

## Integrating Bias Reduction Into Medical Teaching Cases: Addressing the Overrepresentation of Skin of Color Images in Infectious Disease and Sexually Transmitted Infection Cases

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### To the Editor:

Case-based learning is essential in medical education, allowing students to apply real-world scenarios and develop diagnostic and treatment strategies. However, the effectiveness of medical teaching cases can be undermined when they introduce or perpetuate bias, leading to misdiagnosis, stigmatization, and inequitable treatment. We applaud the authors of "A Professional Development Workshop: Applying the Race and Culture Guide to Reduce Bias in Medical Teaching Cases"<sup>1</sup> for their innovative and applicable approach to reducing bias in teaching cases. Participants reported that the workshop effectively challenged biases and would recommend it to others. Thus, a modified version of this workshop could be essential in reducing bias and addressing the significant problem of overrepresentation of skin of color (SOC) images in cases depicting infectious diseases and sexually transmitted infections (STIs).<sup>2-4</sup> Bias reinforcement and harmful stereotypes are often perpetuated by this disproportionate representation by associating stigmatizing conditions with SOC, and thus can distort clinical judgment and perpetuate inequities.<sup>3,4</sup>

Historically, dermatology textbooks and presentations have lacked sufficient representation of SOC images, reducing educational equity for the presentation of dermatologic conditions of different skin tones.<sup>2-4</sup> Furthermore, a more complex issue exists in infectious disease and STI presentations. Thornton et al found that in their analysis of 285 images, darker skin tones were more likely depicted in images of stigmatized conditions in infectious disease textbooks despite their overall underrepresentation.<sup>3</sup> Similarly, Lamb et al found that in analyzing 1,660 images, "light/white" skin was overrepresented, but images of infectious diseases were more frequently depicted on "medium/brown" and "dark/black" skin tones.<sup>4</sup> Adversely, STIs are associated with stigma, and when portrayed in educational materials and teaching cases, specific social determinants of health, such as lower income and educational attainment, often are overemphasized.<sup>3</sup> This emphasis can perpetuate essentialist views, reinforce biases, and contribute to inequities in care.<sup>1</sup> However, the "Race and Culture Guide" (RCG) workshop model could be key in addressing these challenges.

The strategies proposed to enhance the impact of the RCG bias reduction tool are commendable. Strategies include application of this tool to previously written cases and the train-the-trainer component.<sup>5</sup> These strategies could strengthen the tool's ability to reduce bias in dermatological clinical teaching across institutions, especially in areas like infectious disease, where SOC images are overrepresented compared to other dermatologic conditions.<sup>2-4</sup> Applying the RCG tool to existing infectious disease cases, particularly those

that depict STIs, could help challenge the bias associated with these conditions and encourage a more accurate, balanced representation of prevalence across the patient population.<sup>5</sup> Additionally, the train-the-trainer RCG tool component could help leverage important bias-reduction practice dissemination to a broader community of educators and learners, potentially amplifying the tool's impact.<sup>5</sup>

In closing, we are inspired by the authors' efforts to reduce racial bias and racism in medical teaching.<sup>1,5</sup> These equity-focused and bias-conscious practices will benefit current and future medical educators, enhancing their ability to assess, reflect, and reduce bias in medical education.

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