## **Call for Papers**

**Title**: Therapeutic Interventions for the Treatment of Infants Exposed to Drugs and Alcohol in Utero

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**Primary Focus (Complete):** Children and Youth

## **Learning Objectives (Provide 3 learning objectives):**

At the conclusion of the session, the learner will be able to:

- 1. Identify areas of occupational performance that are affected when an infant is born with Neonatal Abstinence Syndrome or Fetal Alcohol Spectrum Disorder.
- 2. Recognize the importance of therapeutic interventions in promoting healthy development and participation of infants within the scope of practice for occupational therapy.
- 3. Apply evidence-based occupational therapy interventions for infants with Neonatal Abstinence Syndrome (NAS) or Fetal Alcohol Spectrum Disorders (FASD).

## Abstract:

In the United States, approximately 0.2-1.5 per 1,000 infants are diagnosed with Fetal Alcohol Syndrome (Centers for Disease Control and Prevention, 2016) and 5.8 per 1,000 infants are diagnosed with NAS, indicating a fivefold increase in prevalence since 2000 (National Institute on Drug Abuse, 2015). This increase is problematic in terms of babies' health and development, longer hospital stays, and greater hospital costs. Infants exposed to substances in utero are at risk for multiple health issues including withdrawal, delays in cognitive, social, physical and language development. Common deficits seen throughout the lifespan are in the areas of attention, learning, memory, executive functioning, abstract reasoning, language, vision, and lower IQ scores. (Trustees of Princeton University - Brookings, n.d.; Paley, & O'Connor, 2007). Occupational therapy aims to increase occupational performance and facilitate optimal development of the infant (American Occupational Therapy Association, 2014). An exhaustive literature search was conducted through a systematic review utilizing CINAHL, PubMed and Scopus. Databases were searched to answer the clinical question "what is the evidence for the effectiveness of therapeutic interventions used to improve occupational performance for infants exposed to drugs and alcohol in utero?". Articles were screened for eligibility and critically reviewed to determine strength and quality of evidence with the following inclusion criteria: infants ages 0-12 months, diagnosis of Neonatal Abstinence Syndrome or Fetal Alcohol Spectrum Disorders, English language and a publication date of ten years or less. This session will present current therapeutic interventions to advance the professional development of clinicians treating this population. Common themes show that rooming-in, breastfeeding, and tactile interventions can potentially mitigate effects of NAS. These interventions showed statistically and clinically significant effects in pharmacological care, hospital length of stay, cost, onset of NAS symptoms, and typical sleep patterns of the infants within the

studies. Occupational therapists in the NICU may utilize these techniques for infants under their care. Further research is necessary to assess the occupational performance outcomes of infants when utilizing these interventions in practice.

**Other:** Describe the level of material being presented: Introductory

**Audience:** Licensed Occupational Therapists, Occupational Therapy Assistants, and Occupational Therapy Students

## References

- American Occupational Therapy Association. (2014). Occupational therapy practice framework: Domain and process. *American Journal of Occupational Therapy*, 68(Suppl. 1), S1–S48. doi:10.5014/ajot.2014.682006
- Centers for Disease Control and Prevention (CDC). (2016). Fetal Alcohol Spectrum

  Disorder: Data and Statistics. Retrieved from

  <a href="http://www.cdc.gov/ncbddd/fasd/data.html">http://www.cdc.gov/ncbddd/fasd/data.html</a>
- National Institute on Drug Abuse. (2015). Dramatic Increases in Maternal Opiate Use

  and Neonatal Abstinence Syndrome. Retrieved from

  <a href="https://www.drugabuse.gov/related-topics/trendsstatistics/infographics/dramatic-increases-in-maternal-opioid-use-neonatal-abstinence-syndrome">https://www.drugabuse.gov/related-topics/trendsstatistics/infographics/dramatic-increases-in-maternal-opioid-use-neonatal-abstinence-syndrome</a>
- Paley, B., & O'Connor, M. J. (2007). Neurocognitive and neurobehavioral impairments in individuals with fetal alcohol spectrum disorders: Recognition and assessment.
  International Journal on Disability and Human Development, 6(2), 127-142.
- Trustees of Princeton University Brookings: Providing research and analysis to promote effective policies and programs for children. (n.d.). Retrieved July 26, 2016, from <a href="http://www.futureofchildren.org/publications/journals/article/index.xml?journalid">http://www.futureofchildren.org/publications/journals/article/index.xml?journalid</a> =69