CORRESPONDENCE

Intersection of gender, race, and academic rank in anesthesiology

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To the Editor,

Racial and gender disparities have been identified in all levels of medicine, including in recruitment, retention, and promotion processes.¹ Nevertheless, the intersecting relations of gender and race in anesthesiology are less clear; these relations provide insight into how one's self is socially constructed and situated among power structures, and how, in turn, society is structured by multiple interactions.² Intersectionality can be employed as a theoretical framework to understand how intersecting power relations impact social relations across the spectrum of diverse societies.² Intersectionality views social constructs as being interconnected and influential on each other, giving rise to advantages and disadvantages.² Research to date has homogenized women's experiences. Using data from the American Association of Medical Colleges (AAMC), we

sought to analyze anesthesiologists' faculty rank representation by intersecting social constructs of gender and race.

In this retrospective observational study, we analyzed the intersection of anesthesiologists' gender, self-identified race and/or ethnicity, and academic rank from 2017 to 2019 inclusively, collected from American medical schools. Institutional ethics approval was not required as all data were publicly available (<https://www.aamc.org/data-reports/faculty-institutions/interactive-data/2019-us-medical-school-faculty>). The AAMC provides “self-identified sex” and “self-identified race/ethnicity.” Although sex is collected (i.e., biological female or male), results are reported using gender-related (i.e., socially constructed) terminology (e.g., woman, man). Similarly, although race and ethnicity are distinct concepts, they are combined in the AAMC data set and are presented as such. Data were averaged across years for the analysis. Data from faculty rank “other” were excluded as rank could not specifically be determined. Faculty ranks of assistant professor and instructor were combined as both are considered entry level ranks. Data were described using percentage and number.

The total population included 27,124 anesthesiologists. After excluding “other” faculty rank ($n = 756$, 2.8%), 26,368 were analyzed. Overall, 9,519 (36.1%) were women. Faculty ranks were professor ($n = 3,680$; 14.0%), associate professor ($n = 4,911$; 18.6%), and assistant professor/instructor ($n = 17,777$; 67.4%). Men who identified as White made up the majority of faculty overall ($n = 11,296$; 42.8%), and both men and women who identified as White made up an increasing proportion as academic rank increased (Figure). Out of all anesthesiologists who were men, those who identified as Asian were the second most highly represented among academic ranks ($n = 3,167$; 12.0%), followed by anesthesiologists who identified as Black, Hispanic, Latinx, or of Spanish origin (Figure). Nevertheless, at

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Figure Percentage of anesthesiologists by gender, race, and academic rank

each rank, women who identified as either Black or Asian had higher representation than men who identified as either Black or Asian (Figure).

Our study adds to the knowledge of the intersection of gender, race, and academic rank within anesthesiology. Our data confirm that male anesthesiologists who identify as White are overrepresented at all faculty ranks and that diversity decreases as faculty rank increases. We also show that among anesthesiologists who identify as Asian or Black, men have a lower relative representation at higher faculty ranks than women.

We have a limited ability to determine reasons for the racial and ethnic disparities observed but can speculate based on previous research. A possible factor preventing anesthesiologists marginalized due to race and/or gender from obtaining higher academic rank is the “minority tax”,³ which is defined as additional and disproportionate responsibilities given to marginalized individuals to achieve diversity.³ An individual tasked with equity, diversity, and inclusion because of their social location is deemed the “native informant”⁴ and may lead to greater racism, greater isolation, and feeling invisible.³ These activities are frequently time-consuming, devalued, and inapplicable for promotion. Moreover, the intersection of gender and race may account for power relations at different academic ranks. The high proportion of men who identify as White in leadership positions may deprioritize addressing the structural and institutional reasons for a lack of academic progression in marginalized groups. Another limitation was the availability of only aggregate data—applicants are not unique in that more than one applicant can apply to more than one specialty, self-

identify with more than one race/ethnicity, and be recounted in multiple years. Therefore, we were unable to formally analyze gender and race interactions. Furthermore, we could not determine historical trends given the lack of longitudinal data.

Our data show that gender and racial diversity decline as faculty rank increases in anesthesiology. Intersectionality as critical praxis may provide solutions to address these disparities.

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