



Caring for the Complexities of Neonatal Abstinence Syndrome Within the Scope of Occupational Therapy

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Project Description & Sites

Areas of Study: 1.) Program and Policy Development 2) Advocacy

Population: Children & Youth; Infants and Toddlers with Neonatal Abstinence Syndrome (NAS), Caregivers, & Occupational Therapy Practitioners

Site: River Valley Center for Addiction, Research, Education, and Support
* Observation also completed at West Virginia University Medicine Children's Neonatal Intensive Care Unit & in the North Carolina Early Intervention Program

Description: The goal of my doctoral capstone was to gain advanced knowledge surrounding intervention strategies for the pediatric NAS population while advocating for pediatric clients with NAS through the development of various accessible resources for caregivers and practitioners. In addition, research was completed to determine if NAS educational materials provided to caregivers improved comfort levels in caring for a child with NAS.



Needs Assessment | Literature Review

Needs Assessment:
Prior the the start of the experiential component of capstone, I was able to access available statistics, literature, and local foster parents and occupational therapy practitioners regarding occupational therapy's role in caregiver and professional education surrounding the diagnosis of Neonatal Abstinence Syndrome (NAS).

Literature Review:
Nationally, from 2000 to 2012 the NAS incidence rate increased by 300 percent, whereas West Virginia's increased by more than 650 percent and is projected to follow that trend in the coming years.

Cognitive and language development, school performance, coping, social, and motor skills are all common areas of delay in pediatric clients with NAS that can be addressed by occupational therapy practitioners through early intervention, school-based, and outpatient services.

The current literature supports that occupational therapy practitioners providing services and parent education is beneficial for children with NAS.

Christ | Scholarship | Service

Mark 9:37

"Whoever welcomes one of these little children in my name welcomes me".

Project Completion and Outcomes

- Outcome Measure #1: The student demonstrated advanced knowledge and identifying the role of occupational therapy in the foster care system when working with pediatric NAS population through 2 community presentations that local caregivers and professionals were invited to attend.
- Outcome Measure #2: To promote NAS advocacy, the student developed a content database with evidence-based research to increase knowledge of best practices for optimizing occupational engagement among the NAS population. The information was disseminated on the student created Beyond Exposure website.
- Outcome Measure #3: The student demonstrated advanced knowledge and identified the role of occupational therapy in the foster care system when working with the pediatric NAS population through developing a social media and webpage to aid caregivers in caring for children with NAS following the completion of a pre/post test survey completed by caregivers of children with NAS.

Mission & Vision Statements

Mission Statement: To develop educational resources for parents, caregivers, and medical professionals in order to improve occupational engagement and quality of life for individuals with NAS. To determine if caregivers report improved comfortability in caring for children with NAS after reviewing the provided educational resources.

Vision Statement: To identify needs and provide holistic solutions to help caregivers promote independence, quality of life and occupational engagement in children with NAS.

Deliverables

- ❖ Photo and Sign In Evidence of 2 Presentations to the Community
- ❖ Completion of 3 CEU Certificates
- ❖ Research Addressing Caregiver Comfort Levels Before and After Resources
- ❖ Three Case Studies
- ❖ Documents Verifying 40+ Observation Hours with Target Population in Various Settings
- ❖ Creation of a Webpage that Includes Information for Caregivers and Practitioners and includes a Resource Database
- ❖ Social Media Page with a Content Outline
- ❖ Educational Materials in the form of handouts for Caregivers
- ❖ Educational Material for Practitioners in the Form of a Short Presentation and Exposure Guide

Comfortability of Caring for Infants and Toddlers with Neonatal Abstinence Syndrome Before and After

Receiving Educational Materials (0 Not Comfortable; 5 Extremely Likely)

Pre-test (n=10)	Post-test (n=10)
0 (n=0)	0 (n=0)
1 (n=0)	1 (n=0)
2 (n=2)	2 (n=0)
3 (n=2)	3 (n=3)
4 (n=4)	4 (n=4)
5 (n=2)	5 (n=3)



Future Implications for OT

Impact on OT: Case studies, exposure guide, and NAS statistics presentation available for occupational therapy practitioners and current and future students to access to gain knowledge on pediatric NAS clientele

Impact on my career: My capstone has solidified my desire to pursue a career in pediatrics following graduation. This project has allowed me to gain further knowledge surrounding NAS and family centered care. I hope to continue to build on my knowledge and serve this population throughout my career.

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KEY REFERENCES *Full reference list available upon request

Arter, S. J., Tyler, B., McAllister, J., Kiel, E., Güler, A., & Cameron Hay, M. (2021). Longitudinal outcomes of children exposed to opioids in-utero: A systematic review. *Journal of Nursing Scholarship*, 53(1), 55–64. <https://doi.org/10.1111/jnu.12609>
Ko, J. Y., Patrick, S. W., Tong, V. T., Patel, R., Lind, J. N., & Barfield, W. D. (2016). Incidence of neonatal abstinence syndrome - 28 states, 1999-2013. *MMWR Morb Mortal Wkly Rep*, 65(31), 799- 802. <http://dx.doi.org/10.15585/mmwr.mm6531a2>
Fucile, S., Gallant, H., & Patel, A. (2021). Developmental outcomes of children born with neonatal abstinence syndrome (NAS): A scoping review. *Physical & Occupational Therapy in Pediatrics*, 41(1), 85–98. <https://doi.org/10.1080/01942638.2020.1766637>
Oostlander, S. A., Falla, J. A., Dow, K., & Fucile, S. (2018). Occupational Therapy Management Strategies for Infants With Neonatal Abstinence Syndrome: A Scoping Review. *Occupational Therapy in Health Care* 33(2), 197-226. <https://doi.org/10.1080/07380577.2019.1594485>