

The Role of Race/Ethnicity on Knowledge of and Attitudes Towards Opioid Overdose and Harm Reduction



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INTRODUCTION

The opioid epidemic continues to be a major public health concern for individuals from all backgrounds and remains one of the leading causes of preventable death in the United States. Research has shown that perceptions and tolerance of substance use disorder (SUD) vary by racial communities.

Students entering their first year of medical school represent a wide variety of these communities. As medical curricula seek to fill gaps in opioid use disorder education, understanding how cultural backgrounds affect students' understanding of SUD plays a vital role in ensuring effective implementation of new teaching strategies.

This study assesses the impact of race/ethnicity on first-year medical students' knowledge and attitudes toward opioid overdose and treatment.

METHODS

Baseline Survey

Opioid Overdose Knowledge Scale (OOKS)	Opioid Overdose Attitude Scale (OOAS)	Naloxone Related Risk Compensation Beliefs (NaRRC-B)
-Measures knowledge of opioid overdose, naloxone effects, and treatment	-Evaluates confidence/attitudes towards managing an opioid overdose	-Measures attitudes towards opioid use in relation to accessibility of naloxone

WSUSOM M1 Participants (n=230)

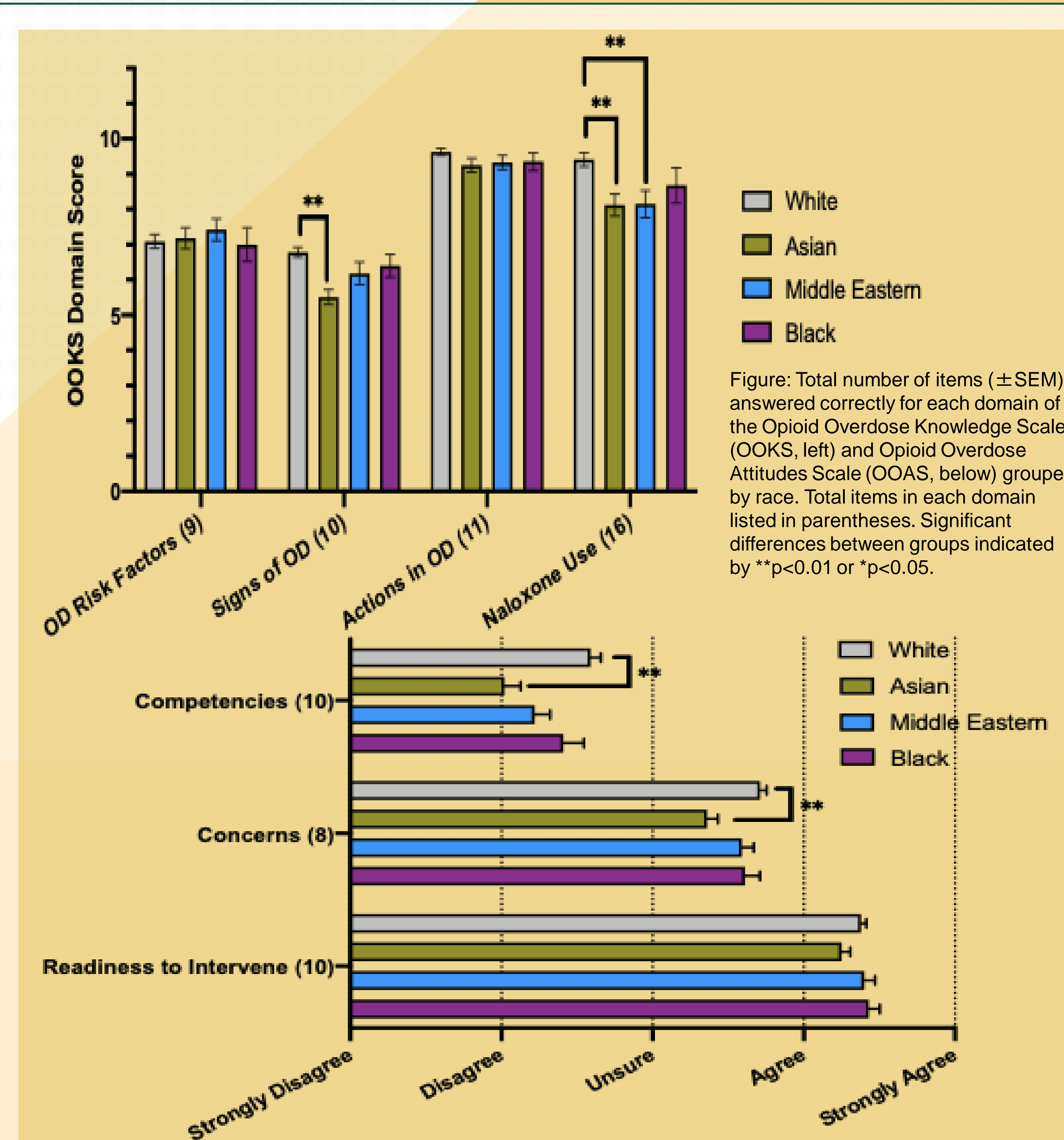
46.0%	22.8%	13.2%	10.0%
White	Asian	Middle Eastern	Black

