**Increasing Diversity in Orthopaedic Surgery: A Survey of Fourth Year Medical Students**

Stephanie A. Boden¹, Samantha Olson², Susanne H. Boden³, Lauren M. Boden³, Mark E. Baratz³

¹Rush University Medical Center, Chicago, IL, ²Penn State College of Medicine, Hershey, PA, ³University of Pittsburgh Medical Center, Pittsburgh, PA, ⁴The Cleveland Clinic, Cleveland, OH

bodens@aol.com

**Disclosures:** Stephanie A. Boden (N), Samantha Olson (N), Susanne H. Boden (N), Lauren M. Boden (N), Mark E. Baratz (Ruth Jackson Orthopaedic Society: Board or committee member)

**INTRODUCTION:** Despite efforts towards improving diversity in Orthopaedic Surgery, Orthopaedics continues to attract the lowest proportions of women and underrepresented minorities. The purpose of this study was to identify factors that influence how fourth year medical students choose their specialty and investigate current deterrents from Orthopaedic Surgery.

**METHODS:** After obtaining approval from the institutional review board, an anonymous 43-question, voluntary online survey was created and distributed via email between June 2023 and July 2023 to fourth year medical students at three allopathic medical schools in Pennsylvania capturing diverse student demographics from centers in a moderate-sized city, rural, and urban settings. All students in the graduating class of 2023 were encouraged to complete the survey.

**RESULTS SECTION:** Ninety-eight of 423 medical students (23.2%) completed the survey. Sixty-five percent of survey participants were female and 71.9% identified as white. Over half of the students (56.6%) reported that clerkship year was the most influential in choosing a specialty. While 61.8% of students were exposed to Orthopaedics and 25% considered applying, only 8% of surveyed students applied. Deterrents from applying for Orthopaedic residency included competitiveness (35.5%), perception of inability to have a career and family (25%), and the lack of female role models (22.4%). Half of the students (50%) believed one must be physically strong to be an orthopedic surgeon.

**DISCUSSION:** Misconceptions about Orthopaedic surgery may deter female and underrepresented minorities from pursuing this specialty. While most students have some level of exposure to Orthopaedic surgery in medical school, a brief exposure may not be enough to overcome these misconceptions. To attract a more diverse and representative cohort of applicants, it is critical to better understand current conceptions and deterrents.

**SIGNIFICANCE/CLINICAL RELEVANCE:** The study provides information that can be used to design a multi-site program dedicated to breaking down the stereotypes associated with Orthopaedics and therefore increase diversity within the field.