



Short Communication

Equity, diversity, and inclusiveness (EDI) in medical education and research**Vishnu Bhat Ballambattu^{1*}, Krishna Rao Gurugubelli²**

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Equity, diversity, and inclusiveness (EDI) are fundamental elements of medical education and research, designed to cultivate a healthcare work force that can effectively meet the varied needs of patient populations. Incorporating EDI principles into medical training is vital for establishing an atmosphere in which all students are recognized and equipped to deliver culturally competent care. Equity indicates everyone receives equitable treatment, access, and opportunities.¹ The concept of diversity in medical education includes multiple dimensions such as race, ethnicity, gender, socioeconomic background, sexual orientation, and disability.¹ Inclusiveness is also important so that all individuals have the opportunity to contribute their perspectives in decision-making processes.¹

It is essential for medical students to grasp the social determinants of health that lead to unequal access to healthcare and varying outcomes across diverse racial, ethnic, and socioeconomic populations. This knowledge is vital for fostering culturally competent healthcare practices.² The development of curricula should incorporate education on health disparities into medical school programs. This integration should emphasize the social determinants of health, facilitate an understanding of interventions across various domains (social, behavioral, clinical, and policy) and encourage students to engage in community-based research and educational initiatives. Such experiences allow students to witness the collaborative potential between academic institutions and local communities. As they train to become physicians, students should encounter curriculum

components that provide foundational knowledge about health disparities, alongside opportunities for active involvement in community service and activities designed to enhance critical thinking skills.²

Holistic review processes in admissions should consider not only academic performance but also individual experiences and characteristics that foster a diverse educational atmosphere. This methodology seeks to identify candidates who will enrich the learning experience for all students while tackling issues of under-representation in the field of medicine.³ Such holistic evaluations are inclined to consider additional non-academic factors, including socioeconomic background. It is essential for institutions to consistently gather and analyze data regarding student experiences, particularly focusing on unmet needs and available support strategies. Insufficient access to fundamental resources, such as stable housing and food security, can adversely impact academic achievement, especially among under-represented and low-income student populations.⁴

Administrators establish an inclusive atmosphere in which every student feels appreciated for their achievement. Initiatives designed to assist first-generation medical students or individuals from under-represented backgrounds contribute significantly to cultivating a sense of belonging.^{3,5}

Promoting EDI within the scientific and healthcare sectors fosters innovation in research and ensures fair access

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to high-quality healthcare. Increasingly, there is an acknowledgment that clinical research frequently suffers from a lack of diversity among study participants, resulting in conclusions that may not be applicable to various demographic groups. Initiatives are underway to guarantee that research participants are representative of the broader population's diversity.^{1,6,7}

There is a growing emphasis among researchers on health equity-related questions, investigating the impact of factors such as race, gender, socioeconomic status, and geographic location on health outcomes. This transition seeks to uncover interventions that can mitigate disparities.⁸ Institutions are establishing training initiatives centered on EDI principles in research methodologies to ensure that researchers recognize the significance of inclusivity in their endeavors.⁸

Interdisciplinary collaboration is being promoted among medical schools, public health organizations, and community entities to tackle intricate health challenges, with a focus on EDI.¹

Despite advancements in the incorporation of EDI within medical education and research, numerous challenges to EDI initiatives include defective leadership, resistance to change, poor communication, inappropriate metrics, institutional culture, politicization, misunderstanding, employee resistance, defective funds, language and cultural barriers and external factors like racism, anti- EDI sentiments, pandemic like covid-19, strain on scientific and health care workforces.^{1,9,10,11,12}

Patient's concern regarding EDI within healthcare environments is predominantly favorable. A study reported that most participants feel accepted and receive equitable treatment. However, there are specific areas that necessitate enhancement, particularly in relation to the sensitivity shown towards transgender individuals and the care provided to those with mental health challenges or lower socioeconomic status.¹³ Critics argue that the growing emphasis on EDI initiatives in the medical field may ultimately be detrimental to patient care. They contend that medical students and practitioners ought to concentrate solely on hard sciences relegating soft sciences (urban planning and sociology) to social workers and policymakers.¹⁴ Hence further investigation is required to explore patients' views on EDI across various healthcare environments and demographic groups.

Integrating EDI into medical education and research is crucial for developing a healthcare workforce that can effectively meet the needs of a growingly diverse population. By promoting an inclusive atmosphere in educational institutions and guaranteeing fair representation in research initiatives, we can strive to reduce health disparities and enhance overall health outcomes.

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Conflict of Interest

None.

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