



**Invited Commentary** | Medical Education

## Breaking the Cycle of Burnout and Bias in Resident Physicians

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This past year, while the identity of a student in an old medical school yearbook photo posing in blackface was initially disputed,¹ one thing could not be argued: physicians are not impervious to racist acts. However, in stark contrast to the powerful visual of a yearbook photo, most physicians' racial biases may be difficult to directly see, owing to the unconscious or implicit nature of the bias. In fact, a recent systematic review of studies that used the Implicit Association Test in physicians² concluded that many physicians across multiple specialties exhibit a subconscious preference for white patients. Given the strong evidence showing significant disparities in race exist, especially for African American individuals, and the call to action to mitigate these disparities, understanding the conditions that promote implicit or explicit bias among physicians is particularly important for medical educators and health care employers.³ Certain conditions that have been shown to predispose physicians to bias include increased cognitive load, scarcity of time, and pressure for quick decision-making.⁴ With an increasing focus on the epidemic of physician burnout by numerous national groups, including the National Academy of Medicine and the Accreditation Council for Graduate Medical Education,⁵ its contribution to implicit and explicit racial bias toward patients has not been largely explored—until now.

Dyrbye et al<sup>6</sup> report on a large longitudinal and cross-sectional cohort of US resident physicians and found that reported symptoms of burnout were associated with greater implicit and explicit bias against black individuals. Interestingly, in the longitudinal cohort, bias reduced between participants' second and third year of residency.<sup>6</sup> However, those with worsening reports of depersonalization were more likely to report explicit bias against black individuals.<sup>6</sup> Perhaps the most interesting finding was the dose-response association of level of reported burnout with intensity of bias, as measured on the tests that were used.<sup>6</sup>

There are numerous strengths of this study, including the large size of the sample, which reflects the resident physician population at large, and the use of both a cross-sectional cohort and a longitudinal cohort, the members of which were observed as they progressed from their second to third year of residency. In addition, unlike many other studies, Dyrbye et al<sup>6</sup> are to be commended on their use of standard testing for bias, including the Implicit Association Test. While the authors also used a validated tool to measure burnout, it is important to recognize the potential limitation of underreporting burnout compared with the standard Maslach Burnout Inventory. The authors are correct in recognizing the limitations of their study, particularly that clinical outcomes and actions were not measured. In addition, little information about specialty is provided beyond surgery and primary care, which is important given how clinical work and exposure to patient care varies greatly by specialty. Last, this study is limited to understanding bias through the use of the term black, presumably owing to the nature of the bias tests, such as the feeling thermometer, that test for bias regarding skin color. This is despite the fact that black people include African American individuals as well as those who self-identify as African, Caribbean, or as members of other racial and ethnic groups. Given the increasing understanding of intersectionality and the compounding nature of bias that those from multiple marginalized groups face, future work should understand that the association of burnout with bias has many complexities, including the color of one's skin.

Given the strength of the study, it may be easy to conclude that burnout leads to bias among our resident physicians. However, it is important to recognize that a causal association cannot be assumed on the basis of this study alone. For example, it is possible that physicians with an

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underlying implicit or explicit bias are subject to greater moral distress when they are forced to reconcile their bias with the fact that they must treat all patients the same, regardless of the color of their skin. In this case, the root cause of the bias is not burnout. Rather, burnout is unmasking an underlying bias that had always existed. In this case, mitigating burnout may reduce the perception of bias in the moment, but it will not actually address the underlying bias that continues to linger and can emerge when a physician faces another external stressor. This is why addressing both burnout and bias together will be key to breaking the cycle.

The study by Dyrbye et al<sup>6</sup> certainly generates a thought-provoking agenda for future work, including understanding the following: will implicit bias training in residency mitigate bias? When is the right time for such training, and what continued reinforcement may be necessary? Do we need specialty-specific training in bias? Will successful efforts to reduce burnout improve bias among residents? Will improving both burnout and bias ultimately improve equity for patients cared for in our nation's training programs? When is the optimal time for such interventions to reduce bias and burnout? While we may not yet know the answers to these questions, we do know that something must be done now, as there are more than 135 000 resident physicians in training who are treating patients at any given time. The time is now to break the cycle of burnout and bias in our nation's graduate medical education programs. Our nation is depending on us.

## **ARTICLE INFORMATION**

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