

# Assessing Identity-Based Bias in Problem-Based Learning Curriculum Through a Community Lens

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## ABSTRACT

**Background:** Identity-based bias in medical education contributes to discrimination in healthcare and health inequities. Community-Students Together Against Healthcare Racism (C-STAHR) was developed in 2010 to combat healthcare racism using community-based participatory research.

**Objective:** The aim of this analysis was to evaluate the problem-based learning (PBL) curriculum at a US medical school for identity-based bias through a community lens.

**Methods:** An evaluation tool was developed from prior C-STAHR focus group data and Sadker Foundation's Seven Forms of Bias<sup>1</sup>. Participants evaluated PBL cases using this survey and qualitative discussions in focus groups. Community participants were recruited via snowball sampling. Survey responses were assigned value based on ideal answer. Questions were summed and divided by total possible points to create a percentage referred to as the Bias Score. Bias Scores corresponding to a particular case were averaged. We used a multivariate mixed effects linear regression model to associate patient-character identity with Bias Score. Three evaluators (two per transcript) coded transcripts through iterative code generation and emergent themes were identified.

**Results:** Six focus groups (43 participants total) were recruited. Each focus group evaluated five of 15 unique cases—each case was reviewed by two groups. The average case Bias Score was 40% (SD: 20.3%). In multivariate mixed effects models, Latinx and Transgender-Man identities resulted in the largest increase in Bias Score [9.1% (*p-value*=0.047) and 11.4% (*p-value*=0.069), respectively]. Emergent themes from community participants include discriminatory care, assumptions based on identity, and missed opportunities to address important patient needs.

**Conclusions:** Community members are valuable assets to identify identity-based bias in medical school curriculum. PBL cases included incidences of identity-based bias that may perpetuate harmful stereotypes and implicit bias of future physicians. These findings represent a larger need to evaluate and address issues around bias and representation in medical education curricula.

**Reference:**

1. Sadker D. Seven Forms of Bias in Instructional Materials. 2017;  
<http://www.sadker.org/curricularbias.html>, 2017.