Oral Defense Announcement
University of Missouri – St. Louis Graduate School

An oral examination in defense of the dissertation for the degree
Doctor of Nursing Practice with an emphasis in Acute Care Pediatric Nurse Practitioner

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B.S. in Nursing, May, 2010, University of Missouri-Columbia

Preventing Ocular Surface Disease in the Pediatric Intensive Care Unit

Date: July 9, 2021
Time: 2:30 p.m. to 3:05 p.m.
Place: Remote

Abstract

Problem: Ocular surface disease in the Pediatric Intensive Care Unit is a significant problem in intubated patients due to altered eye protective mechanics, leading to exposure of the eye surface and dry eye. The purpose of this quality improvement project was to evaluate how an eye care protocol affected the frequency of artificial tear ointment.

Method: A descriptive, cohort design utilizing a retrospective medical record review with convenience sampling of intubated children in the PICU from two cohorts was used. Comparisons were made between the preintervention in 2020 and postintervention phase in 2021.

Results: A total of 96 (N=96) intubated patients were identified, with 53 (N=53) in the 2020 cohort and 43 (N=43) in the 2021 cohort. The mean number of ointment applications for patients after an artificial tear ointment order was placed was 33.15 (SD=60.91) in the 2020 cohort and 28.56 (SD=48.95) in the 2021 cohort. A Chi-square test of independence demonstrated a statistically significant increase in ointment orders between the 2020 and 2021 cohorts (x²(1)=3.9, p=.046). Based on a two-sided Fischer’s exact test, the increase in consults seen between the 2020 and 2021 cohorts was significant (p=.002) A two-sided Fischer’s exact test, demonstrated the increase in ointment ordering for patients who received neuromuscular blockade between the 2020 and 2021 cohorts was statistically significant (p=.012).

Implications for Practice: While the frequency of eye care did not have statistically significant increase after initiation of the protocol, there were clinically significant improvements in ophthalmology consults and the frequency of ointment ordering.

Defense of Dissertation Committee
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