



MARQUETTE
UNIVERSITY

College of Nursing
Nurse Anesthesia

Enhancing Anesthesia Options: Educating Providers On Care Strategies for Patients with Substance Use Disorder on Medication-Assisted Therapy

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Background

- According to the 2022 National Survey on Drug Use and Health, 48.7 million people, or 17.3% of people 12 and older have had a Substance Use Disorder (SUD) in the past year.
- The opioid epidemic is considered a public health crisis (NCDAS, 2024).
- SUD patients may have an altered sensitivity to pain, have tolerance to the analgesic effects of opioids, or be on Medication Assisted Therapy (MAT) which can complicate treating acute pain due to the mechanism of action of these drugs (Brown et al., 2021).
- Patients in recovery from SUD who present for anesthesia, require more comprehensive pain control strategies while limiting opioid use (Brown et al., 2021).
- Healthcare providers are often unaware or lack formal education on how to manage these patients due to there being no standard recommendations (Brown et al., 2021).

Evidence Synthesis

- PubMed and EBSCO
- Keywords: “substance use disorder,” “opioid-free anesthesia,” “regional anesthesia,” “early recovery after surgery,” “methadone,” and “suboxone,”
- Inclusion: English language only. Published within the last 5 years (2019-2023)
- 3,093 articles were found; titles reviewed for relevance
- 54 articles; titles reviewed and scanned for relevance
- 15 articles selected

SWOT ANALYSIS



Literature Findings

- There is a lack of knowledge, education, and training of anesthesia providers on how to manage patients who present with SUD, despite the growing number of these patients (Brown et al., 2021).
- Literature suggests anesthesia providers continue to use opioids to care for these patients, despite the evidence of more appropriate ways (Brown et al., 2021).
- Multimodal analgesia, an ERAS protocol, has proven to reduce or replace opioid use, while improving patient outcomes and decreasing risk of relapse in patients with SUD (Zwolinski et al., 2023).
- A recent study highlighted why initiatives are needed to increase the use of opioid alternatives when caring for this patient population, and web based education alone is unlikely to achieve that goal (Brown et al., 2021).

Gap

- Project partner site lacks standardization of education and care for SUD patients on MAT
- Anesthesia providers lack of understanding of the anesthetic implications of MAT
- Methadone clinic staff lack proper education on opioid alternatives for their patients undergoing anesthesia

Purpose

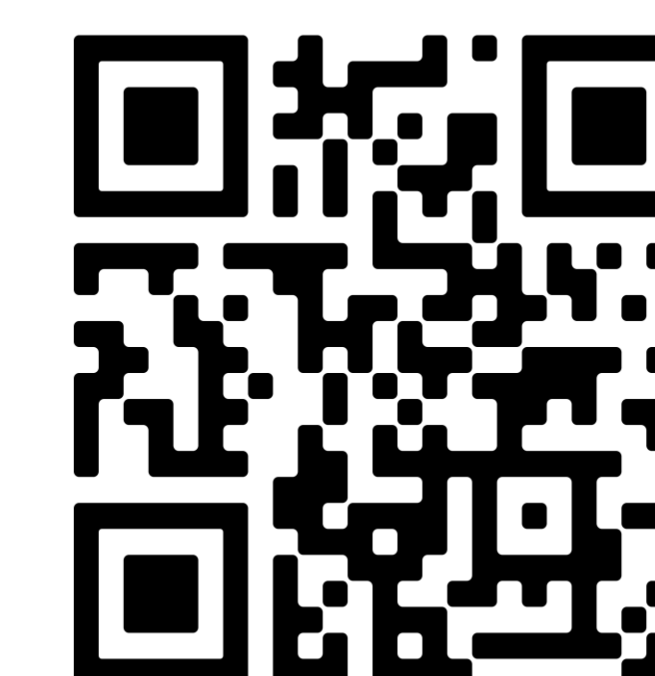
- This project aims to address a gap in knowledge about anesthesia management in patients with Substance Use Disorder, specifically those on Medication Assisted Therapy.

