

Impact of Interactive Radiology Education Sessions in a Minority High School Student Population

Swathi Pavuluri BS, Xiaoni Zhao MS, Aleena Dar BA, Sharon Gonzales MD

Rutgers New Jersey Medical School

INTRODUCTION

Recent studies of trends in racial/ethnic representation among US medical student applicants and matriculants from 2002 to 2017 have demonstrated underrepresentation of Black, Hispanic, American Indian/Alaskan Native individuals of all genders¹.

These disparities may be attributed to multiple factors, including socioeconomic disparities, limited access to educational resources, lack of mentorship from individuals with shared racial/ethnic or gender identities.

To address workforce disparities, early exposure to the field of radiology and medicine is encouraged via mentorship and engagement, as early as high school.

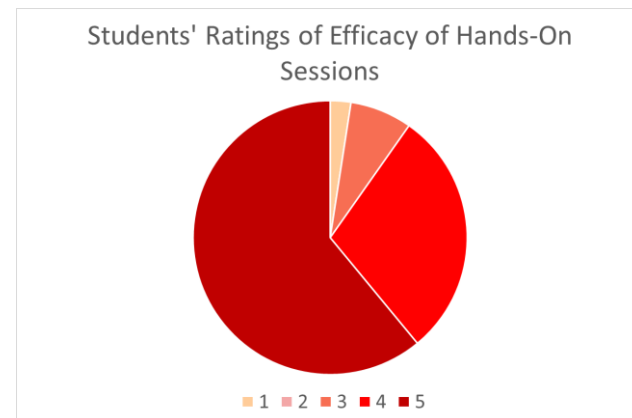
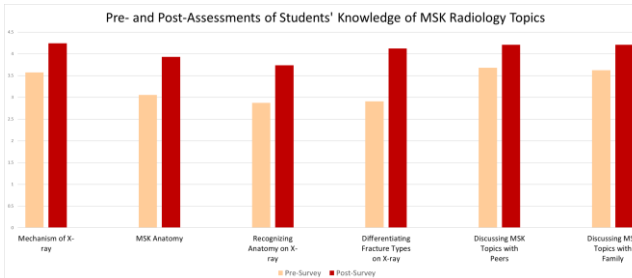
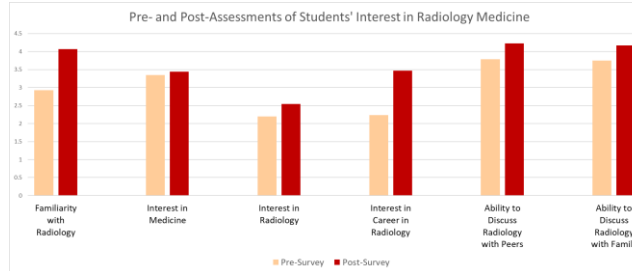
Our study aims to evaluate the efficacy of an interactive, radiology centered curriculum among high school juniors and seniors, regarding knowledge of musculoskeletal anatomy and career interest in the biomedical sciences.

METHODS

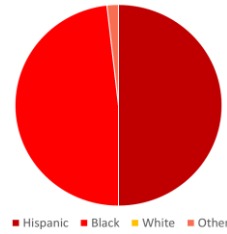
- Medical students designed and delivered an interactive, didactic radiology-based curriculum on musculoskeletal anatomy and the basics of imaging modalities in musculoskeletal radiology at the high-school level
- High school juniors and seniors were asked to participate in pre and post workshop surveys which assessed level of agreement and disagreement on a five-point Likert scale
- Topics addressed in the surveys included familiarity with radiology as a field, interest in a career in medicine, and knowledge of musculoskeletal anatomy, as addressed in the presentation

RESULTS

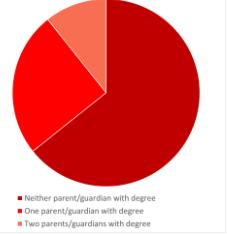
A total of 56 high school juniors and seniors participated in the study.



Students' Demographics



Education Level of Students' Parents



Following the session, results displayed that students had significant increases in familiarity with radiology ($P < 0.0001$), knowledge of the career path to enter medical and radiological fields ($P < 0.0001$), and ability to communicate radiological topics to their peers ($P = 0.0066$) and family ($P = 0.0035$).

Students were also much more confident in their understanding of how X-ray technology works ($P < 0.0001$), their familiarity with MSK anatomy ($P < 0.0001$), ability to distinguish anatomical landmarks on X-ray ($P < 0.0001$), and ability to identify and differentiate between types of fractures ($P < 0.0001$).

CONCLUSION

Early exposure to radiological education and career paths increases students' confidence and knowledge in radiology, and may empower underrepresented individuals to pursue career paths in the field.

REFERENCES

1. Lett AL, Murdock HM, WU Orji, Aysola J, SebraR. Trends in racial/ethnic representation among US medical students. JAMA Netw Open 2019;2:e1910490



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