "Mary is a schizophrenic," use "Mary is a person with schizophrenia. Mary's experience includes hearing voices. She also sometimes has fears that make her reluctant to join groups of people."
	Age	Incorporate age when it is appropriate based on the case. Include diverse age range perspectives in examples.
	SES	When reporting SES, provide detailed information about people's income, education, and occupations or employment circumstances. SES should also be described by providing information related to specific contextual and environmental conditions (e.g., a participant's housing arrangement and neighbourhood characteristics). Historically, SES terms such as "low-income" and "poor" have been used as implicit descriptors for racial and/or ethnic minority peoples. Thus, it is important to use racial and/or ethnic descriptors within SES categories. For example, "the sample includes low-income and middle-income Mexican parents."
Harmful language	Race and ethnicity	Terms such as "visible minority," "ethnic person," "coloured person/people" Hyphens in multi-word names (e.g., Asian-Canadian) Language that essentializes or portrays human groups monolithically (e.g., "the Black race") Use of racial or ethnic slurs. Even in an academic setting (e.g., lectures or publications) Avoid 'Islamic People' and use 'Muslims' or 'people who practice Islam.' 'colored person' 'all people'
	Indigenous Peoples	Native: typically, not used in a respectful manner and is embedded in historical context Aboriginal: Many Indigenous Peoples are opposed to the term because of the connotation of the "ab" prefix (e.g., abnormal). The term was imposed on Indigenous Peoples when written into the Canadian Constitution in 1982. Indian: an offensive term embedded in historical and legal context (e.g., Indian status, Indian Act), often used to govern Indigenous Peoples. The Indian Act was enacted to govern matters pertaining to status, bands, and reserves. Eskimo: a Cree word that means "eater of raw meat" "Canada's Indigenous Peoples" and "our Indigenous Peoples" to describe Indigenous Peoples in this country, as these phrases can be interpreted to imply ownership or possession Imposing Canadian nationality, for example, "Indigenous Canadians" or "Native Canadians" "Reserve" or "reservation" unless specifically identifying a tract of land allocated to a First Nations community. The history of the term "reserve" is embedded in the Indian Act of 1876 in a section that refers to the tract of land set aside based on a treaty agreement established between the Crown and an Indigenous Band. "Tribe" to describe First Nations groups "Métis" as a broad term to refer to mixed-descent Indigenous individuals. There are many Indigenous Peoples who have some non-Indigenous ancestry but who still identify as Indigenous or are affiliated with an Indigenous community. "Inuit Peoples," as it is redundant Using government sources (e.g., Indigenous and Northern Affairs Canada) to determine how to identify a community or peoples
	LGBTQS2+	Language that assumes a person's gender. Assumptions about gender within relationship roles (e.g., husband/wife or mother/father). Instead, use more inclusive terms such as "partner," "spouse," and "parents." Guys" to refer to a mixed-gender group of people Limiting gender to a male-female binary such as in the concept of "opposite sex" or "opposite gender." Instead, use "a different gender." LGBT, as it is considered outdated Using the term "homosexual" or "homosexuality" Using the term "sexual preference," which suggests sexual orientation is a choice and not inherent man, ess

