

Medical Student Knowledge and Perceptions of Medications for Opioid Use Disorder

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Introduction

- Medications for opioid use disorder (MOUD) are the gold standard for treating opioid use disorder (OUD)¹.
 - MOUDs = Methadone, Buprenorphine, & Naltrexone
 - Only 25% of individuals with OUD received treatment with MOUD in 2022².
- The 2023 elimination of the X-waiver increased the number of providers eligible to prescribe MOUD, yet utilization has not proportionally improved³.
- Barriers to MOUD prescribing include provider knowledge gaps, stigma, and misconceptions about substance use disorders (SUD)⁴.
- New DEA requirements mandate eight hours of training on the treatment of SUD, but no standardized curriculum exists.
- The OUWB curriculum meets the DEA requirement, but its effectiveness in preparing students to prescribe MOUD is unclear.
 - Behavioral Medicine and Psychopathology (BMP) course in M2 year = 8 hours lecture material on SUD
 - Psychiatry Clerkship in M3 year = Clinical exposure to SUD

Aims and Objectives

- We aim to identify potential gaps in knowledge that will guide curriculum improvements to better prepare future physicians in MOUD counseling and prescribing.
- In this study, we assess OUWB student understanding of MOUD, including:
 - Pharmacology and clinical indications
 - MOUD effectiveness
 - Attitudes toward patients taking MOUD
 - Evaluation of the OUWB SUD curriculum

Methods

Study Design: Cross-sectional survey designed from previously validated instruments and distributed to OUWB medical students via Qualtrics^{4,5}

Data analysis: Participants who completed the survey were divided into three groups based on their progression through the OUWB curriculum: pre-BMP/Psychiatry (n=14), post-BMP (n=9), and post-BMP/Psychiatry (n=10). Scores were calculated based on participant answers to ten knowledge-based questions (M=4.60, SD=2.18). The data were uploaded to SPSS for analysis.

