

GLACLP Article Review: “The influence of children’s pain memories on subsequent pain experiences.”

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One of the roles that child life specialists play in the hospital setting is assisting in pain management. Child life specialists advocate for staff to use pain management and also provide non-pharmacological pain management through distraction and relaxation techniques. Child life specialists are aware that children’s past medical experiences can affect their coping with later hospital encounters. Some children who were in the NICU are anxious about anyone in scrubs, patients might be scared to come to the hospital because of the past procedures they’ve had, and still other children are terrified of x-rays because they don’t trust health care providers when they say it won’t hurt. Research has been done on the pain memories of children and found that it influences a child’s assessment of subsequent pain experiences.

“The influence of children’s pain memories on subsequent pain experiences” by Noel, Chambers, McGrath, Klein and Stewart (2012) is an experimental study of healthy children that tested the influence of the participants’ memories of a novel pain stimulus on their later pain experiences. Noel et al discuss in the article that pain memories often lead to adult health care avoidance as it increases the anxiety of adults in relation to their healthcare experiences. Research that looks at chronically ill children found that their negative memories of pain increased the child’s pain and distress for later procedures. This study is different from previous studies because it looks at the pain memories of healthy children. Researchers hypothesized that “children’s memories for pain would be a unique and better predictor of subsequent pain reporting than their initial pain reporting” (Noel et al, 2012). They also believed that children who had these negative pain memories would expect greater pain prior to another painful experience.

This study used a sample size of 110 children between the ages of 8 and 12. These children were invited to the lab for a pain task and then rated their pain. Two weeks later, the children were asked to rate the pain of that task again. One month after the first pain task, those children returned to the lab again to complete the pain task again and provide another pain rating. When researchers analyzed the results, they found that the child’s memory of pain intensity was a better predictor of how those children would rate the second pain task. The children that had a negatively estimated memory of pain had expectations that they would experience more pain with the future pain tasks. Those negatively estimated pain memories meant the child had higher levels of anxiety, expected more pain in the future and demonstrated greater increases in pain reporting over time than those children who had developed more accurate scores of their pain in their memories.

This study provides support for child life specialists in their work advocating for more pain management for patients. Although child life specialists focus on a child’s coping and

providing psychosocial support throughout their entire hospitalization, not all healthcare providers have the same education about how painful procedures might affect the child's coping in later experiences. Using the research found in this article, child life specialists can advocate for more pain management for their patients such as numbing agents for pokes and other forms of non-pharmacological pain management during stressful procedures (such as distraction or relaxation techniques).

Noel, M. T., Chambers, C. J., McGrath, P. M., Klein, R. H., & Stewart, S. (2012). The influence of children's pain memories on subsequent pain experience. *Pain*, 153(8), 1563-1572.