

The Need for Emerging Diseases Curricula: A Case Study of Mpox

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To the Editor:

Recent disease modeling suggests that pandemics—often caused by emerging diseases—are likely to increase in frequency and severity over the coming decades.¹ In early 2022, multiple cases of monkeypox (mpox) were first diagnosed in nonendemic countries outside of Africa, including the United States. In August 2022, the Health and Human Services secretary declared mpox a public health emergency; however, there has been little published on medical providers' knowledge or perceptions of the disease.² With one of the highest incidence rates in the United States occurring in South Florida, which is a domestic and international travel hub, our medical school in Miami sought to better understand our students' perceptions of mpox.³

From September to November 2022, we distributed an anonymous, computer-based, optional survey to all enrolled medical students; institutional review board exemption was obtained. A total of 165 students across all 4 years of training provided responses. Twenty-six percent of respondents reported that they were not at all concerned about the mpox outbreak in the United States; 64% were somewhat concerned, and 10% were concerned. No students reported being extremely concerned about the mpox outbreak. Seventy-four percent of respondents stated that their knowledge of mpox was poor or very poor; 22% reported that their knowledge was fair, and only 4% of students felt that their level of knowledge was good or excellent. Importantly, 78% of respondents were not at all confident and 20% were somewhat confident in their ability to recognize signs and symptoms of mpox; 2% of respondents were very confident in their ability to do so. Finally, only 63% of respondents knew that there is an available vaccine for mpox; 19% were unsure whether a vaccine exists, and 18% responded that there is no available vaccine.

Our preliminary data suggest that medical students have low confidence in their knowledge about mpox, even when living in a community with a high incidence of disease. Our medical school delivered no formal curriculum or extracurricular sessions related to mpox, meaning that any education on this topic received by our students would have consisted of self-guided and informal readings, or ad hoc clinical exposure. The data reported here suggest that any such training or exposure was inadequate to meet the clinical training needs of medical students. As emerging diseases are becoming more common, medical students should be better prepared to recognize signs and symptoms in clinical settings. In the wake of the COVID-19 pandemic and mpox outbreaks, medical schools must become more adept at quickly adjusting curricula to incorporate emerging topics so that students are able to safely deliver accurate, high-quality care to populations at risk.

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