

# Improve Infant Suffering Through Education

Maggie Galloway, Kelley Mikut, Jenna Scott, Lauren Paskey, Gabby Neric, Issy Albu

## INTRODUCTION

### Purpose:

- Educate and further explain how non-pharmacological and pharmacological methods go hand in hand when caring for Neonatal Abstinence Syndrome (NAS) babies.
- Discuss how a standard protocol leads to better patient outcomes and a more accurate use of the Finnegan scoring system which determines the route of care given
- The Finnegan scoring system is subjective based on the nurse's observations which can lead to inaccurate scores for the infant.

### PICO:

- In nurses who care for neonates experiencing Neonatal Abstinence Syndrome (NAS), does education on assessment scoring system, nonpharmacologic and pharmacologic treatment strategies compare to no additional education affect nurse knowledge and integration of these strategies into the care of neonates experiencing NAS.

## CURRENT EVIDENCE

- The Finnegan scoring system is the tool used to identify NAS babies by nurses using their subjective opinion on symptoms presented.
- A score of 8 or higher indicates the use of pharmacological therapy. These symptoms include tremors, high pitched scream, seizures, excessive sucking, diarrhea, fever, tachypnea.
- The first line of treatment is non-pharmacological measures. Therapies that improve infant outcome are breast feeding, music therapy, laser acupuncture, and stochastic vibrotactile stimulation.
- The goal of non-pharmacological interventions is to maintain the severity of withdrawal symptoms in order to promote proper growth, hydration, nutrition, and rest for the infant.
- Pharmacological therapy is used when environmental and supportive measures are no longer sufficient and carries risk of long-term morbidity.

## EDUCATION PLAN & IMPLEMENTATION

### Purpose:

- To educate nurses on the benefits of having a protocol in place to use the Finnegan scoring system which leads to more accurate scores.
- Educate on different nonpharmacological interventions to use to improve infants' symptoms
- Show how the use of non-pharmacological and pharmacological interventions used together is more beneficial than using one over the other.

### Objectives:

- Our audience to understand the Finnegan scoring system
- To learn about the different types of nonpharmacologic treatments
- To have an understanding of the standard protocol for the treatment of NAS infants

### Target Audience and Location:

- Nursing students
- 3/31/20 11:30-11:45
- Web-ex session

### Presentation:

- 15-minute PowerPoint presentation
- 150 nursing students attended the information session

## EDUCATION SESSION

- Before starting our education session we sent a pre-quiz to see how much our audience knew about NAS infants, the scoring system and treatment methods for them.
- We held one education session via Web-ex to 150 senior nursing students, this included presenting a PowerPoint lecture.
- Our PowerPoint included information on Neonatal Abstinence Syndrome, Finnegan scoring system, standard protocol, pharmacological and non-pharmacological interventions.
- Once completing our education we allowed for questions from the audience to clarify any information given.
- Following our education the attendees filled out a post-quiz to determine if our education increased their knowledge of NAS infants, scoring system and treatment methods.

## PRE AND POST SURVEY

### Multiple choice question pre-test and post test:

- What number on the Finnegan score means you go to pharmacological treatment?
- T or F : a standard protocol leads to improved outcomes of NAS babies and decreases length of stay?
- What is the average length of stay for a NAS baby?
- What are signs and symptoms of withdrawal?
- Where should the music be positioned for music therapy?

### Results:

- Based on our survey responses, our education gave our audience a better understanding of the Finnegan scoring system.
- The audience better understood the need for standard protocol for NAS infants following our education session.
- Survey responses overall showed attendees' knowledge increased about NAS scoring and treatment following the education session.

## LESSONS LEARNED

### Recommendations:

- To be able to present information to nurses who are experts in the field and who utilize the Finnegan scoring system. This includes NICU, labor and delivery and postpartum nurses.
- Gather the policy and procedure on Finnegan scoring from local hospitals to compare the procedures done and our research.
- Use a different survey website for question to be able to see all of the results instead of being limited to 40 responses
- Education and training for nursing staff on accurate scoring and consistency to decrease subjective discrepancies.
- Utilizing non-pharmacological interventions to help decrease the infant's hospital stay
- More research on the benefits of combining nonpharmacological and pharmacological interventions

