

MSA ABSTRACT

EVALUATION OF THE MIDDLE SCHOOL TO MEDICAL SCHOOL OUTREACH

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Despite Affirmative Action Health Care Policy efforts, the diversity of the U.S. population is not reflected in the composition of the student body, medical school faculty, or physician workforce. Minority groups make up 30% of the U.S. population, but only 13% of medical students, 6% of physicians, and 3% of medical school faculty are members of an underrepresented minority groups.¹

Research studies demonstrate that increasing the number of URM medical students and practicing physicians, enhances learning outcomes, improves cultural competency, and helps eliminate healthcare disparities.^{2,3} Many of the existing medical school pipeline and mentoring programs are focused on high school and undergraduate students, while little research has been done on the impact of these programs on middle school students.^{4,5}

Hypotheses:

After interacting with medical students and/or faculty from URM backgrounds through a mentorship or after-school program, minority middle school students will have increased interest and increased sense of self-efficacy in entering a career in health care.

Methods:

An existing relationship with Skinner Middle School has already been in place. Skinner Middle School agreed to work with authors in developing this outreach program. One-page proposals for potential program designs and potential pre- and post-evaluations were then sent to Skinner stake holders for consideration and review. The program consists of a one day, hands on & interactive curriculum at the Anschutz Medical Campus composed of different workshops led by CU medical students with faculty liaisons present for additional leadership & support. Medical student volunteers helped lead students, facilitated workshops and lectures, and participated in a panel. Once the program participants arrived on campus they were distributed a pre-evaluation survey with 6 core questions using a 5 point Likert scale (1= Strongly Disagree, 5= Strongly Agree), as well as a few other demographic questions. These same survey questions were used in the post-evaluation survey distributed at the end of the program to compare changes in interest and self-efficacy. The post evaluation survey also includes options for students to provide open ended written feedback about the program.

Results/Progress:

We have successfully completed three iterations of the program in 2018, 2019, and 2021. From the 2019 program, we had a total of 18 students participate (nine male and nine female) with 88% of participating middle school students from underrepresented minority backgrounds. Statistically significant information included that student interest in becoming a health care provider (non-physician) increased ($p=0.015$) as well as confidence in having the

knowledge/intelligence to become a medical doctor increased ($p= 0.024$). Overall, results show increased interest and improved self-efficacy in pursuing careers in medicine & other health professions. Our 2021 event was virtual in the COVID-19 era and did not have enough data points to statistically analyze, therefore, it was left out of our discussion.

Future Direction:

Authors will identify medical school students/faculty to engage with Skinner Middle School participants. Authors will need to identify students from incoming medical school class to lead and sustain program over the subsequent years.

References

1. Kripalani S, et al. A prescription for cultural competence in medical education. *Journal of General Internal Medicine*. 2006;21(10):1116-1120.
2. Thomson W, Denk JP. Promoting diversity in the medical school pipeline: a national overview. *Academic Medicine*. 1999;74(4):312-4.
3. Whitla D, et al. Educational benefits of diversity in medical school: a survey of students. *Academic Medicine*. 2003;78(5):460-466.
4. NaiNair, Marciscano AE, Vivar KL, Schaeffer S, LaMont E, Francois F. Introduction to the Medical Professions Through an Innovative Medical Student-Run Pipeline Program. *Journal of the National Medical Association*. 2011;103(9):832-838.
5. Holden L, Berger W, Zingarelli R, Siegel E. After-School Program for urban youth: Evaluation of a health careers course in New York City high schools. *Information services & use*. 2015;35(1-2):141-160.