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### Harm Reduction Education in Medical School (Poster)

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## Abstract

**Background:** Despite a long history of harm reduction practices and research, U.S. medical schools have not widely incorporated harm reduction into their curriculum, despite the recent opiate epidemic.

**Objective:** We hypothesized that medical students will find benefit in receiving an educational session on harm reduction, by becoming more comfortable with harm reduction practices and finding it useful in their future care.

**Methods:** This prospective survey study included current Cooper Medical School of Rowan University first-year students. Data was collected from pre- and post-educational session surveys investigating student opinions of harm reduction practices.

**Results:** Male students were more likely than female students to know a person experiencing addiction. In the survey, questions 1 ( $p=0.011$ ), 2 ( $p=0.000$ ), and 3 ( $p=0.001$ ) had a significant increase after the education session while questions 5 ( $p=0.000$ ) and 6 ( $p=0.000$ ) had a significant decrease.

**Conclusions:** A one-hour lecture on harm reduction can be effective in changing medical student viewpoints and potentially practice patterns. Further studies should be performed to demonstrate long-term changes in clinical practice based on this education session.

## Introduction

- Harm reduction is a philosophical approach to addressing harms in a community.<sup>1</sup>
- This philosophy accepts that harm and harm reduction are on a spectrum where there is opportunity to intervene depending on the individual's readiness for change.
- A report by the National Center on Addiction and Substance Abuse in 2012 illustrated that the majority of medical schools only devote a few hours over the course of 4 years to discussing addiction medicine.<sup>2</sup>
- There is a current irrefutable need to reevaluate how future providers are trained, and harm reduction education can offer these future providers with patient-centered tools to help combat risky behaviors, overdoses, and other community issues beyond drug use.

## Methods

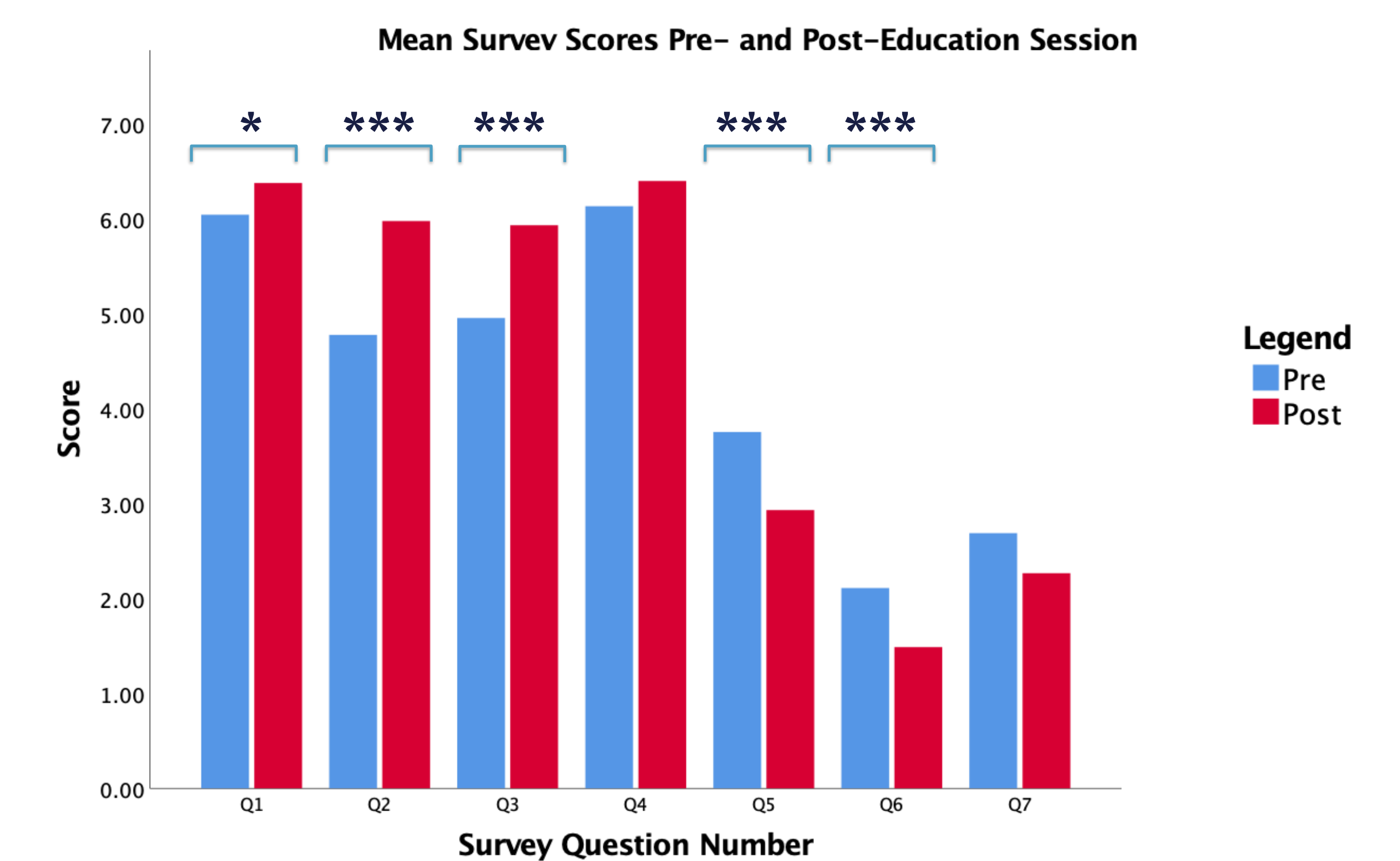
The prospective survey study included current medical students at Cooper Medical School of Rowan University (CMSRU), and specifically first year students interested in joining the Street Medicine service learning group. Students participated in a one hour training session on harm reduction theory and case discussions concerning IV drug abuse and sex work. Data was obtained from identical pre- and post-session surveys. Survey data was analyzed using Wilcoxon Signed Ranks Test to compare pre-intervention and post-intervention changes in question ranking. The data were analyzed using IBM SPSS Statistics version 25.

