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Can Non-Pharmacological Interventions Reduce Postoperative Pain?

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PICOT

What effect does preoperative patient education for non-technological methods of pain control have on dental patient's reported pain postoperatively?

Search Terms/ Database Used

Database: EBSCO Host

Terms: Non-pharm pain management, Postop non-pharm pain management

Methodology

- Literature review
- Pre-operative teaching for Dental procedures with Pre-op RN, patient, and families
- PACU survey completed for Dental and ENT procedures

Implementation

Create a handout with non-pharmacological interventions to teach dental procedures pre-operatively. Have the PACU RN evaluate how effective the teaching was to decrease post-op pain.

Literature Review

- “Diaphragmatic breathing is defined as an efficient integrative body–mind training for dealing with stress and psychosomatic conditions.”
- “Number of studies indicates there may be a potential role of non-pharmacological interventions, including relaxation therapy, guided imagery, music and audio-visual distraction, in pain management of patients.
- “Techniques such as cognitive-behavioral therapy, relaxation techniques, and distraction methods improve pain control and reduce anxiety. Implementing protocols of enhanced recovery after surgery (ERAS) holds promise in optimizing pain management.”
- While the literature did show that technology can be useful in decreasing reported pain post-operatively, our project focuses on non-technological and non-pharmacological methods of pain management.

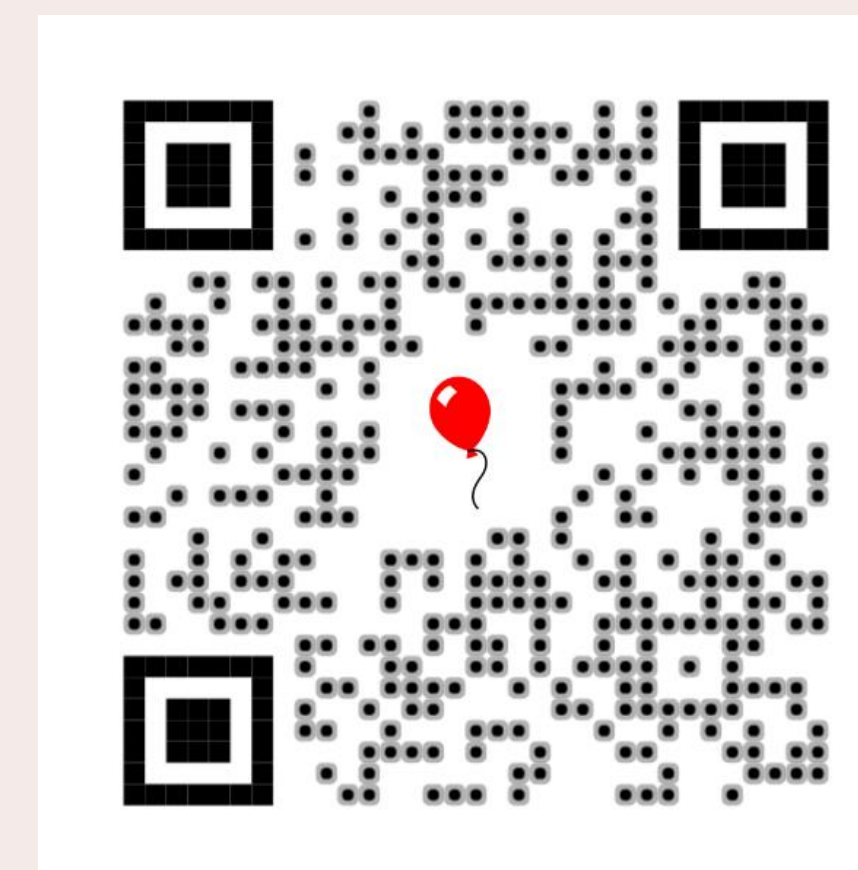
Author	Level of Evidence	Application to Practice
FAN, MEIFEN ;CHEN, ZHEYING ;	Level 1 Systematic Review	Music therapy, relaxation techniques, breathing exercises, and therapeutic touch can be implemented to help reduce pain in patients post-operatively. "Current evidence from a limited number of studies indicates that there may be a potential role of non-pharmacological interventions, including relaxation therapy, guided imagery, music and audio-visual distraction, in the pain management of patients with orthopedic surgery."
Bargale, Seema ;Khandelwal, Jayesh ;Dave, Bhavna ;Deshpande, Anshula ;Shah, Susmita ;Chari, Deepika ;	Level 2 RCT	Children performing diaphragmatic breathing exercise showed significant reduction in dental anxiety scores when compared before and after local anesthesia administration.
Montazemi M; Abbaskhani Davanloo A; Pahnabi A; Daneshian M.	Level 1 Systematic Review	Informing patients and their caregivers about the potential severity and duration of postoperative pain, along with the available pain management strategies, can help alleviate anxiety and enhance compliance with prescribed treatments. Educating patients about early pain control, maintaining hydration, and gradually reintroducing oral intake can improve postoperative outcomes. In addition, addressing concerns and providing ongoing support and reassurance throughout the recovery process can improve patient satisfaction and overall experience.