Statistical Analysis

ANOVA comparing racial/ethnic group differences in assessment scores

RESULTS

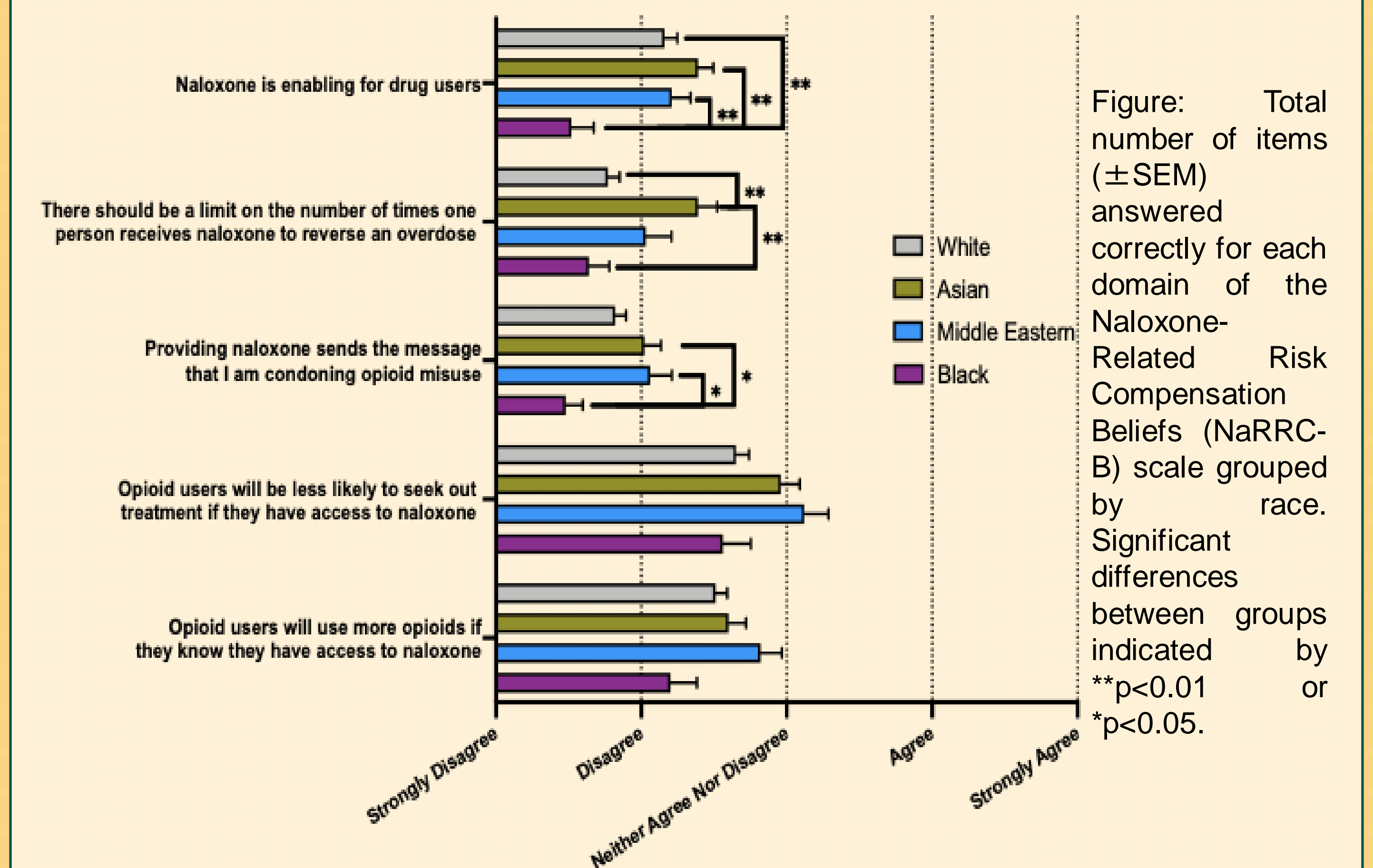
	White N=115 (46.0%)	Asian N=57 (22.8%)	Middle Eastern N=33 (13.2%)	Black/African American N=25 (10.0%)	Test Statistic N=230
Age	23.7±2.6	23.0±2.6	22.7±2.2	24.1±2.7	2.376 (0.071)
Gender (female)	51.3% (59)	49.1% (28)	45.5% (15)	68.0% (17)	3.334 (0.343)
Prev. Paid healthcare experience	73.9% (85)	56.1% (32)	54.5% (18)	72.0% (18)	8.042 (0.045)
Know someone with an SUD (or had one themselves)	53.9% (62)	17.5% (10)	21.2% (7)	68.0% (17)	33.539 (<0.001)
Heard of Naloxone and knew its use	81.7% (94)	50.9% (29)	69.7% (23)	60.0% (15)	23.268 (0.001)