Abilities/Disability	Using terms like handicap, cripple, victim, differently abled, diverse-ability, able-bodied Labelling or defining people by their disabilities Using unnecessary emotional tone (e.g., having a disability does not make someone a hero, a saint, a victim, a burden, or a soldier). Calling non-disabled people "normal," which implies that a person with a disability is abnormal 'Student failure' 'underprepared' 'learning styles' 'non-traditional' 'mentally retarded, afflicted with, defective, crippled, victim, differently-abled, special needs
Mental Health	Using mental illness as an aggregate term Employing terms like "psychotic," "disturbed," and "crazy." These terms cause hurt and shame. Using the following phrases that sensationalize or stigmatize individuals: "afflicted by mental illness," "suffers from mental illness," "is a victim of mental illness," "mentally ill person," and "person who is mentally ill" Defining something as "normal behaviour" or "abnormal behaviour," as this language stigmatizes a person living with a mental illness. Instead, use concepts like "usual behaviour" or "typical behaviour." Assuming a link between mental illnesses and violence
Age	Using terms like aged, elderly, seniors, old, and aging dependents Describing people as victims or using emotional terms that imply helplessness (e.g., "suffering from" or "stricken with") Using euphemistic terms (e.g., "physically challenged" or "special") Portraying aging as fatalistic Using open-ended definitions (e.g., "under 18 years" or "over 65 years")
SES	"Poor," "impoverished," "underprivileged," "poverty-stricken," and "disadvantaged" to describe individuals or groups of low income "ghetto," and "the projects"

By starting with deductive coding, the authors were able to analyze inclusion of I-EDIAA content based on current standards from the EDI style guides. Then, inductive coding to identify themes based on these standards supported the study objective of identifying how I-EDIAA content was being incorporated. These methods, when combined with the findings from the conceptual content analysis, allowed for the identification of patterns of I-EDIAAA incorporation to identify strengths and potential areas for improvement.

The authors reflected on their positionality throughout all stages of the research process. The primary author (LW) has experience in health equity and public health as a family physician and resident public health physician. The primary author was a FM resident in the KTI stream during the 2023/2024 year and thus had familiarity with the content from the teaching sessions.

The second author (EP) is a practicing family physician, researcher, educator, Healthy Equity Lead, and clinical supervisor at the KTI residency training site. The authors reflected on their experience with I-EDIAA content in an effort to recognize and address the influence of their own positionality in relation to their interpretations.

Ethical Considerations

This was a quality improvement study within normal education requirements that was formally exempt from research ethics board approval per Queen's University Research Ethics Board Standard Operating Procedure #5.3.2. The Alberta A Project Ethics Community Consensus Initiative (ARECCI) screening tool provided a score of 0 in alignment with this exemption.

Results

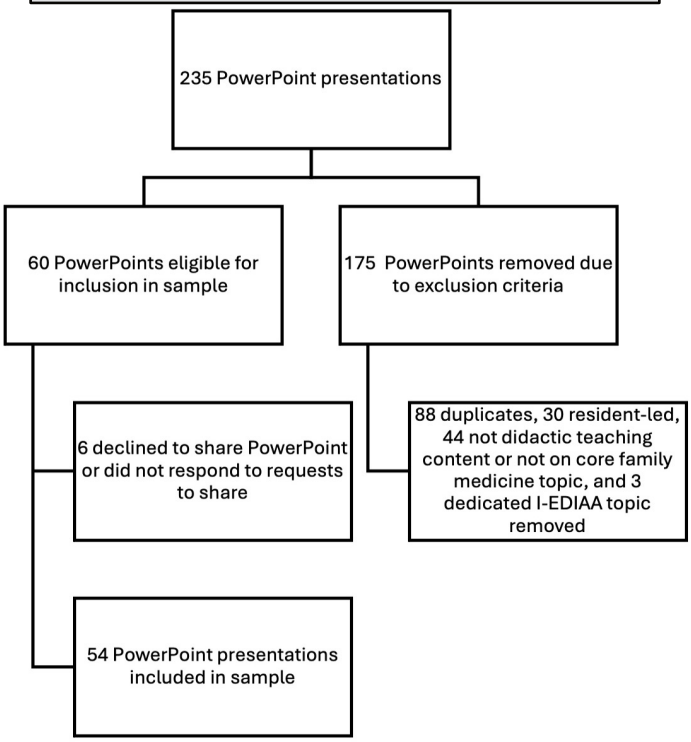
Data Sharing

The authors are unable to share data from this project as the content is exclusive property of the Queen's Department of FM.

