Margaret Reilly, MD, MS; Nalani A. Wakinekona, BA; Micah J. Rubin, BA; Bethany Canales, MPH; Rodney Sparapani, PhD; Mitchell Dyer, MD, MS; Neel A. Mansukhani, MD, MS

Introduction

- Clinical vascular surgery research has historically examined a narrow population of patients, excluding women and non-white participants.
- There is evidence of disparities between patient presentations and outcomes for vascular patients with diverse backgrounds. These disparities have implications for the care patients receive.
- We aimed to characterize the frequency and quality of race-based and sex-based reporting and analyses in current vascular surgery research.

Hypothesis

Despite known differences in patient outcomes with regards to race and sex, inclusion of race-based and sex-based analyses is minimal in vascular surgery research.

Methods

- A bibliographic review of all original manuscripts published in EJVES, JVS, JVS: VLD, JET, and AVS from 2018 to 2020 was conducted.
- Primary Outcomes: race or sex reported, race or sex included in any statistical analysis, race or sex included in multivariate analysis, results reported separately by race or sex, and discussion or race-based or sex-based differences.
- Secondary Outcomes: disease process studied, anatomic location studied
- Exclusion Criteria: research on non-human subjects, sex-specific diseases, editorials, and articles with unspecified numbers of patients.
- Chi square tests examined differences in race and sex reporting and analysis.



Manuscripts without Race Reported () Manuscripts with Race Reported () Manuscripts without Sex Reported () Manuscripts with Sex Reported

Analysis of Bias in Vascular Surgery Research: Are Race and Sex Adequately Assessed?





- Sex evaluations included 2558 manuscripts with 578 (22.6%) reporting participant sex. Multicenter studies were more likely to include sex in evaluations. There was no difference between US-based and non-US-based articles with regards to sex reporting.
- Thirty studies (1.2%) had equal numbers of male and female participants.





Conclusions

The rates of race and sex-based patient inclusion and data analysis in the current vascular surgery literature is low, with less than one-fourth

of articles reporting either category.

Investigation of the articles that did report or investigate race and sex revealed that further comparative analysis was minimal. This can make it difficult to apply study findings to the diverse population of vascular patients, despite evidence that both race and sex can affect patient outcomes.

Future research efforts should aim to elucidate differences in patient populations to improve clinical care and outcomes.

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