## Results

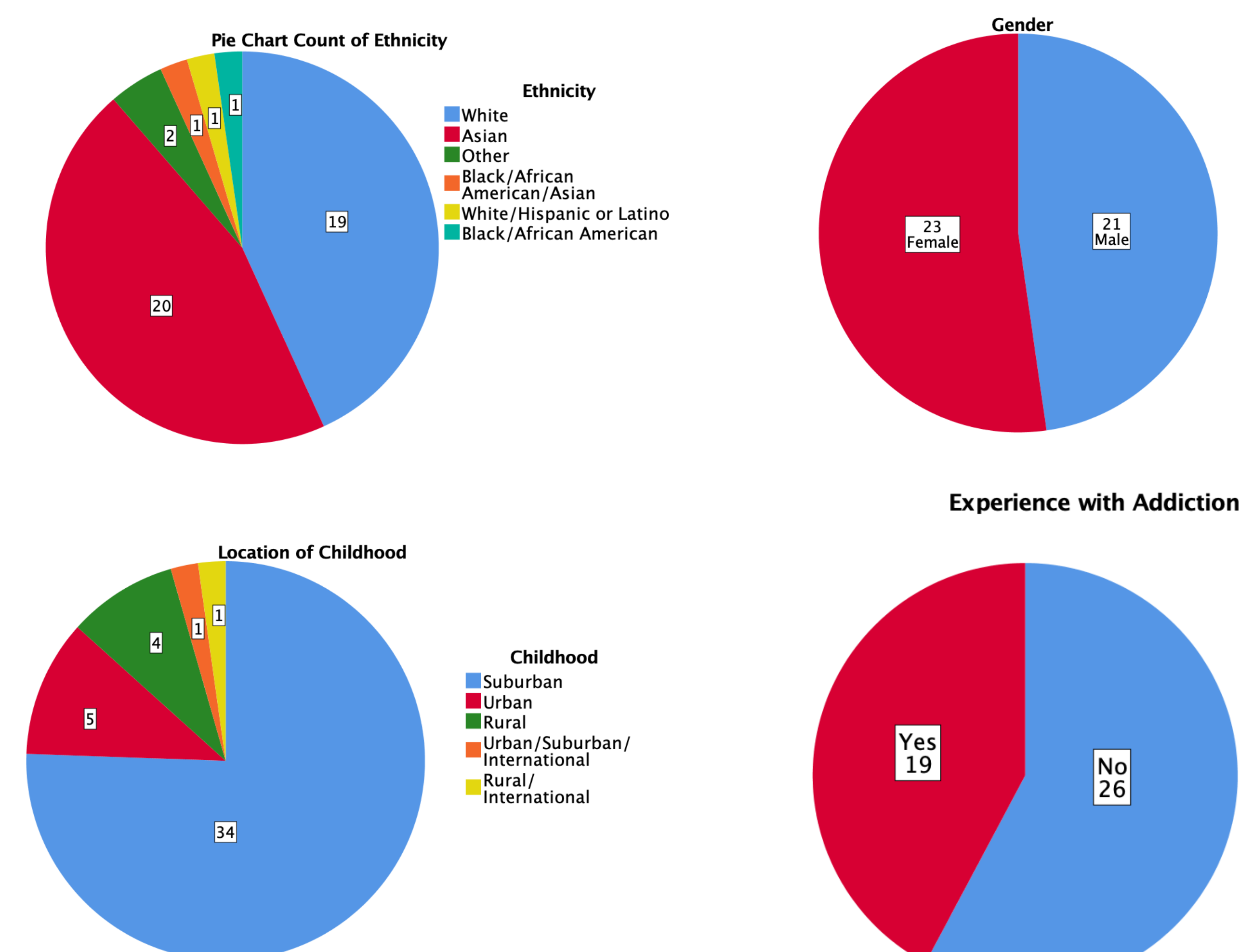
**Table 1.** Survey questions posed to students with a scale of -3 (strongly disagree) to 3 (strongly agree).

