## Perianesthesia Nurses' Knowledge, Attitude, and Intention to Promote Safe Use, Storage, and Disposal of Opioids

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**Introduction:** Opioid overdose deaths and opioid use disorders are a crisis in the United States. Perianesthesia nurses have an excellent opportunity to educate patients and families who are discharged to home after surgery.

**Identification of the problem:** In a prior study, the authors found that nurses and other providers do not routinely discuss safe use, storage, or disposal of medications; perianesthesia nurses are more likely to discuss side effects of opioids.

**Purpose of the Study**: The purpose of this study is to determine if a web-based educational intervention increases knowledge, attitude, and intention of perianesthesia nurses to promote safe use, storage and disposal of opioids.

**Methodology:** A one group pre-test, post-test interventional study was conducted using a survey of ASPAN nurses. The intervention was a web-based voiceover module with patient education scenarios focused on information for patients before discharge. Responses to the pre-survey and 2 post surveys were collected. Data analysis included descriptive summary and evaluation of changes in knowledge and domains of Theory of Planned Behavior using repeated measures mixed modeling.

**Results:** The participants included pre-test survey (n = 678), the immediate post-test (n = 247), and the 4-week post-test (n = 171). The analysis presented is limited to 247 who completed at least the first post-survey. For all outcomes, there was an immediate increase in the measure following the intervention; this pairwise difference (between pretest and the immediate post-test) was significant in each model. The immediate and 4-week post-test scores exceeded the corresponding pre-test score, though for perceived behavioral control, attitude, and intention, the difference between baseline and week 4 was not significant.

**Discussion** These findings suggest a more intensive intervention with possibly the inclusion of booster sessions, particularly for the outcomes of perceived behavioral control and subjective norms may be needed.

**Conclusion:** This educational intervention can be implemented at the national level for optimum impact.

**Implications for perianesthesia nurses and future research:** Perianesthesia nurses are well-positioned to teach patients about the risks of diversion, nonmedical use, and proper disposal of opioids. Research to develop safe postdischarge prescription practices and encourage safe opioid practices after surgery is needed.