



Neonatal Abstinence Syndrome Nonpharmacological Intervention Education for Healthcare Professionals Caring for Newborns

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Introduction

- Neonatal Abstinence Syndrome (NAS) is the “result of sudden discontinuation of fetal exposure to substances [legal or illegal] that were used or abused by the mother during her pregnancy” (Kocherlakota, 2014, p. e547). This post-withdrawal syndrome produces both behavioral and physiological signs and symptoms in the neonate, resulting in longer hospital stays and increased cost of care. Treatment of NAS can include both pharmacological and nonpharmacological interventions. However, there are no nationally standardized protocols for the treatment of NAS. Nonpharmacological interventions are less controversial, less expensive, and have the potential to reduce the average length of stay (Grossman, Berkwitt, Osborn, Xu, Esserman, Shapiro, & Bizzarro, 2017, p.e4).
- The purpose of this study was to offer alternative and effective treatment strategies for Neonatal Abstinence Syndrome—through the introduction of education addressing non-pharmacological interventions that can help comfort the infant and manage symptoms that manifest during the withdrawal period.

Methods

- Following approval from the Scholarly Project Committee, an application to the Institutional Review Board was submitted and approved on December 1, 2020. Data collection took place from January 2020 to January 29, 2020.
- Data was collected utilizing the Qualtrics Survey Software. A pre-test survey and post-test survey were utilized prior-to and following an educational presentation. The surveys assessed knowledge, confidence, and personal thoughts on NAS management and interventions from the participants experience.

Results

- In total, 30 individuals participated in the study. All 30 participants identified their primary role in healthcare as a registered nurse.
- Prior to education, results of the pretest indicated that healthcare professionals would benefit from receiving further education about neonatal abstinence syndrome and nonpharmacological interventions when treating infants diagnosed with NAS. After the educational offering, participants indicated their knowledge and confidence had increased.
- Data was analyzed utilizing paired t-test statistics via SPSS. The analyzed data showed that there was a significant ($p < .05$) increase in both knowledge and confidence questions.



Conclusions

- Increasing education provided to healthcare professionals caring for newborns in a hospital setting resulted in an increase in knowledge and confidence when caring for newborns with NAS and utilizing nonpharmacological interventions as a treatment method.
- Additional nonpharmacological intervention education for the treatment of newborns diagnosed with NAS is needed.
- Healthcare providers should utilize this study to advocate for increased education in order to provide better quality of care to their patients.

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- Grossman, M. R., Berkwitt, A. K., Osborn, R. R., Xu, Y., Esserman, D. A., Shapiro, E. D., & Bizzarro, M. J. (2017). An Initiative to Improve the Quality of Care of Infants With Neonatal Abstinence Syndrome. *Pediatrics*, 139(6). <https://doi.org/10.1542/peds.2016-3360>
- Kocherlakota, P. (2014). Neonatal Abstinence Syndrome. *Pediatrics*, 134(2), e547-e561. doi: <https://doi.org/10.1542/peds.2013-3524>