Best practices for sex and gender diversity in medical education

Issue

While the medical education system has completed preliminary work to highlight the important impact sex and gender have on clinical medicine, U.S. medical education learners have voiced additional needs to learn about sex and gender in a way that supports health care for transgender, gender non-conforming, and intersex people (also called people with differences in sexual development, DSD) across all bodily systems and areas of medicine, as well as for support for sex and gender diverse learners themselves. This is particularly urgent when many studies reveal barriers to health care, discrimination, and human rights violations against transgender, gender non-conforming, and intersex people. Though the Association of American Medical Colleges (AAMC) released related curriculum guidelines in 2014 and the AMA Foundation launched the National LGBTQ+ Health Fellowship Program in 2020 to "to ensure that all LGBTQ+ patients receive the highest standards of care while helping to transform the landscape of medical education," additional improvements across the medical education spectrum remain necessary. In addition to the needs of LGBTQ+ individuals, education on sex and gender impacts all people, especially when pre-existing notions are reductive or stereotypical. This issue brief addresses potential best practices to promote understanding of sex and gender diversity in medical education.

Background

What is sex and gender?

Sex and gender are similar concepts. Both are socially constructed, and per AMA policies H-65.962 and H-65.967, it is appropriate to affirm each individual's self-determination regarding both sex and gender labels.

Gender describes someone's inner sense of being a woman, a man, another gender or genders, or no gender at all. Gender categories are reflections of historical, cultural, and social mores. An individual's gender may or may not align with what the larger society perceives their physical traits to be or what sex they may have been assigned at birth. Someone is **cisgender** if they identify their gender with the sex category they were assigned at birth. Someone is **transgender** if they identify their gender as fully or partially different from the sex category they were assigned at birth.

Sex is a characteristic often externally assigned to individuals to describe their assumed genotype and/or phenotype. These physical traits, however, are made up of many diverse components. Many people mistakenly think of sex categories as unchanging and exclusively male or female, but a landmark study demonstrated that about 1 in 50 live births present with variations in chromosomes, gonadal structure, hormone levels, internal sex organs, and/or external genitalia that differ from the expected ideas of male or female. This is referred to as being **intersex** or having DSD, which is not inherently related to being transgender, nor inherently requiring of medical intervention. For anyone, regardless of gender identity, sex characteristics may vary over time for diverse reasons, such as surgeries, health conditions, or non-pathological bodily changes (e.g., menopause).

Neither gender nor sex are stable, objective categories, though impacts of physiological structures on health are real, as are the impacts of how people are perceived or treated within a society. Affirmation of one's subjective, innate sense of gender is important for psychological well-being, and culturally competent care includes respect for each patient's self-identified sex or gender labels and understanding that every patient's anatomy and care needs are unique.

Challenges and concerns in medical education

Historically, the default medical model representing all patients was the white, 70kg, cisgender man, thus hindering care of many patients of different genders and sexes and creating imprecise generalizations about cisgender male patients, too. While some advancements from a cisgender women's health lens have been made toward disrupting this nonrepresentative norm in medical education, such as AMA policies H-525.976 and D-295.310, more attention is needed toward understanding variations within sex categories, dismantling assumptions about body parts and gender identity, and promoting education about the ways many patients' sex or gender experiences fall outside of binary male or female concepts.

In a recent systematic review of 670 studies, only seven assessed undergraduate or graduate medical trainees' knowledge retention and/or clinical skills acquisition in the care of sex and gender diverse patients. Only one study assessed both retention and skills acquisition, and only one fully aligned assessments with AAMC competency recommendations. This indicates a need for alignment with pre-existing recommendations, continued curriculum development, and increased assessments of actual effectiveness.

Another important concern regarding sex, gender, and medical education is ensuring that the training environment is actively welcoming to learners and faculty who themselves are transgender, gender non-conforming, or intersex. One roadblock to this goal is that many major organizations and institutions do not collect accurate demographic information: several student and faculty diversity surveys split self-reported sex and gender options into only male and female, thus already hindering some individuals who may identify as both or neither from reporting their identities. When data is available, it indicates significant barriers during medical training for these individuals, due to discrimination.

Potential strategies to support sex and gender diversity in medical education

- Amplify and encourage the implementation of pre-existing curricular guidelines supporting sex and gender diversity
- Encourage development of further curricular guidelines across the medical education spectrum, particularly at the graduate level across all specialties, with an expansive, diverse understanding of sex and gender for all patient care
- Provide additional training to faculty and clinicians responsible for training medical students and resident and fellows
- Investigate opportunities to update terminology in existing curricula—i.e., modifying language like "both sexes" that implies only two sexes or genders
- Advocate for improved support of and protections for sex and gender diverse medical trainees and faculty, thus increasing recruitment and retention within medical education
- Advocate for an updated standard of care, in alignment with other major medical organizations, for individuals with DSD or intersex conditions, and align education with these standards
- Assess delivery of evidence-based, quality care for transgender, gender non-conforming, and intersex patients in clinical training sites

- Promote additions of clinical skills regarding sex and gender diverse patients, rather than didactic learning alone
- Promote intersectional education on the impacts of sex and gender, e.g., the explicit inclusion of transgender and intersex women in education on women's health, and examining the impact of racial injustice on care for patients of all sexes and genders
- Encourage robust research on knowledge retention, clinical skills acquisition, and longitudinal outcomes in relation to sex and gender diverse curricula inclusion

Moving forward

The AMA has many policies that address how the topics of sex and gender are navigated within medical education. For example, the AMA:

- works with appropriate medical organizations and community based organizations to inform and educate the medical community and the public on the medical spectrum of gender identity; affirms that an individual's genotypic sex, phenotypic sex, sexual orientation, gender, and gender identity are not always aligned or indicative of the other, and that gender for many individuals may differ from the sex assigned at birth (D-295.312)
- encourages medical education accreditation bodies to both continue to encourage and periodically reassess education on health issues related to sexual orientation and gender identity in the basic science, clinical care, and cultural competency curricula in undergraduate and graduate medical education (H-295.878)
- continues to explore opportunities to collaborate with other organizations, focusing on issues of mutual concern in order to provide the most comprehensive and up-to-date education and information to enable the provision of high quality and culturally competent care to LGBTQ people (H-160.991)
- advocates for the creation of targeted efforts to recruit sexual and gender minority students in efforts to increase medical student, resident, and provider diversity; encourages the inclusion of sexual orientation and gender identity data in all surveys as part of standard demographic variables given respondent confidentiality and response security can be ensured; works with the Association of American Medical Colleges to disaggregate data of LGBTQ+ individuals in medicine to better understand the representation of the unique experiences within the LGBTQ+ communities and their overlap with other identities (D-200.972)
- continues to inform medical schools and residency program directors about activities and resources related to assisting physicians in providing culturally competent care to patients throughout their lifespan and encourage them to include the topic of culturally effective health care in their curricula (H-295.897)

AMA resources

- Council on Medical Education
- Policy Finder
- Advisory Committee on LGBTQ Issues
- Health Care Advocacy
- Center for Health Equity
- AMA Foundation National LGBTQ+ Fellowship Program