Are Our Actions Matching Our Words? A Systematic Review of the Literature Surrounding Diversity in Orthopaedic Surgery and Other Surgical Specialties

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¹UCLA Department of Orthopaedic Surgery, ²UCLA, Dept. of Orthopaedic Surgery, ³University of California, Los Angeles INTRODUCTION:

Ethnic and gender diversity among healthcare provider teams has been repeatedly proven to lead to improved patient care metrics. Despite this knowledge, surgical specialties, with orthopaedic surgery in particular, are notorious for lacking both ethnic and gender physician diversity. There has, however, been an increased emphasis on promoting surgeon ethnic and gender diversity as well as an increased emphasis on publishing literature regarding diversity. The current study provides a systematic review to identify quantitative and qualitative trends regarding surgeon diversity among this literature.

METHODS:

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines were used to query articles from PubMed, Embase, Web of Science, and the Cumulative Index to Nursing and Allied Health Literature through March 15, 2022. The search used a combination of keywords for the constructs of surgical subspecialties, residency training, and diversity. The Rayyan Intelligent Systematic Review program was then utilized by two independent reviewers to screen articles. Broad inclusion criteria of both ethnic and gender diversity within various training levels of any surgical specialty was utilized.

RESULTS:

Our query resulted 1,429 studies, of which 326 were included for analysis. Orthopaedic surgery was the subspecialty with the highest number of publications about diversity (n=72), followed by general surgery (n=49) (Figure 1). A majority of articles focused on solely gender diversity (n=138) with fewer articles focusing on solely ethnic diversity (n=38). Of note, 124 articles analyzed both ethnic and gender diversity. Figure 2 illustrates the number of studies about surgical diversity published by year dating back to 1989. In total, 240 studies regarding surgical diversity were published in 2021 compared to just 16 studies 10 years prior to that in 2011 (Figure 2).

DISCUSSION AND CONCLUSION:

Orthopaedic surgery is the surgical subspecialty with by far the most publications regarding diversity among surgeons. Despite this, orthopaedic surgery remains one of the least ethnically and gender diverse surgical subspecialties. This review serves as a call to action to orthopaedic surgeons to continue to promote diversity at all training levels. Furthermore, as the recent emphasis on promoting diversity has led to an exponential increase in published studies in recent years, close attention should be paid to how the ethnic and gender landscape of the surgical workforce changes over the coming years. Should gender and ethnic diversity remain stagnant, orthopaedic surgeons may need to rethink the



