Practice Considerations for the Anesthesia Provider for Methamphetamine Substance Use Disorder Patients

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INTRODUCTION

- Methamphetamine accounts for approximately 1.6 million of the 21.5 million misused substances in the United States.[1]
- 5.4% of Americans reported they have used methamphetamines at some time in their life.[2]
- Some regions report methamphetamine use as high as 15.1% of the population.[3,4]
- Methamphetamines account for approximately 16.2 to 48.3 billion of healthcare dollars spent.[5]
- 81% of patients provide false information to their providers.[6]
- No comprehensive practice considerations exist for anesthesia providers treating methamphetamine SUD patients.

OBJECTIVES

The goal of this DNP project is to educate anesthesia practitioners on the potential complications of providing anesthesia to patients who are acutely intoxicated or have a history of methamphetamine use.

The aims of the project are as follows:

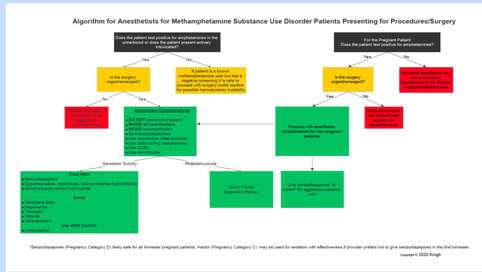
1. Based on existing literature amend the current practice considerations for patients with methamphetamine SUD.
2. Develop, implement and evaluate an educational module for anesthesia providers treating patients with methamphetamine SUD disorders.
3. Present findings from the DNP project to the AANA and IANA. This includes: literature review, amended practice considerations, findings from Yale Qualtrics survey administered to IANA CRNAs.

METHODS

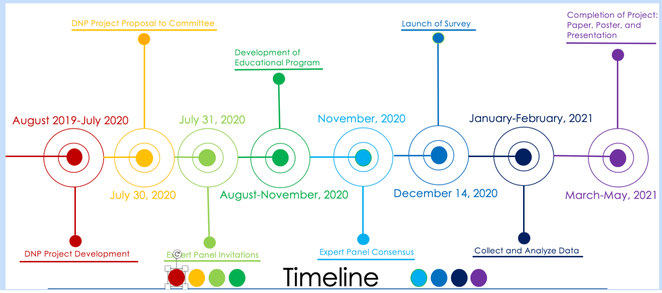
- The development of guidelines an important task and requires initiative and leadership. This author will use knowledge gained to be the rising subject matter expert to advocate for the updating of knowledge in relation to methamphetamine SUD patients.

The aims of the project are as follows:

1. Based on existing literature amend the current practice considerations for patients with methamphetamine SUD.
   - A literature review and expert panel consultation resulted in amending practice considerations for the AANA and the following algorithm:

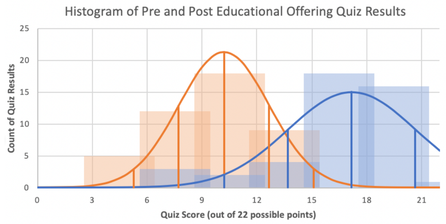


2. Develop, implement and evaluate an educational module for anesthesia providers treating patients with methamphetamine SUD disorders.
   - A 50-minute educational YouTube was created and sent via email survey to IANA CRNAs
3. Present findings from the DNP project to the AANA and IANA. This includes: literature review, amended practice considerations, findings from Yale Qualtrics survey administered to IANA CRNAs.
   - Podium presentation with AANA August 2021.



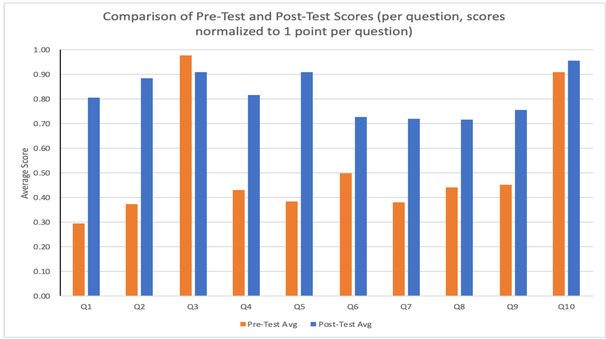
RESULTS

- 44 Yale Qualtrics surveys administered to IANA CRNAs were analyzed with the following results.



Pre-educational offering results are displayed in orange, while post-educational offering results are displayed in blue.

22 possible quiz points			
n	44		
Pre-test μ	Pre-Test SD	Post-test μ	Post-Test SD
10.20	2.46	17.18	3.49
t	10.84254		
Null	Pre mean = post mean		
Alternative	Post mean > Pre Mean		
alpha	0.05		
t(.95,40)	1.684	Reject Null	



- The scores of survey respondents improved from the pre-test to the post-test.
- Survey satisfaction scores were overwhelmingly positive.
- 88.56% of survey respondents stated that they would used the algorithm in their practice.
- Expected project completion: April 23, 2021

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