# Assessing the impact of an online training module on knowledge, practice, and perceived attitude regarding neonatal abstinence syndrome among pediatric nurses

#### **Problem**

Neonatal Abstinence Syndrome (NAS) is increasing in the United States and affects more than 24,000 infants annually. NAS is a disorder that causes infants to experience withdrawal and neurological symptoms. Management of NAS requires nurses to have a high level of knowledge, education, and assessment skills. The day to day care for infants with NAS can be emotionally and physically demanding as infants are very difficult to console, manage and treat. Population prejudice and ethical burden may cause stigmatization to occur. Inconsistencies in evidenced-based practice and absence of standardized clinical practice guidelines increase length of stay, symptoms, costs, and may cause developmental delay in infants. Nurses need focused training regarding the management of NAS. There is little research published assessing the knowledge, practice and attitudes of nursing staff and how they relate to appropriate care of the infant with NAS and the mother with opioid use disorder.

# **Purpose and Objectives**

The purpose of this study is to evaluate the effect of an online training module on pediatric nurses' knowledge, practice, and perceived attitude regarding neonatal abstinence syndrome. The objectives of this training module are to improve nurses': knowledge of addiction and NAS, skills of NAS management, and attitudes regarding maternal addiction and care of infants with NAS.

#### Design

The project will be a pre-post survey design with an online training module and self-evaluation that assesses the knowledge, practice, and attitudes of NAS. The project will utilize the PDSA model and the theoretical framework will be based on the Bandura's Self-Efficacy and Social Learning Theory.

## Population/Sample/Setting

The setting is an inpatient children's Magnet hospital and teaching facility. The population will be approximately 35 nurses from the Neonatal Intensive Care Unit, NAS nursery, and pediatric unit.

#### Variables studied/Intervention

The project will utilize a NAS survey tool that incorporates a Likert Scale, 2 case studies and 2 open-ended questions. This tool will be used as the pretest and posttest. The intervention will be an online training module.

#### Method

The methods used to evaluate the data will be a paired t-test or non-parametric equivalent to check for mean differences in pre and post survey responses and descriptive statistics to identify demographic items including units and skill levels.

## **Projection of Findings**

The projected findings of this project are that nurses who use this online training module will improve their knowledge, skills, and attitudes regarding NAS care and management.

# **Conclusion/Future Implications for Practice**

The online training module can be applied to future unit orientation and review for yearly competency for nurses to improve the care for infants with NAS and pregnant mother's with substance use disorder. Infants with NAS require skilled nursing interventions as well as knowledge of withdrawal and addiction. The training will help nurses improve their knowledge, practice, and attitude of NAS. The training will also help nurses understand components of addiction to improve care of infants with NAS and their mothers.