Results

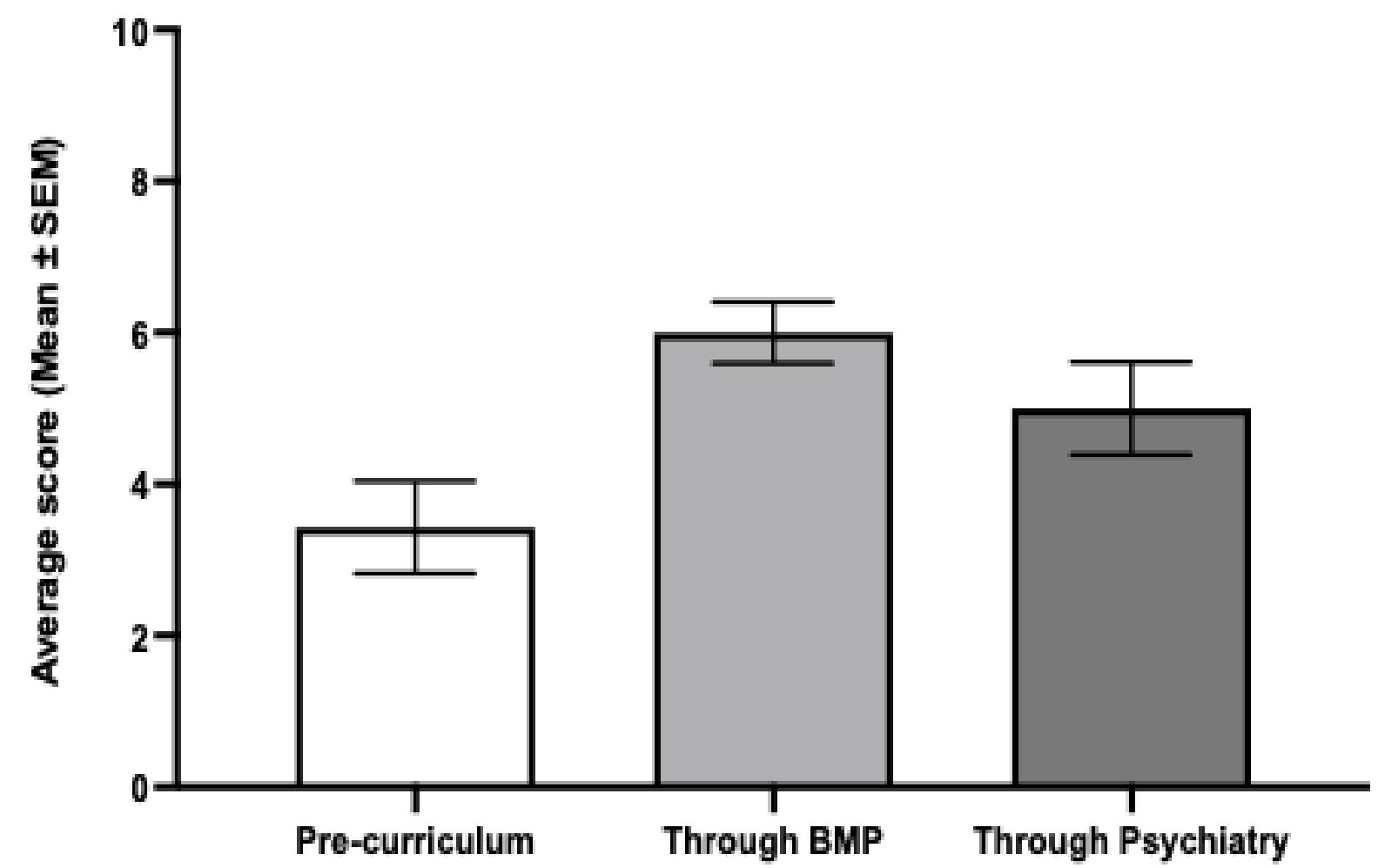


Figure 1. Average score on knowledge-based questions at three points of progression through the OUWB SUD curriculum.

	True	False	Unsure
Buprenorphine is a first-line treatment for patients with OUD	39.4*	15.2	45.5
Evidence recommends continuing buprenorphine during pregnancy	48.5*	12.1	39.4
Physicians must have a special license (X-Waiver) to prescribe buprenorphine	45.5	24.2*	30.3

Table 2. Percent of participants responding true, false, or unsure to statements about buprenorphine (*=correct).

Item Question	Correlation with Knowledge-Based Score	
Treatment with buprenorphine is overvalued because it substitutes one drug for another	r = -.383	p = 0.028
Treatment with buprenorphine discourages patients from seeking long-term remission	r = -.359	p = 0.040

Table 1. Negative Pearson correlations between participant knowledge-based score and agreement with negative statements about buprenorphine.