PACU Survey Interpretation

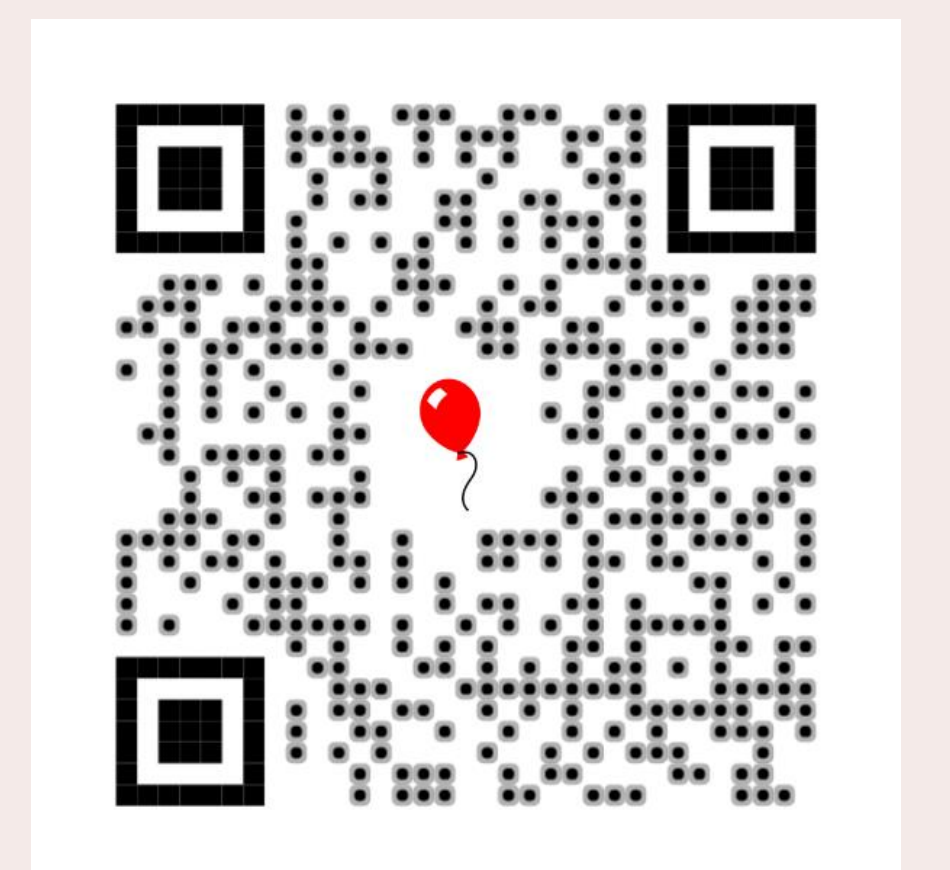
- **Dental:** 8 surveys
- **ENT:** 11 surveys
- **Total Responses:** 19 surveys
 - The results showed teaching has helped reduce anxiety and pain especially if the parents participate in the treatment plan.
- **Department goals:** reduce narcotics given, pain, and anxiety while increasing patient and family satisfaction

Recommendations

Implement our Krames teaching “Ways to Comfort Your Child When They Are In Pain” with all Dental patients to give the families different tools to manage their child's pain and preoperative anxiety. See with QR Code down below.



Literature Review Evidence Table



Krames Handout and Survey Questions

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