

March 2024

Healthy Hearts: An interactive demonstration to increase interest in medicine in elementary/ middle school students in/around Detroit.

Neha Chava

Wayne State University School of Medicine, hk5837@wayne.edu

Jessica Elderkin

Wayne State University School of Medicine

Austin Kim

Wayne State University School of Medicine

Molly Dahle

Wayne State University School of Medicine

Rohit Goru

Wayne State University School of Medicine

See next page for additional authors

Follow this and additional works at: https://digitalcommons.wayne.edu/som_srs

 Part of the [Medicine and Health Sciences Commons](#)

Recommended Citation

Chava, Neha; Elderkin, Jessica; Kim, Austin; Dahle, Molly; Goru, Rohit; Monchamp, Karamoja; Ochaney, Neeraj; and Dwaihy, Meghan MD, MPH, "Healthy Hearts: An interactive demonstration to increase interest in medicine in elementary/ middle school students in/around Detroit." (2024). *Medical Student Research Symposium*. 302.

https://digitalcommons.wayne.edu/som_srs/302

This Research Abstract is brought to you for free and open access by the School of Medicine at DigitalCommons@WayneState. It has been accepted for inclusion in Medical Student Research Symposium by an authorized administrator of DigitalCommons@WayneState.

Authors

Neha Chava; Jessica Elderkin; Austin Kim; Molly Dahle; Rohit Goru; Karamoja Monchamp; Neeraj Ochaney; and Meghan Dwaihy MD, MPH

Title: Healthy Hearts: An interactive demonstration to increase interest in medicine in elementary/ middle school students in/around Detroit.

Abstract:

There continues to be a lack of representation and diversity in higher education today, especially in medicine and healthcare. As part of the Healthy Hearts student organization at Wayne State University School of Medicine, we developed a one-time educational session and interactive demonstration to teach students about heart and lung health and fuel students' enthusiasm for healthcare. This project serves as a quality improvement study to understand how we can increase STEM interest in elementary and middle school students in and around Detroit, Michigan. A three question pre- and post-intervention survey was constructed to measure change in: 1) interest in health and science education; 2) perceived importance of heart, lung, nutrition, and exercise education; and 3) intent to pursue a career in health or sciences. Out of 27 students surveyed, 26 surveys were completed fully and used for analysis by independent unpaired t-tests for each survey statement. Following the intervention, mean student interest in health and science education improved by 15.6% ($p = 0.187$). Mean student-perceived importance of heart, lung, nutrition, and exercise education improved by 18.5% ($p = 0.210$). Mean student intent of pursuing a career in health or sciences improved by 6.41% ($p = 0.612$). Although there was a raw improvement in student agreement with the three statements, we found no statistically significant increase in interest in medicine based on pre- and post-intervention survey questions. We will evaluate areas needing improvement in our presentation/demonstration and collect additional data to further evaluate the efficacy of the proposed intervention.

Keywords: education, nutrition, heart and lung health, children, students, STEM interest, medicine, career, Detroit public schools