Sample

There were 235 unique slide decks for PGY1 teaching sessions in 2023/2024, of which 60 were eligible for analysis based on inclusion and exclusion criteria. Of the 60 presentations, 6 (9.1%) were not included in the analysis as the presenter either did not respond to requests or declined to send the presentation content. A final sample of 54 presentations were included in the analysis. (Figure 1).

Figure 1: Flow diagram depicting creation of sample



Content Analysis

Among the 54 presentations studied, 48 (89%) incorporated mention of at least one key I-EDIAA topic. Content analysis results by EDG are presented in Table 3.

Thematic Analysis

Four major themes, each with their own sub-themes, relating to incorporation of I-EDIAA concepts were identified: 1) Diverse case representation; 2) Preferred language and terminology; 3) Identities as a risk factor for health outcomes; and 4) Impact of identities on approach to clinical scenarios (Table 4).

Diverse Case Representation

A variety of I-EDIAA topics were incorporated to create diverse cases and examples in presentations. Various photographs of different ethnicities were used appropriately in graphics to highlight diversity. For example, various skin types were used in content on dermatologic presentations. Cases had diverse examples with patients who identified as newcomers to Canada, same-sex couples, patients with an intellectual or developmental disability (IDD), patients with a mental health condition, and patients across a range of socioeconomic statuses. For example, one slide deck included a case focused on obstetrical delivery and incorporated considerations around translation requirements for a patient that did not speak English. There were few instances where there was a lack of representation or potentially harmful representation. For example, some dermatological presentations did not include images or descriptions of rashes across a variety of skin types.

Preferred Language and Terminology

There were many instances of preferred language and terminology use to describe I-EDIAA concepts. Two presentations included specific slides outlining the appropriate terms in ways that were patient-centered and gender-neutral, and other presentations included these terms throughout. For example, using the preferred terms ‘newly arrived refugee’, saying ‘older adults’, using anatomy-based, gender-neutral terminology, and first-person language with regards to various mental health conditions were employed. There were few instances where more gender-neutral language could have been used, for example using the term ‘infant feeding’ or ‘chest feeding’ instead of ‘breastfeeding’. There were some instances where non-preferred language was

Table 3: Content analysis results

Variable included in presentation	Total (N = 54) n (%)
At least 1 EDG	48 (89)
Mental health identity	32 (59)
Socioeconomic status	22 (41)
Race and ethnicity	20 (37)
Age	16 (30)
2SLGBTQIA+ identity	13 (24)
Physical, mental, or intellectual disability identity	8 (15)
Indigenous identity	5 (9)
1 EDG	12 (22)
More than 1 EDG	36 (67)
More than 2 EDG	17 (31)
More than 3 EDG	12 (22)

Table 4: Thematic analysis results

Theme	Sub-theme	Example(s)
Diverse Case Representation	Positive representation	Inclusion of same-sex couples in case examples about parents Inclusion of case of a patient whose first language is not English Images of various ethnicities in graphics of presentations Images of older adults being active
	Lack of representation	Lack of gender inclusive cases with regards to pregnancy and infant feeding Lack of diverse skin colours in images used in teaching on dermatologic conditions
	Potentially harmful representation	Including images of women only when discussing mental health concerns
Use of Preferred Language and Terminology	Appropriate terminology	Use of preferred terms including "newly arrived refugee", "older adult", "pregnant people", and person-centred descriptions
	More inclusive terminology possible	Use of breastfeeding and woman only in presentation on infant nutrition where 'infant feeding' and 'person with a cervix' could have been used
	Potentially harmful terminology	Use of terms 'elderly', 'minority', and harmful terms relating to intellectual developmental disability
Incorporation of I-EDIAA identity as a risk factor for health outcomes	Clear articulation and rationale for identity as a risk factor	Clearly articulating the legacy of colonization and ongoing impacts, rather than identity/race itself, when describing the risk of diabetes and suicide associated with identifying as Indigenous
	No clear rational outlined or potentially harmful incorporation	Listing Indigenous identity as a risk factor for chronic kidney disease with no rational provided as to why Use of race in calculation of the Framingham risk score
Incorporation of impact of I-EDIAA identity on approach to clinical scenario	Impact of mental health and socioeconomic identities on clinical scenario	Recognizing impact of a pre-existing mental health condition on someone's experience with screening tests and providing appropriate support Recognizing need to alter treatment recommendations based on socioeconomic status Recognizing impact of gender diversity on experiences of intimate partner violence
	Potentially harmful application of identity on approach to scenario	Suggesting using someone's education level and socioeconomic status to alter your approach to a situation with no rational as to why

