Racial and Gender Disparities in the National Resident Matching Program: a textual analysis of Medical Student Performance Evaluations

Title: Racial and Gender Disparities in the National Resident Matching Program: a textual analysis of Medical Student Performance Evaluations

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Submission Role: Research and Innovation Abstracts

Presentation Type: Oral or Poster

Current Category: Research

Abstract Body:

Short Description: While gender and racial disparities have been found across a range of settings, their presence has not been systematically explored in applications to residency programs. We used customized software to examine the applications of 5,685 US medical students and found significant differences in how applicants were described based on gender and race. The recognition of implicit biases and their potential impact is a critical first step in working to create a more egalitarian medical community.

Abstract: Purpose:

Gender and racial disparities are prevalent across a range of settings, including within the medical profession. One factor thought to contribute to these disparities is the presence of implicit biases (1).

The transition from medical school to residency is both a critical developmental step in the careers of physicians and, because of the standardized application process – wherein schools submit for each applicant a summative Medical Student Performance Evaluation – it also represents a unique research opportunity. Surprisingly, there are no comprehensive studies examining the prevalence of possible biases based on race and gender in the MSPE.

Methods:

This was a retrospective cohort study examining the MSPE’s of 5,685 US medical students applying to 16 residency programs at a single institution in 2014-15. Custom designed software was used to extract core demographic data and the occurrence of words from four thematic categories (standout traits, ability, grindstone habits, and compassion) (2-4).

Results:

Significant differences in word usage were found based on both gender and race. White applicants were more likely to be described using “standout” or “ability” keywords (including “exceptional”, “best”, and “outstanding”) while black applicants were more likely to be described as “competent”. Differences in the use of these adjectives remained significant after multivariable logistic regression controlling for USMLE step 1 and 2 scores. Female applicants were more likely to be described as “caring”, “compassionate”, and “empathic” or “empathetic”. Women were also more likely to be described as “bright” and “organized”.

Discussion/Conclusions:

While the MSPE is intended to reflect an objective, summative assessment of each student’s qualifications, these data demonstrate clear differences in the way candidates are described based on their race and gender.

Whether writing evaluations or assessing applicants, the recognition of implicit biases and their potential impact is important for faculty who strive to create a more egalitarian medical community.

Level of Audience: Mid-career

Focus of Presentation: UME, GME


