Title:
Airway Clearance in a Neonatal Intensive Care Unit: A Retrospective Study

Brandi Rene Harbin, BSN
Ellise Adams, PhD
College of Nursing, The University of Alabama in Huntsville, Huntsville, AL, USA

Session Title:
Rising Stars of Research and Scholarship Invited Student Posters

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Keywords:
NICU, Neonate and Suction

References:
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Abstract Summary:
The retrospective, descriptive study will be used to determine current practices and related outcomes for suctioning neonates. Correlation of variables will assist with understanding the associated risks related to airway clearance in the NICU. The data collected may be sufficient to identify practices of neonatal suctioning and improve patient outcomes.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE

The learner will be able to describe the current practice for suctioning neonates in the NICU setting.	Variables related to practice include mode or route or suctioning, frequency of suctioning events, and color/consistency of sputum.
The learner will be able to describe outcomes related to suctioning neonates in the NICU setting	Variables related to outcomes include tolerance of airway clearance as evidence by suction response including color change, apnea, bradycardia, desaturation, and/or no distress.

Abstract Text:

Although suctioning practices are often used in Neonatal Intensive Care Unit (NICU) settings, there is minimal scientific evidence available to defend the use of routine suctioning. Most literature indicates the harmful effects of suctioning including bradycardia, desaturation of oxygen, apnea, inflammation of airways, and/or bronchospasms.

This study is a retrospective, descriptive chart review to analyze the current airway clearance practices used in a level III regional NICU. The practices in review include suctioning via inline suction, suction catheter, soft tip “Little Sucker”, and bulb syringe to determine the frequency, color, consistency of exudate, and tolerance of airway clearance, along with key demographics for comparison such as gestation, race, gender, and co-morbidities. Data will then be analyzed descriptively to determine current practices and outcomes correlated with nursing practices that are associated with neonatal airway clearance.

The convenience sample will be collected from participants admitted between the years of 2015-2017. Participants eligible for this study will be 32 weeks to 36 weeks and 6 days, or moderate to late preterm infants as defined by the World Health Organization, and must be admitted and discharged from the regional NICU where the study is taking place. If a neonate has had surgery with general anesthesia, he or she will be excluded from the study. No participant will be excluded based on age, gender, or ethnicity. The sample size for this study is projected to be 300-400 participants.

The information gathered from this study will be used to determine current practices and related outcomes for suctioning neonates. Correlation of variables will assist with understanding the associated risks related to airway clearance in the NICU. The data collected may be sufficient to identify practices of neonatal suctioning and contribute to further studies that may impact suctioning policy and procedure across the nation in support of better patient outcomes.

Results and findings are to be determined prior to completion of poster presentation.