



Does the combination of pharmacological and non-pharmacological pain interventions improve pain control in the pediatric acute care patient?

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Introduction

One of the top priorities of nursing care in the pediatric patient is pain management. Therefore, it is important for nursing, along with the entire healthcare team, to establish effective interventions for pain support for the patient. The goal of this project is to determine if a combination of both pharmacological and non-pharmacological interventions are more effective than pharmacological interventions alone. It then becomes essential to educate staff on the evidence and create a practice to ensure the highest standard of care to the pediatric patient.

PICO Question

Population: Inpatient Pediatric Acute Care (PAC) patients in pain.

Intervention: Providing education on non-pharmacological pain management methods in the pediatric patient to pediatric nursing staff.

Comparison: Assessment of variances between non-pharmacological and pharmacological pain management.

Outcome: Increasing the use of non-pharmacologic pain management methods and increasing RN knowledge about these methods.

Question: Are non-pharmacological pain management methods able to successfully decrease pain scores in the PAC patients?

Methods

A literature search was conducted using CINAHL, EbscoHost, PubMed, and LionSearch databases.

Keywords: *pediatric pain management, non-pharmacological, complementary and alternative medicine.*

Inclusion Criteria: Articles within 5 years, inpatient hospitals, pediatric patients and pediatric nurses.

The initial search yielded 179 articles, 18 articles were reviewed and 5 articles were selected for this project.

Results

Article	Methods	Results
Baulch, I. (2010)	External double-blind peer review of 24 published articles	Pharmacological and non-pharmacological interventions when in combination with each other provide the highest standard of care in the management of pediatric pain care.
He, H. (2010)	A survey was conducted in 2008 with a convenience sample of 134 registered nurses from 7 pediatric wards in Singapore	Nurses who were younger, less educated, lower designation, less experience and had no children of their own were less likely to use non-pharmacological methods to help in reducing postoperative pain in pediatric patients.
Landier, W., & Tse, A. M. (2010)	Integrative review with systematic and qualitative approaches that combined results of 32 studies into summative statements.	The use of both non-pharmacological and pharmacological agents in these patient populations have concluded to have minimal risk and can be individualized to best benefit each patient. The three most commonly used non-pharmacological interventions implemented for procedural pain are hypnosis, distraction, and imagery.
Pollard, D., & Stanley, M. (2013)	A cross-sectional, correlational design was used in a convenience, non-probability sample of 25 pediatric nurses in two regional hospitals in North Carolina.	Years of pediatric nursing experience correlated with significantly higher knowledge levels. Education may benefit pediatric nurses in regard to their management of pediatric pain.
Twycross, A. (2010)	A literature review of articles published in the past 15 years and included the following search items: pain, pain management, education, quality and nurses.	Contributing factors to poor pain management in pediatrics have been concluded as outdated beliefs, knowledge deficits of nurses, poor decision making strategies and organizational culture. Improvements in education provided to nurses and families along with a multifactorial approach being implemented need to be assessed and completed to increase pain management in the pediatric population.

Discussion

- ❖ Incorporation of non-pharmacological interventions along with a well-designed pharmacological approach is essential for pain management in the pediatric patient
- ❖ Reviews also showed that many factors often hinder the overall plan and execution:
 - ❖ inadequate recognition and assessment of pain
 - ❖ lack of training, education and knowledge of vital staff
 - ❖ involvement of familial emotions in the treatment of pediatric patients

Conclusions

- ❖ Non-pharmacological strategies in conjunction with pharmacological interventions to ensure the best practice of pain management in pediatric care
- ❖ In order to incorporate both into a successful treatment plan, it is imperative to address factors that may delay the healing process
- ❖ Update mandatory education requirements for all healthcare staff
- ❖ Provide new educational handouts to patients, parents and healthcare professionals about alternative pain management tools
- ❖ Hang visuals throughout the units for reminders of pain control options
- ❖ Educate family on services provided by Child Life

Limitations

- ❖ Amount of time and resources available
- ❖ Amount of research in the time period allotted
- ❖ Restrictions on population (age, location, etc)

References

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