**Promoting Equity in Emergency Preparedness & Disaster Response for Medical Students: A Qualitative Exploration**

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**ISSUE:** The COVID-19 pandemic has demonstrated the crucial role physicians and medical students play in responding to large-scale public health emergencies. At the same time, it has followed a predictable pattern in which vulnerable and marginalized populations are disproportionately impacted, thus exacerbating inequities created and driven by structural factors. For the healthcare system to play a role in acknowledging, addressing and preventing these injustices in future emergencies, tomorrow’s physician workforce must be trained in equitable emergency preparedness and disaster response (EPDR). However, there is scant evidence indicating if or how public health preparedness with an equity focus is being integrated in medical education, nor an in-depth exploration of the essential elements this training should entail. The aim of this study is to shed light on the existing and evolving role of medical education in preparing the future health workforce to approach pandemics and other disasters from a health equity conscious perspective.

**METHODS:** Our study sought to answer two primary research questions: 1) What should medical students be learning about EPDR, as it relates to health equity? 2) What kinds of educational experiences would allow students to achieve these learning objectives? We also sought to identify barriers and facilitators to achieving identified educational aims. Given the exploratory nature of our research, we employed qualitative research methods. We conducted key informant interviews with multidisciplinary experts representing medical education, public health, disaster preparedness, and other relevant sectors to shed light on the intersection of health equity and EPDR in medical education.

We used qualitative methods to analyze the data. Interview recordings were transcribed verbatim for accuracy and uploaded to Dedoose™, a qualitative data analysis program, for coding and analysis. A coding scheme was developed using a combination of deductive codes identified through a literature review and inductive codes that emerged during transcript review. Inductive codes were added to the coding scheme until saturation was reached, and a thematic content analysis was performed. Two members of the research team conducted the coding and thematic content analysis for each interview and resolved any discrepancies through discussion until consensus was reached.

**FINDINGS:** We conducted 11 interviews with 12 key informants. Collectively, informants represented 9 organizations in their current, primary roles. Four held roles specific to diversity, equity, or inclusion; five had direct experience in emergency preparedness or disaster response; and 2 played key roles in undergraduate medical education (UME) curriculum redesign efforts. Four learning content areas to promote equitable EPDR in UME emerged as dominant themes: community needs and assets; social and structural determinants of health; physician humility & systems integration; and advocacy. Activities identified as facilitating student learning in these areas were: required community-engaged, experiential opportunities; having role models internal and external to the academic institution as teachers; a longitudinal, integrated curriculum emphasizing public health principles; and in-person experiences that build understanding of the public health system. The dominant barriers interviewees identified to achieving these educational aims were a lack of competency around needed learning content areas among traditional faculty and physician leaders and the omission of equity-focused learning objectives from medical education testing and evaluation instruments. However, potential facilitators for equity-promoting EPDR also emerged in our interviews. These included academic-community partnerships...
to create built-in pipelines for learning opportunities and provide access to community-based role models for students; faculty development and continuing education, especially in the structural determinants of health; diverse representation and leadership in UME curriculum design; and incorporation of health equity principles in student evaluations. Above all else, interviewees viewed current and prospective medical students as the most promising drivers of transformation to medical education, noting that the current generation of trainees expects medical schools to prioritize health equity and is holding them accountable for doing so.

**DISCUSSION:** In this study, we interviewed a diverse sample of content experts to identify themes central to promoting equity in EPDR for medical students. Most interviewees cited a need for deeper consciousness of and stronger partnerships with the community as imperative to this work. However, they also noted that needed change will necessitate systemic investments in and transformations to medical education, including robust faculty development and recruitment efforts, a critical review and reimagination of curricular content, inclusion of equity and public health principles in evaluation rubrics, and equity-focused regulatory provisions.

Unfortunately, COVID-19 is unlikely to be the only public health emergency or large disaster medical students will respond to in their future careers. Further, the key informants interviewed for this study emphasized that medically and otherwise vulnerable populations live on the precipice of personal disaster daily due to racism and structural drivers that breed inequity. For physicians to play a role in narrowing the disparities endemic in society and exacerbated by disasters, medical students should be trained in the upstream determinants that create them and how to translate this awareness to action and advocacy. Findings from this study may aid medical and other health professions schools in creating or adapting training approaches that will prepare trainees for applying an equity mindset to future emergency preparedness and disaster response. Additional research is needed to evaluate programs and curricula that espouse training elements identified in this study, especially the impact of community-academic partnerships on students, faculty, and communities.

**Key Words:** Medical education, emergency preparedness & disaster response, health equity