ABSTRACT

• The purpose of this scholarly project was to increase the knowledge base of the ADU SRNA 2019 cohort regarding multimodal pain management techniques for pediatric T&A’s.
• The population most likely to require T&A are children with OSA who are at highest risk for morbidity and mortality.
• An educational Power Point addressing evidence based preoperative, intraoperative, and postoperative pain management techniques for children undergoing a T&A was devised.
• Involvement in the pretesting and posttest assessment was voluntary.
• For statistical analysis, paired samples t-tests were conducted to analyze the data with a P value < .001 which is statistically significant. It can be concluded that the average scores increased significantly.

PROBLEM

• Currently, however, there is no set standard for perioperative pain management for the pediatric T&A patient in either ambulatory or inpatient settings, which has led to respiratory compromise.

PICOT Questions

• In pediatric patients undergoing a tonsillectomy and adenoidectomy (P), how do narcotic medications (I) compare to other modalities of analgesia (C) affect pain management and respiratory depression (O) within the perioperative period (T)?

• Educational innovation is addressed in the second question: In Adventist University student nurse anesthetists (P), does a 30-minute (T) PowerPoint presentation regarding multimodal pain management approaches for pediatric T&A patients (I) result in an increase in the knowledge base (O)?

REVIEW OF LITERATURE

• The incidences of perioperative respiratory complications have been proven to be ten times higher for children with OSA compared to those without OSA (Lauder and Emmott 2014).

RESULTS

• The potential to improve efficiency with multimodal analgesia is advocated for management of pediatric perioperative pain by concurrently targeting different analgesic mechanisms and reducing the dose requirements of single agents, therefore, minimizing dose-dependent adverse effects (St. John-Green, St John-Green, & Wong, 2013).

CONCLUSIONS

• The implementation of an educational Power Point on a pediatric guide to tonsillectomy and adenoidectomy showed that the knowledge base of the nurse anesthesia students belonging to the ADU cohort class of 2019 increased substantially from baseline.

• This demonstrates a potential positive impact that a power point lecture can have in the development of the nurse anesthesia students.

Paired Samples Test

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<th>Pre-Test</th>
<th>Post-Test</th>
<th>Mean Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
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<tbody>
<tr>
<td>Pre-Test</td>
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<td>93.076</td>
<td>-32.284</td>
<td>-6.075</td>
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<td>.000</td>
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<td>Post-Test</td>
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</table>

Paired Differences

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References available upon request