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Can Non-Pharmacological Interventions Reduce Postoperative Pain?

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Authors

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PICOT

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

Search Terms/ **Database Used**

Database: EBSCO Host **Terms:** Non-pharm pain managemer 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 nonpharmacological interventions to teach dental procedures preoperatively. Have the PACU RN evaluate how effective the teaching was to decrease post-op pain.

References: Bargale, Seema; Khandelwal, Jayesh Rupesh; Dave, Bhavna Haresh; Deshpande, Anshula Neeraj; Shah, Susmita Shrenik; Chari, Deepika Narasimha. Comparative evaluation of effect of two relaxation breathing exercises on anxiety during buccal infiltration anesthesia in children aged 6-12 years: A randomized clinical study. Journal of Indian Society of Pedodontics and Preventive Dentistry 39(3):p 284-290, Jul–Sep 2021. | DOI: 10.4103/jisppd.jisppd_501_20 Fan, M., & Fan, M. (2020). A systematic review of non-pharmacological interventions used for pain relief after orthopedic surgical procedures. Experimental and Therapeutic Medicine, 20, 36. https://doi.org/10.3892/etm.2020.9163 n Montazemi M, Abbaskhani Davanloo A, Pahnabi A, Daneshian M. Exploring Effective Pain Relief Strategies Throughout Tonsillectomy: Before, During, and After the Surgery. Journal of Pediatrics Review. 2023; 11(4):323-332. http://dx.doi.org/10.32598/ jpr.11.4.1090.1

Can Non-Pharmacological Interventions Reduce Postoperative Pain?

By: Janelle Santiago, BSN, RN; Adam Martinez, BSN, RN; Anna Murray, BSN, RN; Alexis Pasley, BSN, RN; Savannah DeFeo, BSN,RN; Maria Escamilla, BSN, RN; and Lainey Quandt, BSN, RN

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, relaxion 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 \bullet pain post-operatively, our project focuses on non-technological and nonpharmacological methods of pain management.

	Author	Level of Evidence	Appli
nt, it	FAN, MEIFEN ;CHEN, ZHEYING ;	Level 1 Systematic Review	Music breat be im patie "Curr studio role o incluo music mana of pat
	Bargale, Seema ;Khandelwal, Jayesh ;Dave, Bhavna ;Deshpande, Anshula ;Shah, Susmita ;Chari, Deepika ;	Level 2 RCT	Child breat reduc denta and a
	Montazemi M; Abbaskhani Davanloo A; Pahnabi A; Daneshian M.	Level 1 Systematic Review	Inform the p posto pain i anxie preso about hydra intak addit ongo the re satisf

lication to Practice

- ic therapy, relaxation techniques, thing exercises, and therapeutic touch can mplemented to help reduce pain in
- ents post-operatively.
- rent evidence from a limited number of lies indicates that there may be a potential
- of non-pharmacological interventions, uding relaxation therapy, guided imagery, ic and audio-visual distraction, in the pain agement
- atients with orthopedic surgery."
- dren performing diaphragmatic
- thing exercise showed significant iction in
- tal anxiety scores when compared before after local anesthesia administration.

rming patients and their caregivers about potential severity and duration of operative pain, along with the available management strategies, can help alleviate ety and enhance compliance with cribed treatments. Educating patients ut early pain control, maintaining ration, and gradually reintroducing oral ke can improve postoperative outcomes. In ition, addressing concerns and providing oing support and reassurance throughout recovery process can improve patient faction and overall experience.



Ο

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



Brittney Saldierna, Ashley Utley, Adrienne Davis, Hannah Ramos, Danielle Brookshire, May Bressler, Cheri Clanagan, Lynn Clark, Gregory Patterson, Monica Fuller, Dianne Becker, Ginger Uyemura, and PACU Nurses

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.



Krames Handout and Survey Questions

Acknowledgements