used in relation to older adults, where the non-preferred terms of 'elderly' or 'senior' were used.

Identities as Risk Factors for Health Outcomes

While some presentations did include I-EDIAA concepts to mainstream the notion of a diverse patient population, the majority of I-EDIAA concepts were incorporated as a risk factor for a health outcome. The incorporation was done appropriately and respectfully when there were clearly articulated reasons for why an identity was a risk factor. For example, when discussing Indigenous identity, two presenters clearly articulated the legacy of colonization and its ongoing impacts, rather than the racial identity itself, as the risk factor of health outcomes. However, there were multiple presentations that listed an I-EDIAA concept as a risk factor for health on a slide without providing a clear rationale as to why, in particular in relation to race and ethnicity. For example, when discussing genetic screening during prenatal care, a slide listed various races and ethnicities as risk factors for disease without outlining the rationale behind these recommendations.

Impact of identities on approach to clinical scenarios

Many case examples highlighted how having a pre-existing mental health condition or having a lower socioeconomic status could impact an illness experience or management plan, and ways to support patients in these scenarios. Some lecturers considered how gender identity, sexual orientation, or having a physical or intellectual disability may influence someone's experience with a particular health care concern, or warrant further support. There was only one potentially harmful suggestion of using socioeconomic status to influence interactions with a patient. This example recommended that providers should identify a patient's education level and socioeconomic status to modify how you might engage in dialogue with that patient, which may be reasonable in some settings, but may also lead to bias or differential treatment of patients.

Discussion

The purpose of this study was to understand how a Canadian FM residency teaching site includes and addresses I-EDIAA in core academic teaching. Findings from this project demonstrate that majority of Queen's PGY1 FM KTI lecture-style teaching sessions incorporate I-EDIAA to some degree given the findings from the content analysis that 89% of slide decks incorporated at least one I-EDIAA topic or identity.

This is consistent with a study done in the US that found most primary care residency programs provided teaching on health disparities.[5] Amongst I-EDIAA concepts that were included, thematic analysis revealed the majority of lectures included diverse case presentations and used preferred language and terminology to describe individuals and groups. Teaching content could be further enhanced using person-centered, gender-neutral language and preferred terminology. The Academy of Breastfeeding Medicine (ABM) highlights the power in language and the recognition of implicit biases within the language that is used, and provides a set of recommendations for gender-inclusive language around infant feeding that could be employed by family medicine residency training programs.[14]

These findings also demonstrate that I-EDIAA concepts in lectures are incorporated mainly as risk factors for health outcomes or as considerations for an approach to a clinical scenario. This is in alignment with recommended ways of incorporating curriculum relating to health disparities, which includes contextualizing individual choices and health behaviors in broader contexts.[15] However, while some presentations incorporated I-EDIAA to create inclusive and diverse case examples, this was not consistent across all presentations. A greater effort could be made to incorporate I-EDIAA concepts as diverse examples that are in alignment with a culturally relevant pedagogical approach to education.[8,9] Additionally, further elucidation of why an I-EDIAA concept is a risk factor is important to bring attention to these broader determinants of health.[16] For example, applying race as a biological determinant of health has also been shown to lead to inequitable delays in diagnosis and access to care, as is the case with using race-based eGFR and pulmonary function testing.[16,17] Identifying these determinants of health may help to teach healthcare

providers to better address root causes of disease and avoid medically inaccurate and harmful interpretations.[15]