Questions	Strongly Disagree	Moderately Disagree	Disagree	Neutral	Agree	Moderately Agree	Strongly Agree
I will use principles of harm reduction in patient treatment	-3	-2	-1	0	1	2	3
I feel comfortable discussing harm reduction with patients	-3	-2	-1	0	1	2	3
I feel comfortable discussing harm reduction with family	-3	-2	-1	0	1	2	3
I would support harm reduction practices in health advocacy and policy	-3	-2	-1	0	1	2	3
Harm reduction enables patients to continue engaging in dangerous behaviors	-3	-2	-1	0	1	2	3
Harm reduction is not relevant to my education as a medical student	-3	-2	-1	0	1	2	3
Harm reduction will prompt more people to engage in dangerous behaviors	-3	-2	-1	0	1	2	3

## Results (cont.)



**Figure 2.** Pre- and post-survey question means ( $n=45$ ). \* indicates  $p<.05$ . \*\*\* indicates  $p<0.001$



**Figure 1.** Responses on the demographics portion of the survey represented as a pie chart.

## Results

- Our population was heavily represented by subjects that identified as White or Asian and lived in a suburban location.
- Males were more likely to know a person dealing with addiction than females ( $p=0.007$ ). However, there was no difference when comparing answers of subjects of white ethnicity vs any other ethnicity ( $p=0.447$ ) and a suburban childhood location vs any other location (0.651).

## Conclusions

- The finding that males are more likely to have experience with a family member or friend dealing with addiction may be related to increased risk-taking behavior in their peer group.
- The education session was feasible and changed subjects' comfort in discussion of harm reduction and opinion of harm reduction. However, further studies should be done to determine the longevity of this change.
- Of note, Q7 remained unchanged during this lecture session, which prompts us to reevaluate our ability to convey this point and determine a way to shift attitudes through the education session.

## References

- Marlatt GA, Larimer ME, Witkietiz K, eds. *Harm Reduction: Pragmatic Strategies for Managing High-Risk Behaviors*. New York, NY: The Guilford Press; 2012.
- Howley L, Whelan A, Rasouli T. Addressing the Opioid Epidemic: U.S. Medical School Curricular Approaches. *AAMC Analysis in Brief*. 2017 August; 18(1).