

The Effects of Pharmacological Interventions in Caring for Neonates with NAS Post Discontinuation of In Utero Opioid Exposure, and its Impact on the Length of Hospital Stay

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Overview

- Neonatal abstinence syndrome (NAS), a general clinical term used to describe the impact of discontinued exposure to substances in utero and is among the key public health issues impacting perinatal well-being.
- This study explored the best practices related to neonatal health by examining the treatment of NAS after birth and how it affects the length of stay in hospitals as currently published in scholarly research literature.
- Recognizing the broad scope of NAS, this study specifically examines in-utero opioid exposure.



Methods







- This study was conducted using a systematic review of existing literature to explore best practices related to neonatal health by examining the treatment of Neonatal Abstinence Syndrome after birth and how it affects the length of stay in the hospital.

Methodological Considerations:

- National increase in Neonatal Abstinence Syndrome
- Limited body of research on the best practices related to neonatal health outcomes and length of hospital stay exists.
- A growing body of research on the effectiveness of diverse treatment modalities to decrease the severity of NAS.
- Among this treatment, modalities include pharmacological and non-pharmacological interventions.

Results

- **Key Finding 1:** Pharmacological treatments are an important component of management for neonates with NAS when supportive and nonpharmacological care is insufficient.
- **Key Finding 2:** Approximately 60 to 80% of infants with NAS do not have a response to nonpharmacologic treatment.
- **Key Finding 3:** Pharmacologic treatments have demonstrated success in relieving moderate-to-severe signs of NAS such as seizures, fever, and weight loss or dehydration, which are crucial to minimize in the early stages of development so that the effects do not last throughout their lifetime.
- **Key Finding 4:** Oral morphine, methadone and buprenorphine are among the most successfully used pharmacological interventions.
- **Key Finding 5:** Currently, in the United States, oral morphine is the most common pharmacological treatment.
- **Key Finding 6:** The use of methadone and oral morphine present potential clinical benefits, resulting in significantly shorter durations of hospitalization and overall length of treatment, in comparison to newborns who did not receive pharmacological intervention

✓ Low Birth Weight 	✓ Sudden Infant Death Syndrome (SIDS) 
✓ Poor Fetal Growth 	✓ Developmental Delays 
✓ Jaundice 	✓ Ear Infections & Vision Problem 

Next Steps

Despite the rise in NAS, detection and early pharmacological intervention may lessen the effects of neonatal withdrawal helping relieve later side effects. Further research on this topic will continue to advance perinatal health regarding NAS. I continue research on this topic as I intend to go to graduate school next year to pursue mental health counseling, with a specialty in addictions rehabilitation and therapy.

References

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