

Researcher: Jasmine Tienda

Question:

To reduce IV peripheral pain among pediatric patients is to use cognitive behavioral therapy compared to not using cognitive behavioral therapy.

Summary:

“The negative memories of distressing and painful needle-based procedures in childhood may result in exaggerated memories of the pain and heighten distress during subsequent procedures.” (Yi-Chuan Hsieh, Su-Fen Cheng, Pei-Kwei Tsay, Wen-Jen Su, Yen-Hua Cho, Chi-Wen Chen, 2017) If a child has a bad experience with an IV placement that could determine whether they accept future procedures. That is why we must do everything we can to minimize the amount of pain and distress they go through during an IV insertion. First off, why do our patients need IVs? “Intravenous therapy is a way to give fluids, medicines, nutrition, or blood directly into the bloodstream through a vein.” (“IV (Intravenous) Therapy”, 2022) Distraction in Cognitive Behavioral Therapy is a technique used to help keep the patient’s mind distracted from their anxious thoughts during the procedure. “Distraction technique is one of the non-pharmacological methods of pain control that uses the five senses in order to focus the patient’s attention on other stimuli.” (Rezai, M., Goudarzian, A., Jafari-Koulaee, A. and Bagheri-Nesami, M., 2017) Cognitive Behavioral Therapy can also help alleviate the parent’s distress, which also can benefit their child. “Active distraction is to encourage the child's participation in the activities during the procedures e.g., encouraging children to perform deep-breathing exercises, blow pinwheel toys or bubbles, squeeze a soft, inflatable ball.” (Yi-Chuan Hsieh, Su-Fen Cheng, Pei-Kwei Tsay, Wen-Jen Su, Yen-Hua Cho, Chi-Wen Chen, 2017) “Audiovisual distraction used

in previous studies has been shown to be effective in assisting children to manage painful, distressing procedures and other treatments.” (Yi-Chuan Hsieh, Su-Fen Cheng, Pei-Kwei Tsay, Wen-Jen Su, Yen-Hua Cho, Chi-Wen Chen, 2017) Distraction techniques can reduce the pain of venipuncture in children. An article I read used a “Distraction in Action Tool” where the parents were involved in the distraction techniques, and it had an overall good outcome. 84% of the parents reported that “DAT” was not difficult to use and 100% understandable. 89.5% had a good experience and even the medical staff said that “DAT” was helpful and did not get in the way of their work. (Hanrahan K, Kleiber C, Miller BJ, Davis H, McCarthy AM., 2018) It is suggested to make these techniques more effective and apply them by considering the age and mental and physical conditions of children. (Rezai, M., Goudarzian, A., Jafari-Koulaee, A. and Bagheri-Nesami, M., 2017)

Conclusion:

After doing a great deal of research about cognitive behavioral therapy and how it reduces pain in pediatric patients, there is a link between distraction and reducing the patient’s pain/distress during peripheral IV insertion. Distraction helps pediatric patients feel less distressed and minimizes the amount of pain they go through. Studies show that fear and anxiety can make the pain or entire experience worse for the patient. “Fear and anxiety affect anticipation of future painful experiences, and thereby reduce pain inhibition, magnifying pain sensitivity.” (Mittinty MM, 2018) Nurses should utilize their non-pharmacologic resources more to create a better patient experience for the children. Pediatric patients have an overall better experience when they aren’t as scared and anxious. In conclusion, pediatric patients who utilize cognitive behavioral therapy are more likely to experience less pain than children who don’t utilize cognitive behavioral therapy.

Worked Cited:

Primary Article

Yi-Chuan Hsieh, Su-Fen Cheng, Pei-Kwei Tsay, Wen-Jen Su, Yen-Hua Cho, Chi-Wen Chen (2017, December) Effectiveness of Cognitive-behavioral Program on Pain and Fear in School-aged Children Undergoing Intravenous Placement. Retrieved September 16, 2022, from <https://www.sciencedirect.com/science/article/pii/S1976131717303584>

Secondary Article

Rezai, M., Goudarzian, A., Jafari-Koulaee, A. and Bagheri-Nesami, M. (2017) *The Effect of Distraction Techniques on the Pain of Venipuncture in Children: A Systematic Review*. Retrieved September 16, 2022, from <http://jpr.mazums.ac.ir/article-1-134-en.html>

Tertiary Articles

Hanrahan K, Kleiber C, Miller BJ, Davis H, McCarthy AM. (2018) The Distraction in Action Tool©: Feasibility and Usability in Clinical Settings. *J Pediatr Nurs*. Retrieved September 16, 2022, from <https://pubmed.ncbi.nlm.nih.gov/29132876/>

IV (Intravenous) Therapy. Nationwide Children's. (2022). Retrieved 16 September 2022, from [https://www.nationwidechildrens.org/family-resources-education/health-wellness-and-safety-resources/helping-hands/iv-therapy#:~:text=IV%20or%20intravenous%20\(in%2Dtrah,to%20a%20bag%20of%20fluid](https://www.nationwidechildrens.org/family-resources-education/health-wellness-and-safety-resources/helping-hands/iv-therapy#:~:text=IV%20or%20intravenous%20(in%2Dtrah,to%20a%20bag%20of%20fluid).

Mittinty MM, McNeil DW, Brennan DS, Randall CL, Mittinty MN, Jamieson L. Assessment of pain-related fear in individuals with chronic painful conditions. *J Pain Res*. (2018) Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6280906/>