

Does Diversion Therapy as a Non-Pharmacologic Intervention Reduce Pain in Children?

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Introduction

- For my research project, I am studying the effects of play on children's pain levels after they endure a painful procedure. Pain is often associated with fear, anxiety, and stress (Perry, Hockenberry, Lowdermilk, & Wilson, 2014). However, non-pharmacological techniques such as distraction can reduce these symptoms. The distraction technique I am focusing my study on is play, specifically using the Connect Four (four-in-a-row) board game during a painful procedure.

Purpose

- The primary aim of this study is to determine whether or not the non-pharmacological distraction technique of play reduces children's pain levels during painful hospital procedures.

Background

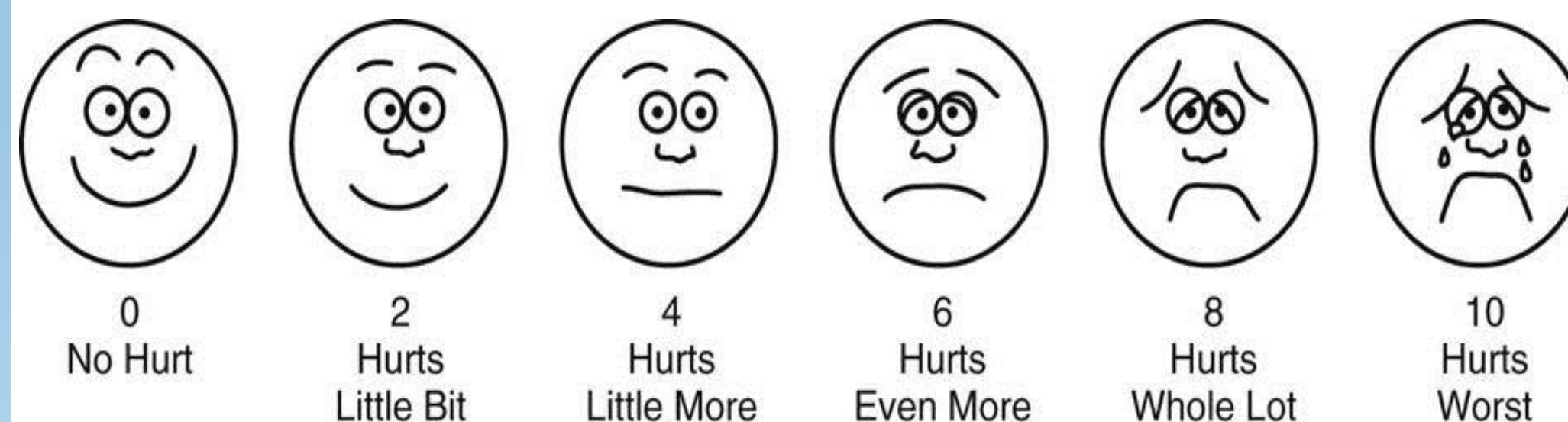
- According to a study conducted in eight Canadian pediatric hospitals, 78.2% of hospitalized children had undergone at least one painful procedure in a 24 hour period (Hussein, 2015). Painful medical procedures can cause negative effects in children including anxiety, fear, distress, and behavioral issues. Prolonged and uncontrolled pain can even lead to an enhanced pain response. In addition to ethical obligations, other reasons for pain control are earlier mobilization of patients, shortened hospital stays, and reduced costs.

Methods

- The researcher went to the emergency department (ED) of a local hospital and asked children undergoing a painful procedure (and their parents) if they would be willing to participate in this study. If inclusion criteria were met, they were enrolled in the study and were asked to draw a number from a bag. The children were placed in their respective groups according to if they drew a 1 or a 2.
- Group 1 (control group): The researcher asks the participant (child) his/her pain before his/her painful procedure in the ED using the Wong-Baker FACES scale. The type of procedure and intensity is noted along with any pain medications given before the procedure. Immediately following the procedure, the child's pain level is reassessed. NO board games are played.
- Group 2 (experimental group): The researcher asks the participant his/her pain before his/her painful procedure in the ED using the Wong-Baker FACES scale. The researcher actively plays the Connect Four board game with the child. The type of procedure and intensity is noted along with any pain medications given before the procedure. Immediately following the procedure, the child's pain level is reassessed.

Tools

- Wong-Baker FACES Pain- Rating Scale (Perry et al., 830-831, 2014)



Results & Conclusions

- This study is still ongoing. The low number of children within the inclusion criteria is a limitation of this study.
- From this study, I hope to conclude that either diversion therapy helps children who are in pain, or does not help them, so we can use the best method of pain control.

	Pain Before Procedure	Pain After Procedure	Game played (Y) or game not played (N)
Participant 1	6	0	N

References

- Hussein, H. A. (2015). Effect of active and passive distraction on decreasing pain associated with painful medical procedures among school aged children. *World Journal of Nursing Sciences*, 1(2), 13-23.
- Perry, S., Hockenberry, M., Lowdermilk, D., & Wilson, D. (2014). *Maternal child nursing care*, (5th ed). St. Louis, MO: Elsevier Mosby.