ORTHOPAEDIC SURGERY RESIDENCY PROGRAM & HEALTHCARE ADMINISTRATION

OKLAHOMA STATE UNIVERSITY
CENTER FOR HEALTH SCIENCES

Women in Orthopaedic Surgery: How Medical Schools and Residencies Can Improve Gender Imbalance

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INTRODUCTION

In the United States, women make up 50% of medical students, yet only 15% of those women become orthopaedic surgery residents (Van Heest, 2021). Orthopaedic surgery continues to see the smallest percentage of females of any other surgical specialty, despite similar capabilities and qualifications of applicants in surgical and non-surgical residencies. Many studies spotlight the many factors that play into female students' decisions to pursue orthopaedics or their perceptions of what an orthopaedic residency entails and if they fit into that mold. However, there is a gap in research regarding osteopathic-based education.

Could medical schools, specifically those with osteopathic-based education, potentially sway students' decisions on which residencies to choose?

PURPOSE

The purpose of this study is to look at why female medical students do not choose orthopaedic surgery and a preliminary study of how osteopathic medical schools further impact their decision.

The aim is to highlight the perceptions among female medical students of what makes a good orthopaedic surgeon and the demands of the residency, and if osteopathic medical schools are inadvertently encouraging women to go into traditionally female-heavy residencies by not providing adequate exposure and mentorship in orthopaedics.

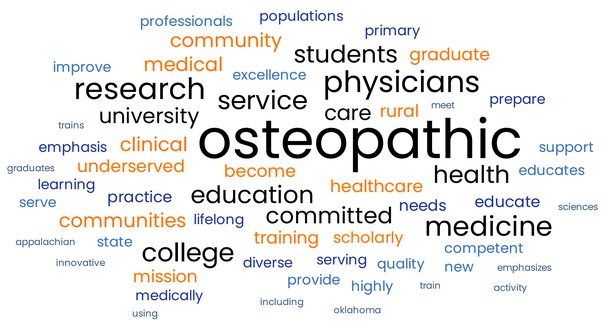
The goal is for medical schools, in conjunction with residency programs, to take this information and use the recommendations to improve the rate of females into orthopaedic surgery residencies.

METHODS

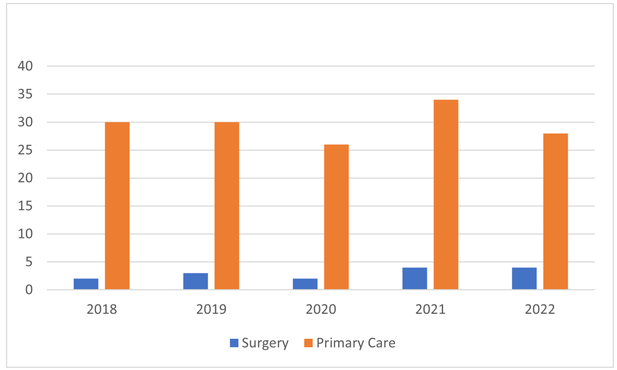
Qualitative research was conducted using transformative worldview methodology. 16 articles were collected and reviewed from PubMed, and the mission statements from 15 Osteopathic medical schools were analyzed using word count in Microsoft Word, as well as an online word cloud generator for word frequency. Data was requested from the Oklahoma State University College of Osteopathic Medicine on the number of female students who matched into primary care residencies compared to those that matched into surgical residencies.

RESULTS

Top Words Used in Mission Statements of 15 Osteopathic Medical Schools

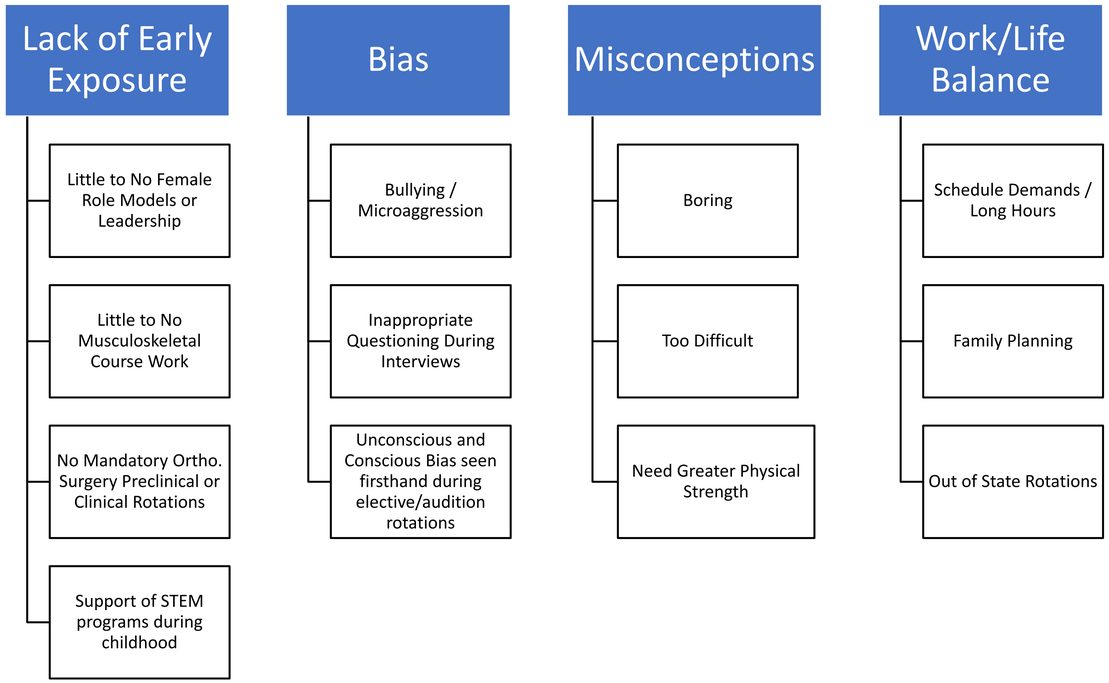


Residency Programs Matched Into by Females at OSU-COM from 2018-2022



Primary Care= Family Medicine, Internal Medicine, Pediatrics, Obstetrics & Gynecology
Surgery= General Surgery, Orthopaedic Surgery, Otolaryngology

Female Medical Student Reasoning Against Choosing Orthopaedic Surgery



CONCLUSION

Increasing the number of females in orthopedic surgery residencies will require efforts across all levels. All research analyzed points to the importance of early exposure by way of musculoskeletal curriculum, clinical rotations, and mentorship prior to a student's third year of medical school. In addition, efforts must be made by residencies and graduate medical education departments to foster and promote female surgeons into positions of leadership. For residencies to see diversity in their programs, it requires initiative from leadership, faculty, and coordinators to promote its attainability. A concerted effort must be made to modernize what an orthopaedic surgeon looks like– for the health of the program and the health of its community.

Regarding osteopathic medical schools, research shows that the mission of osteopathic medical education emphasizes primary care practice and, therefore, could dissuade a female student from choosing orthopaedic surgery, thus continuing to contribute to the shortage.

REFERENCES

Van Heest, A. E., Agel, J., & Samora, J. B. (2021). A 15-Year Report on the Uneven Distribution of Women in Orthopaedic Surgery Residency Training Programs in the United States. JB & JS Open Access, 6(2). https://doi.org/10.2106/JBJS.OA.20.00157

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