Sex, gender, and sexual orientation are important factors that influence the risk for disease, response to medical treatment, and health-care seeking behaviors and attitudes.

Studies show that 75% of physicians agree that issues pertaining to sexual and gender minorities should be covered more often during medical training.

Sex, gender, and sexual orientation are important factors that influence the risk for disease, response to medical treatment, and health-care seeking behaviors and attitudes.

- Despite these considerations, a growing body of literature suggests a lack of emphasis on the unique health care needs of these minority populations in clinical practice.
- Recent reports from the Institute of Medicine (IOM), US Department of Health and Human Services (DHHS) Healthy People 2020, Laura Bush Institute, Endocrine Society, World Professional Association for Transgender Health (WPATH), Agency for Healthcare Research Quality (AHRQ), and others (1-7) have drawn attention to the various health inequities affecting these populations, and acknowledge a need to improve the depth and breadth of medical education and residency training to ensure that future physicians are prepared to deliver appropriate and inclusive care to sexual minorities and the LGBTQ+ community.

The purpose of this study is to assess the knowledge, awareness, and preparedness of medical students at MSUCOM and residents in the Michigan Statewide Campus System to deliver care to sex, gender, and LGBTQ+ populations. The growing need for competent physicians to serve the unique needs of these communities necessitates a paradigm shift in medical education. The purpose of this study is to assess the knowledge, awareness, and preparedness of medical students at MSUCOM and residents in the Michigan Statewide Campus System to deliver care to sex, gender, and LGBTQ+ minority populations.

Some important barriers to more appropriate education and training in these areas include a lack of expertise among educators, insufficient time in the curriculum, and limited support for faculty training. The growing need for competent physicians to serve the unique needs of these communities necessitates a paradigm shift in medical education. The purpose of this study is to assess the knowledge, awareness, and preparedness of medical students at MSUCOM and residents in the Michigan Statewide Campus System to deliver care to sex, gender, and LGBTQ+ minority populations.

- Medical students and younger respondents at all stages of training reported lower curriculum preparedness to provide sex, gender, and LGBTQ+ care compared to residents and older respondents (p<0.001).
- Earlier cohorts of medical students and medical residents reported less curriculum preparedness than later cohorts (p<0.001).
- Medical residents with more formal education in these topics reported more preparedness in serving sex and gender minority populations.

Overall, our findings indicate a lack of sex, gender, and LGBTQ+ specific education in both the osteopathic medical school curriculum and residency training. These results point to the need for:

- Increased sex, gender, and LGBTQ+ focused education and training in medical school and residency.
- Curriculum changes that focus on improving the knowledge, awareness, and level of preparedness that is necessary for future physicians to apply sex and gender based medical principles in the care of patients.
- These changes will serve to reduce health disparities faced by gender and sexual minorities and improve health outcomes in these communities.
- Recommendations and future plans include the introduction of formal educational hours devoted to:
  - Sex, gender, and LGBTQ+ based medicine and health maintenance into osteopathic patient care.
  - Basic science, and residency training.
  - Incorporating approaches to trans-affirming care for patients including psychiatric, endocrine, and surgical evaluations.

N=116. 19% (N=22) respondents identified as LGBTQ+.

- A simple t-test assessing continuous curriculum preparedness demonstrated a significant difference between medical residents and medical students (p<0.001).

**Methods**

- Cross-sectional 17-item survey containing self-identification questions about sexual orientation and gender was administered to students from MSUCOM and residents in the Statewide Campus System. Items assessed medical student and resident perceptions of the amount of formal education they received in sex, gender, and LGBTQ+ care throughout their education/training.
- Respondents evaluated the efficacy of their formal education in preparing them to provide competent LGBTQ+ medical care.

**Results**

- A series of non-parametric two-tailed stepwise multinomial logistic regression procedures with SPSSv.25 software was employed for analysis. Simple t-tests were used to compare findings between medical students and medical residents.
- Medical students and younger respondents at all stages of training reported lower curriculum preparedness to provide sex, gender, and LGBTQ+ care compared to residents and older respondents (p<0.001).
- Earlier cohorts of medical students and medical residents reported less curriculum preparedness than later cohorts (p<0.001).
- Medical residents with more formal education in these topics reported more preparedness in serving sex and gender minority populations.

**References**

5. World Professional Association for Transgender Health. https://wpath.org
6. Agency for Healthcare Research Quality. Evidence-based practice center systematic review protocol project title: improving cultural competence to reduce health disparities for priority populations, AHRQ http://www.ahrq.gov/clinic/187670c18768a-000d-0000-00e0-fd5e6e1a.pdf