Decreasing Adverse Drug Events Related to Opioids by Improving Parent and Nurse Knowledge of Pain Management in Postoperative Infants & Toddlers.

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“On my honor, I pledge that I have neither given nor received any unauthorized assistance on this paper”

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Abstract

**Background:** The lack of knowledge and recognition of age appropriate and paradoxical reactions to opioids in postoperative infants and toddlers by parents and nurses led to continued opioid administration and more severe adverse events.

**Objectives:** The purpose of the QI project was to decrease adverse drug events (ADEs) related to opioids in postoperative infants and toddlers by improving parent and nurse knowledge of causes of pain, infant and toddler reactions to opioids, and effective nonopioid and nonmedication therapies.

**Methods:** The project used pre-post design. Parents were given an educational handout specific to postoperative infants and toddlers describing the causes of postoperative pain, responses to opioids including mild to severe and paradoxical, as well as known effective nonopioid medication and nonmedication pain therapies. Nurses received a twenty-minute presentation on literature findings, ADEs in the target population, project goals and the parent educational handout. A survey consisting of four scenarios that included an ADE with varying level of pain was also administered to both parents and nurses before and after they received education to measure any change in knowledge.

**Results:** There was a 35.9% reduction in opioid administration, a 117.95% increase in NSAID and a 4.64% increase in acetaminophen use. There were zero rapid response events. There was no statistically significant change in nurse knowledge and not enough parent responses were received to assess for change in knowledge.

**Conclusion:** Education can help guide nurses to use of nonopioid analgesics which helped decrease ADEs related to opioids by improving knowledge of signs of adverse effects and effectiveness of nonopioid and nonmedication therapies. No statistically significant change in knowledge was measured in this project.