Empowering Nurses: A Training Initiative on Essential Oils for Pediatric Neurosurgery Patients

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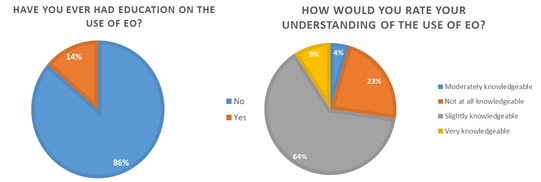
Practice Problem

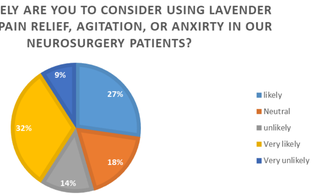
Pediatric patients admitted to the neurosurgery unit often experience increased anxiety and agitation. Pediatric neurosurgery nurses may lack knowledge of non-pharmacological interventions to reduce agitation and anxiety in their patients. This evidence-based practice (EBP) project aimed to explore whether education provided to pediatric neurosurgery nurses about essential oils (EO) increases their knowledge and the likelihood of using lavender EO for their patients with agitation, pain, or anxiety on the neurosurgery floor.

PICO

In pediatric neurosurgical bedside nurses, does education on lavender essential oil, compared to no education, improve knowledge, confidence and intent to integrate it as a complementary therapy for TBI patients?

Pre Education Results





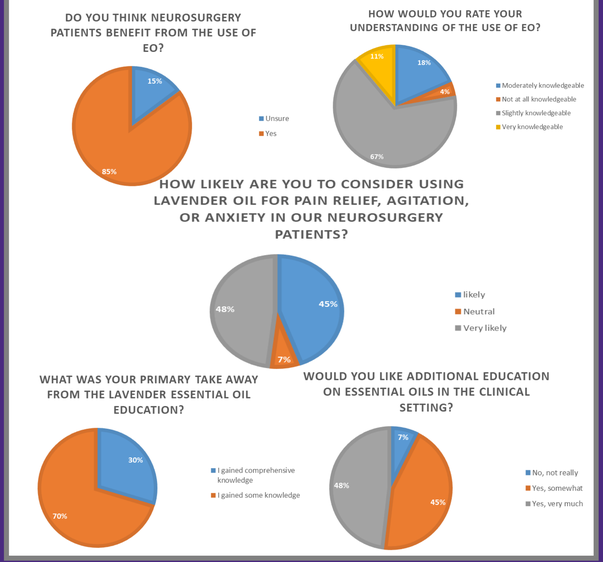
Literature/Evidence

- The search strategy in the CINAHL (EBSCOhost) database used MeSH Headings and keywords, including English articles published within the last ten years. A total of 22 articles were reviewed.
- A meta-analysis found that the use of aromatherapy has significantly decreased anxiety levels (Gong et al., 2020).
- In pediatric patients, lavender oil inhalation has been specifically shown to reduce anxiety, pain scores, and vital signs after a dental procedure (Arslan, Aydinoglu, & Karan, 2020).
- In adults, aromatherapy reduced anxiety, pain, and improved sleep in patients with burn injuries (Akkaya, Kocasli Akin 2020 Rafil 2020); reduced anxiety and blood pressure before surgery (Karan, 2019); and decreased pain and extubation time (Babatabar Darzi, et al, 2020).

Implementation/Pilot Testing

- The initial step was to evaluate nurses' understanding of the benefits of using essential oils for pain, anxiety, or agitation in pediatric neurosurgery patients.
- Pre and Post survey given to bedside nurses surrounding education during staff meeting These surveys were both anonymous and voluntary
- All nurses felt they gained some or comprehensive knowledge after the education, and the majority (92%) expressed interest in additional education on EO.
- Twenty-two nurses completed the pre-questionnaire, and twenty-seven completed the post-questionnaire.

Post Education Results



Recommendations/Conclusions

Education on the use of EO for bedside nurses improved their knowledge and increased the likelihood of utilizing EO for their neurosurgical patients. Providing further education to both providers and ancillary staff on incorporating essential oils as a supplemental therapy should be evaluated. Future research should explore the use of EO in pediatric neurosurgery patients and its impact on pain, anxiety, and agitation.

Evidence Table

References