- On the OOKS and OOAS White students exhibited more knowledge of overdose signs ($F(3,229)=7.85$, $p<0.001$) and naloxone use ($F(3,229)=5.38$, $p=0.001$), more self-confidence ($F(3,229)=8.59$, $p<0.001$) and fewer concerns responding to overdose ($F(3,229)=6.20$, $p<0.001$) than their Asian counterparts.

RESULTS

- For 3 NaRRC-B statements Black/African American students were less likely to agree that: naloxone distribution condoned drug use ($F(3,229)=3.33$, $p=0.020$), naloxone use should have a limit ($F(3,229)=6.878$; $p<0.001$), or it is enabling ($F(3,229)=5.92$, $p=0.001$).



- 68.0% of Black students either knew someone with SUD or had one themselves compared to 17.5% among Asian students and 21.2% of Middle Eastern students.
- 81.7% of the White students had heard of naloxone and knew its use, while 53.9% of White students knew someone with an SUD or had one themselves.
- 72.0% of Black students and 73.9% of White students had previous paid healthcare experience.
- These higher percentages could further explain why Black and White students stood out in the NaRRC-B and OOKS/OOAS respectively.

CONCLUSION

Black students had more tolerant attitudes of naloxone use and distribution whereas White students had more baseline knowledge on opioid/naloxone use and comfort responding to overdose. 250 students filled out the baseline survey. Since very few endorsed "other" or "mixed", they were not included in the analysis however this could be a potential new area of investigation.

Future Directions: Understanding these trends will help tailor medical education and train future physicians to combat this epidemic in an informed and empathic way. Better training may help reduce SUD rates and decrease the stigma for those with SUDs.

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