Introduction

Painful procedures such as lab draws, IV insertions and dressing changes are common in the pediatric inpatient setting. These procedures cause anxiety and can leave lasting impressions on children. Our goal was to determine if non-pharmacologic pain interventions can decrease this pain and stress.

PICO Question

Population: Pediatric patients undergoing acute painful procedures.

Intervention: Non-pharmacologic pain management such as cold and vibration.

Comparison: Procedures performed with no pain intervention.

Outcome: Decreased acute procedure related pain and stress.

Question: How does the utilization of non-pharmacologic pain management techniques affect pain outcomes in pediatric patients during acute procedures?

Methods

A thorough search was conducted utilizing EBSCOhost and CINAHL.

Keywords: Pediatric, pain management, procedural.

Inclusion Criteria: Articles published within the last 5 years. Peer reviewed. Our initial search yielded 155 articles and 4 were used for this project.

Discussion

Acute pain related to procedures such as IV insertions, lab draws and dressing changes creates anxiety and stress for children in inpatient settings. As these studies have shown, utilization of non-pharmacologic pain management techniques can decrease this pain and anxiety, creating for an overall better experience for the patient and their families. As the one study showed, quality improvement implementation can help to provide education and increase the utilization of non-pharmacologic resources. The Pediatric Hematology/Oncology Unit at Penn State Hershey Medical Center is currently implementing a quality improvement program to increase the utilization of these resources and improve pain outcomes.

Results

<table>
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<tr>
<th>Article</th>
<th>Methods</th>
<th>Results</th>
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<tr>
<td>McCarthy, M., Glick, R., Green, J., Plummer, K., Peters, K., Johnsey, L., &amp; Deluca, C. (2013).</td>
<td>Cross-sectional audit of an implemented program.</td>
<td>The study found that the younger the patient the more likely they were to experience procedural anxiety, but with the implementation of programs targeted at procedural pain management, the more likely caregivers were to utilize non-pharmacologic resources to aid in decreasing anxiety and pain and therefore actually decreasing it.</td>
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<td>Wente, S. J. (2013).</td>
<td>a systematic review of fourteen different research studies (predominantly randomized control trials).</td>
<td>The results of the review showed that utilization of non-pharmacologic pain management techniques such as positioning, distraction and parental involvement lead to decreases in levels of distress, pain and anxiety.</td>
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Conclusions

Pain and fear of painful procedures can have a lasting mental and physical effect on children. Research shows that utilization of non-pharmacologic resources such as cold, vibration, positioning, parental involvement, and distraction can decrease procedural related pain, distress, and anxiety.

References


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