## LITERATURE SEARCH

### Databases:

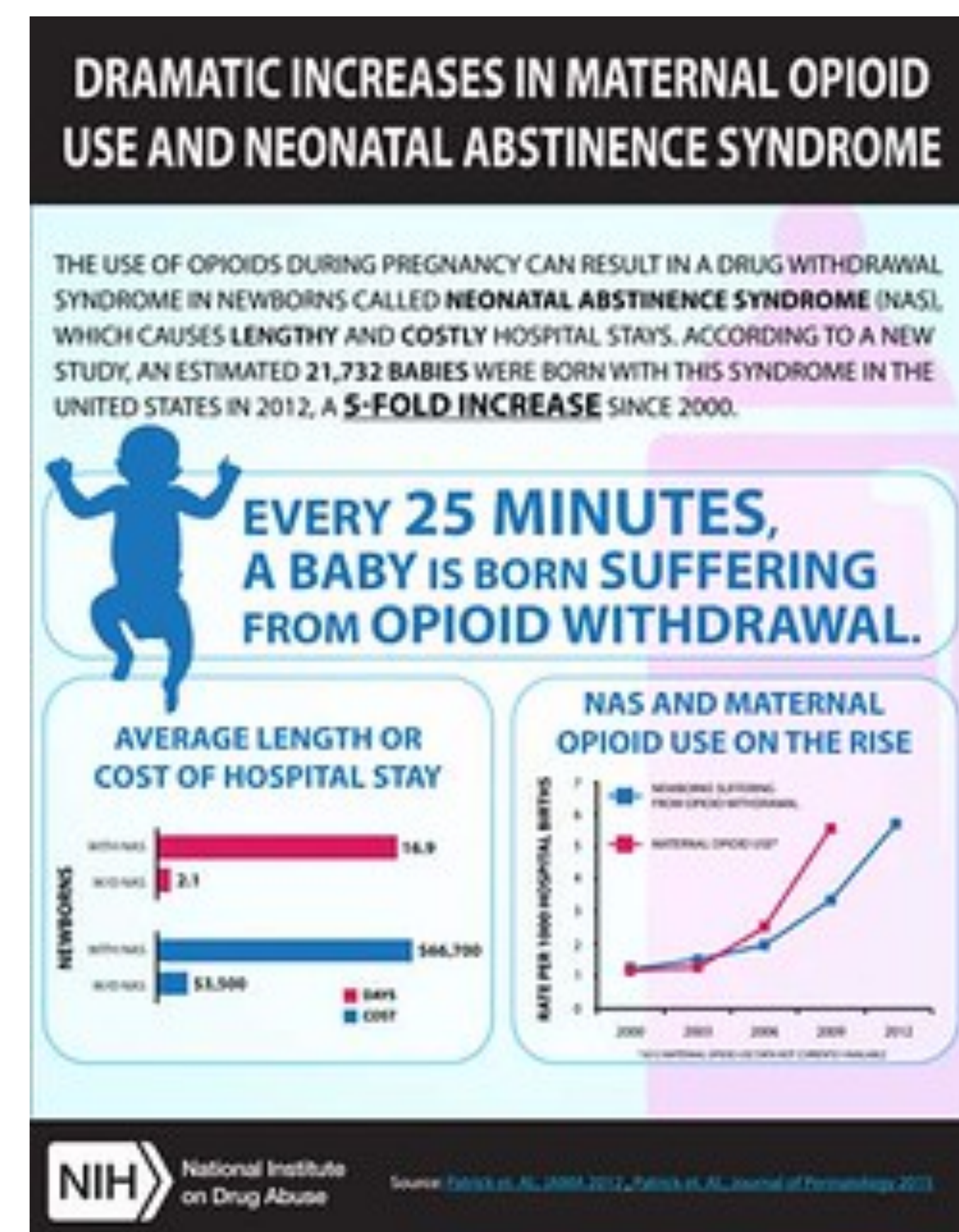
- CINAHL, PubMed

### Keywords:

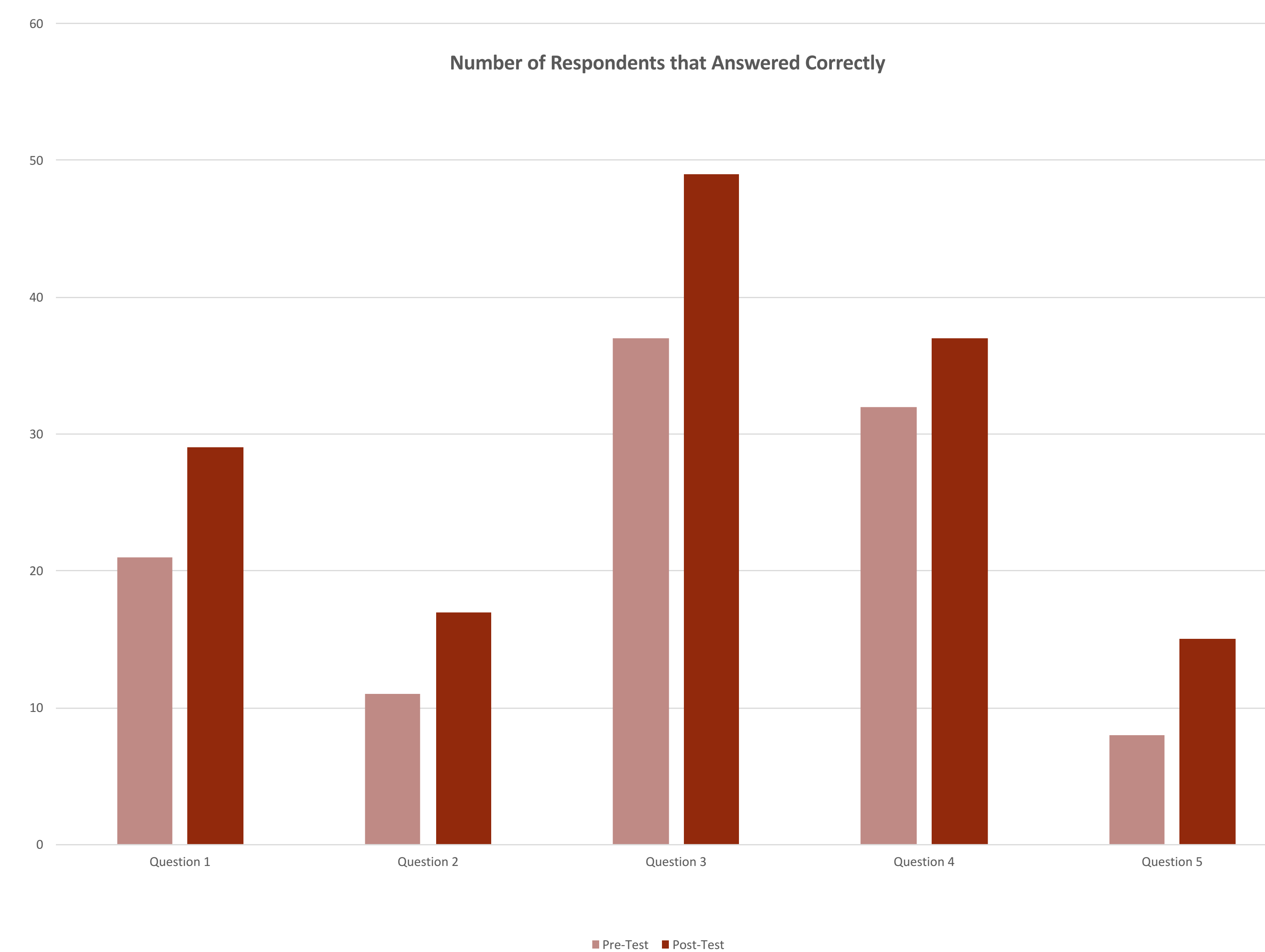
- Neonatal Abstinence Syndrome (NAS), non-pharmacological, pharmacological, Finnegan score, interventions, standard protocol, music therapy

### Search Parameters:

- Peer reviewed articles
- Published within the last 7 years



Patrick et. Al. (2015). Dramatic Increases in Maternal Opioid Use and Neonatal Abstinence Syndrome [digital image]. NIH. <https://www.flickr.com/photos/nida-nih>



[Untitled digital image of child outline with words]. Vanderbilt University Medical Center. <https://www.vumc.org/nas/what-neonatal-abstinence-syndrome>

