



Bias in Healthcare Interactions and Strategies to Overcome Bias

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Background

- Medical students have implicit biases towards patients, which may impact decision-making and patient-provider interactions.
- Research in social psychology has identified effective evidence-based bias reduction strategies but have rarely examined medical students' understanding and planned utilization of these strategies after an Implicit Bias in Healthcare Workshop.
- The purpose of this study was to examine medical students' self-reflections and planned future actions regarding their implicit bias to better comprehend their understanding of bias following a learning workshop designed to raise awareness of implicit bias in healthcare.

Methods

Participants: Third-year medical students ($n = 156$) attended an in-person didactic and two successive online self-reflection assignments over six months.

Implicit Bias Workshop: The workshop consisted of a one-hour didactic reviewing definitions of implicit and explicit bias, sources of bias, and implications of bias in healthcare. Students completed an IAT during the didactic, and the didactic concluded with an introduction to evidence-based bias-reduction strategies.

Materials: Students then completed the following reflection questions:

1. *Reflect on a previous clinical experience with a patient that you may have been biased towards. Now that you have learned more about the role of implicit bias in healthcare, please (1) describe the patient and (2) how you think bias may have impacted the care that you provided for this patient?*
2. *Considering what you know now about the role of implicit bias in healthcare, what, if anything, will you do differently when providing care for patients who you may have a bias towards?*

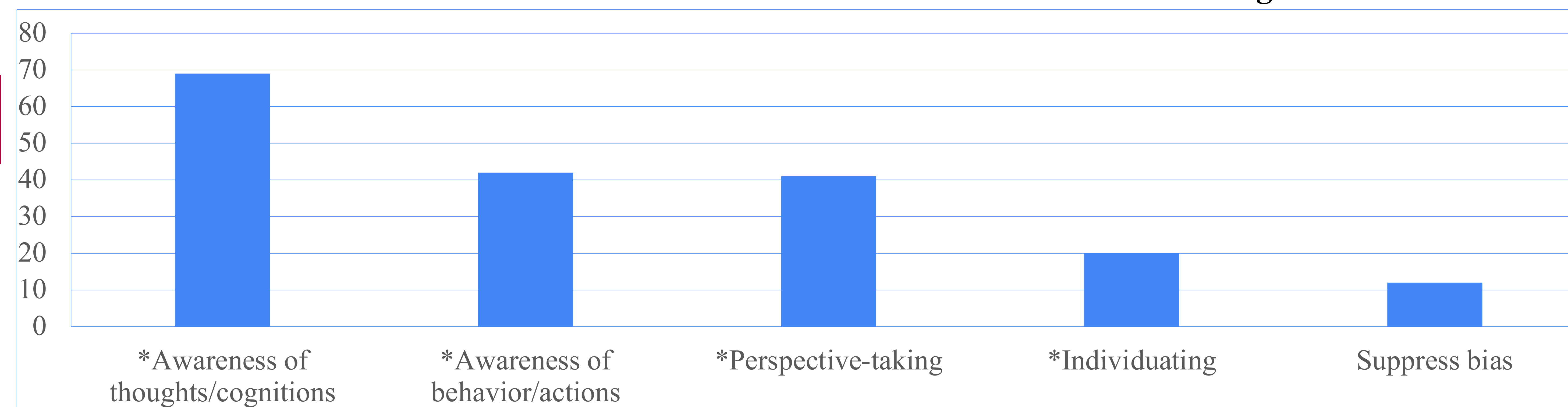
Analyses: Responses were content analyzed by three coders (all Cohen's kappa values > 0.75 to ensure interrater reliability). Frequency analyses were conducted, and results were organized by the most frequently endorsed category to the least frequently endorsed category.

Results

Table 1. Perceptions Concerning the Impact of Bias on Patient Interactions

Category/ Theme	n (%)	Node definition
Negative impact	103 (70)	Bias worsened patient interaction/outcome due to assumptions about the patient's compliance, lack of motivation, or responsibility for their disease etiology.
Positive impact	22 (15)	Bias improved patient interaction/outcome due to having a favorable bias, shared cultural background, or being aware of one's unfavorable bias.
No impact	22 (15)	Bias did not have an effect on patient interaction/outcome.

Table 2. Medical Students' Planned Future Bias Reduction Strategies



Note: Planned future bias reduction strategies are not mutually exclusive. All evidence-based bias reduction strategies are marked with asterisks.

Summary:

- The majority (70%) of students felt that their bias worsened the quality of their interaction with the patient, while some (30%) felt it improved or did not affect the clinical interaction.
- Students most frequently reported that they planned to be more aware of their bias, mindful of their body language and behaviors, put themselves in their patient's shoes, and get to know their patients more.
- These actions were consistent with the evidence-based bias reduction strategies presented in the didactic, but a minority of students generated potentially harmful, non-evidence-based actions such as suppressing bias.

Discussion

Implications:

- Students with shared cultural background often reported positive impacts of their bias, suggesting benefits of racial concordance.
- While being more aware of bias is a fundamental first step, awareness alone is not enough.
- Students may not be aware that suppression of stereotypic beliefs may lead to a rebound.

Future Directions:

Future research could examine the effectiveness of implementing the actions students proposed and how well medical students' perceptions of their quality of care for patients whom they hold biases towards are consistent with their patients' perceptions. Future didactics should dedicate more time to presentation of evidence-based strategies and offer active learning opportunities to solidify student learning.