A notable finding was the infrequent incorporation of the impact of Indigenous identity on health outcomes, with only 5/54 (9%) of presentations mentioning a topic relating to Indigenous identity. These findings are consistent with a study reporting that FM residency training programs in Canada have some exposure to teaching relating to Indigenous health, but more expertise, direction, and formal objectives for training were needed.[7] It is well known that anti-Indigenous racism persists in the Canadian healthcare system, and the Truth and Reconciliation Commission of Canada (TRC) recommends ways the health education system can help address this.[18,19]

If medical education programs do not include teaching on the structural and systemic determinants of health as it relates to Indigenous identity throughout their curriculum, then inequitable treatment and access in the Canadian healthcare system will continue.[18] There are numerous potential explanations for the infrequent incorporation of Indigenous identities in these slide decks. Additionally, there may be inadequate experience, expertise or guidance on incorporation of Indigenous content for non-Indigenous medical educators, or lack of representation of medical educators that identify as Indigenous. A narrative inquiry on participation in reconciliatory work by non-Indigenous medical educators identified uncertainty on how to appropriately and respectfully contribute as a barrier to engagement.[20] Another qualitative study examining an Indigenous-led cultural safety education program identified additional barriers of time and resource constraints, program readiness, and difficulty securing facilitators.[18] While these barriers exist, medical educators can still make purposeful efforts to increase engagement with Indigenous content.[20] Medical educators and programs may wish to utilize resources such as the Guidelines for the Development of Indigenous Studies, Cultural Safety & Anti-Racism Assessment in Medical Education, along with connecting with Indigenous-led content and experts, to contribute meaningfully to reconciliation in teaching content.[20,21]

There are several notable limitations of this work. First, there is possible interpretation bias due to the qualitative nature of the research, although the authors practiced reflexivity throughout the research process to mitigate this. Second, there was lack of availability of 9% of presentations and the analysis did not include content spoken aloud during a teaching session that was not reflected on slides. This may present potential bias of results, as I-EDIAA content may have been included in these missing presentations or discussed during the teaching session without explicitly being included in the slides. Third, this research did not examine student and faculty views on, and competency in, incorporation of I-EDIAA content in teaching, which limits the ability to make specific recommendations for improvement. Finally, these findings are limited only to one academic year at a single teaching site within one FM program, which limits the generalizability of these results to other settings and timeframes. Despite these limitations, these findings contribute to the scarce literature on how residency training programs incorporate I-EDIAA. Other training programs could use this project as a framework for evaluating how their own program incorporates I-EDIAA and identifying areas of strengths and improvement. This could, in turn, lead to creating culturally competent, equitable healthcare providers in alignment with the CanMEDS-FM and CanMEDS roles.[1]

In conclusion, we found current strengths in incorporating I-EDIAA in FM training include diverse case representation and use of appropriate terminology. Areas for improvement are: further inclusion of considerations for Indigenous Peoples; increased use of person-centered terminology; and enhanced identification of structural determinants of health. Medical educators should engage with guidelines for incorporating I-EDIAA in teaching content including equity-style guides, and take purposeful and meaningful steps to reconciliation by focusing on Indigenous-led content. Future directions could include seeking faculty and resident feedback on lecture teaching content to assess barriers and facilitators to implementing I-EDIAA in teaching content; seeking feedback on the gap between what is written in content, and what is included in group learning sessions; and assessing

the impacts of the I-EDIAA curriculum on outcomes relating to cultural competency for FM residents across Canada. Future research should focus on assessing barriers and facilitators to engagement with I-EDIAA content and assessing their own programs' incorporation to better understand areas to focus on for improvement to create culturally competent and responsive health care providers.

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