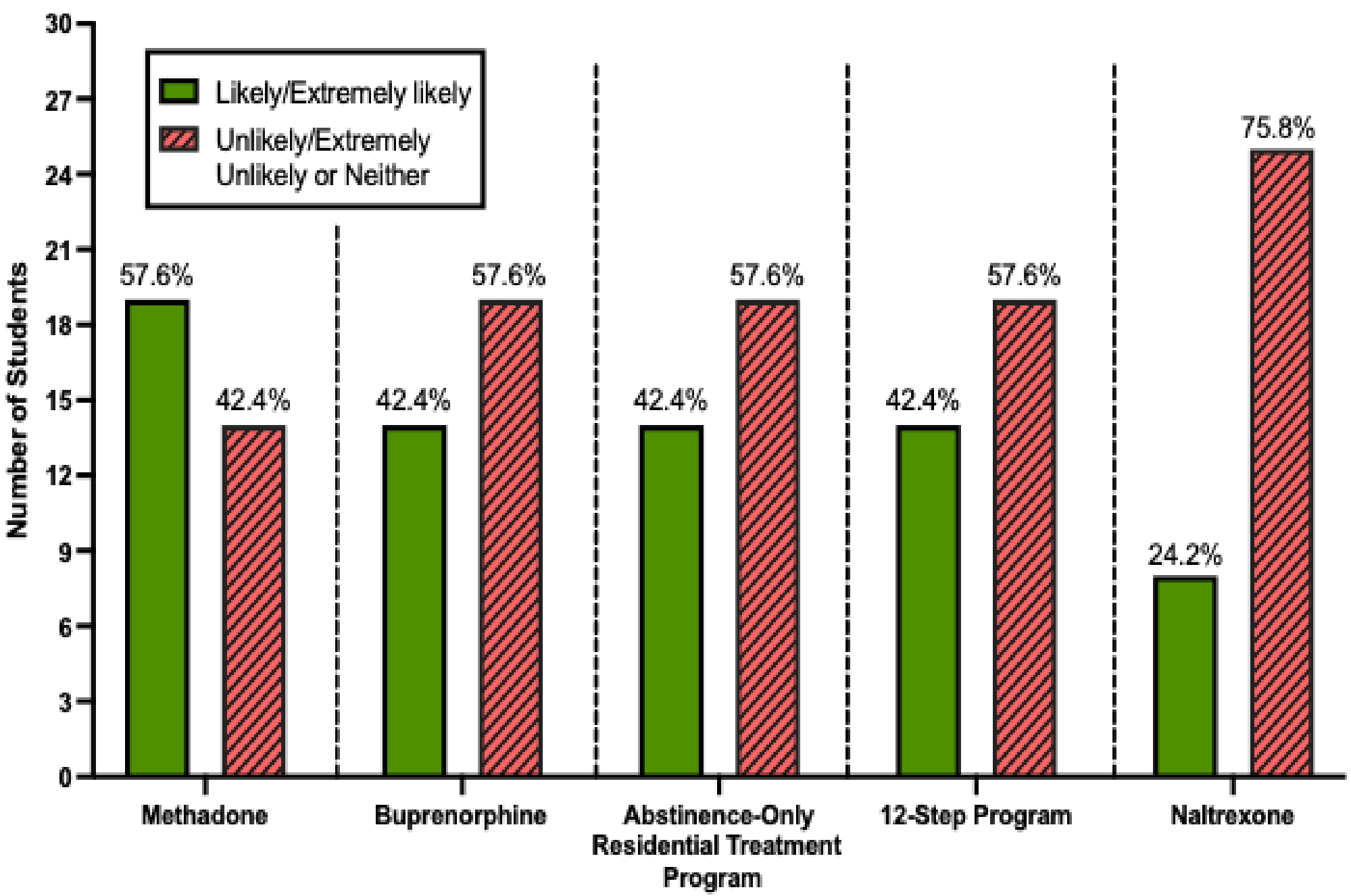


Figure 2. Student perception of the likelihood of a patient achieving remission from OUD with each mitigation strategy alone.

Discussion

- Our findings support the need for enhanced, longitudinal MOUD training across all phases of medical education.
- The largest limitation in the interpretation of our results is our sample size, and we plan to continue data collection.

Conclusions

- All participants indicated support for MOUD, but many demonstrated gaps in knowledge about MOUD prescribing.
- Knowledge scores peaked after the BMP course (M2-M3s) but declined post-psychiatry clerkship, suggesting a need for reinforcement during clinical years.
- Greater endorsement of negative views about buprenorphine was linked to lower knowledge-based scores.
- Knowledge Gaps:
 - Underestimating buprenorphine's effectiveness compared to methadone and misidentifying 12-step programs as equally effective compared to buprenorphine.
 - The majority (60.7%) of students could not identify buprenorphine as a first-line treatment for OUD.

References

- Wakeman SE, Larochelle MR, Ameli O, et al. Comparative effectiveness of different treatment pathways for opioid use disorder. *JAMA Netw Open*. 2020;3(2):e1920622. doi:10.1001/jamanetworkopen.2019.20622.
- Dowell D, Brown S, Gyawali S, et al. Treatment for opioid use disorder: population estimates — United States, 2022. *MMWR Morb Mortal Wkly Rep*. 2024;73:567–574. doi:10.15585/mmwr.mm7325a1.
- Christine PJ, Chahine RA, Kimmel SD, et al. Buprenorphine prescribing characteristics following relaxation of X-waiver training requirements. *JAMA Netw Open*. 2024;7(8):e2425999. Published 2024 Aug 1. doi:10.1001/jamanetworkopen.2024.25999.
- Franz B, Dhanani L, Hall OT, et al. Buprenorphine misinformation and willingness to treat patients with opioid use disorder among primary care-aligned health care professionals. *Addict Sci Clin Pract*. 2024;19:7. doi:10.1186/s13722-024-00436-y.
- Tutag Lehr VB, Nolan C. Community pharmacists' knowledge and perceptions of buprenorphine for patients with opioid use disorder. *J Addict Med*. 2023;17(4):e224-e231. doi:10.1097/ADM.0000000000001135.