Aims

- 50 % of CRNAs will report the education provided them with improved knowledge of SUD and MAT
- 50% of CRNAs will report the education improved their knowledge of alternative anesthetic options for SUD patients
- 50% of CRNAs will report consideration of implementation of knowledge learned through this education
- 50% of Methadone Clinic staff will report the education provided them with a better understanding of anesthesia options for their patients

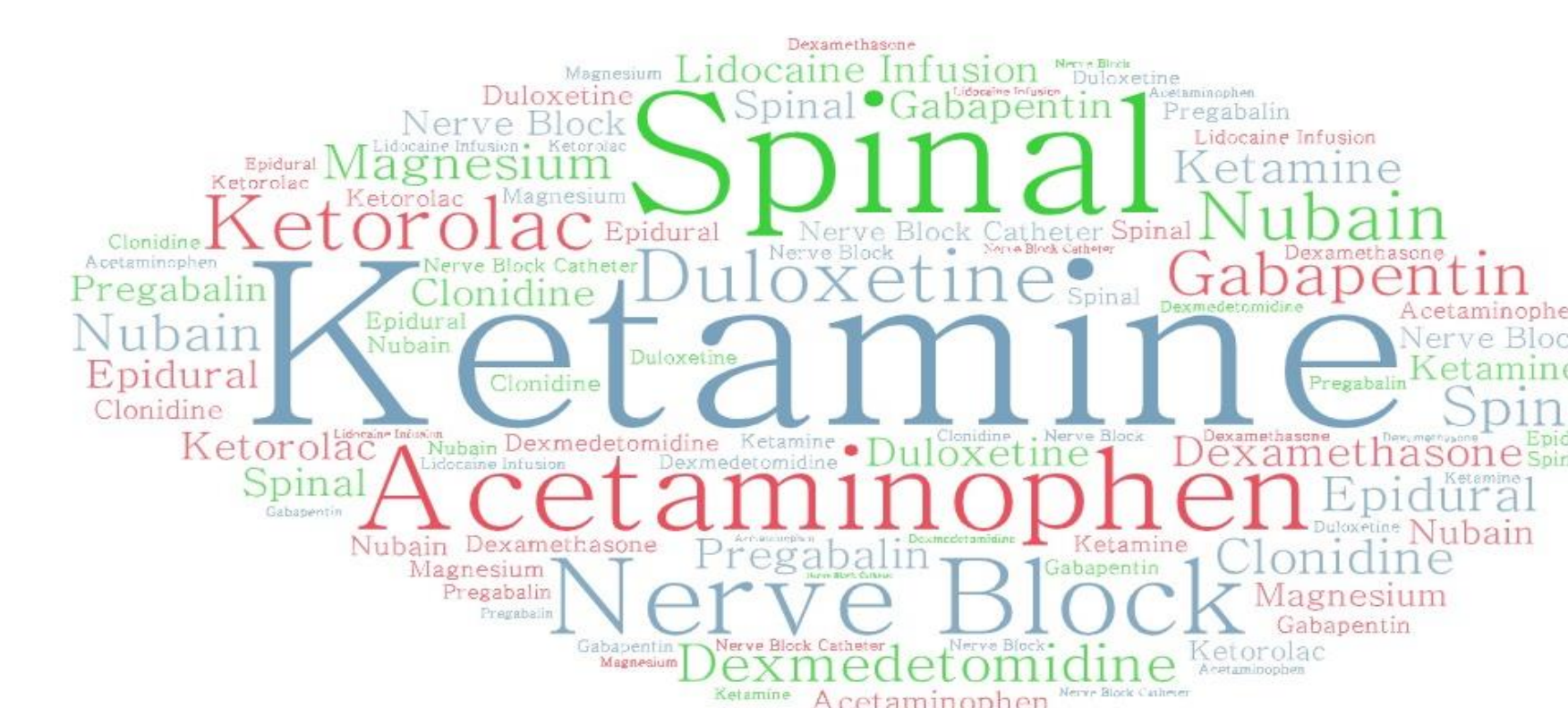
Project Design

- Quality Improvement Project
- Educational presentation for the Certified Nurse Anesthetists at a project partner site
- Educational presentation for the staff of a Methadone Clinic at a project partner site
- Presentations were developed and individualized to each site's audience and needs
- A quick reference guide was developed as an additional resource for CRNAs to increase accessibility of the information for future use



Methods

- A pre-education questionnaire will be given to each convenience sample prior to the presentation.
- A post-education will be given to the same convenience samples once the presentation has commenced.
- A 30-day follow up questionnaire will be distributed to those whom participated in the presentations to measure effectiveness and sustainability of this project.



Timeline

- January 2023 through May 2025

References

