Evaluating Nurses’ Knowledge and Intention to use Acupressure for Chemotherapy-Induced Nausea and Vomiting after an Educational Intervention

Shaquonda Brown, RN, BSN, OCN, BMTCN; Carmen Rodriguez, PhD; Hsiao-Lan Wang, PhD; Susan Hartranft, PhD, ARNP

Purpose/Aim
- The purpose of this DNP Quality Improvement Project was to evaluate whether an educational intervention would increase nurses’ knowledge and intention to use acupressure for Chemotherapy-Induced Nausea and Vomiting (CINV).
- The overarching goal for this project was to increase nurses’ awareness of CINV as a strategy for improving CINV.
- Increasing nurses’ knowledge about evidence-based nonpharmacological alternatives for managing CINV may improve nurses’ perceptions of the benefits of acupressure, and increase their intention to use acupressure for controlling nausea and vomiting associated with chemotherapy.

Background
- Chemotherapy-induced nausea and vomiting (CINV) are the most common side effects experienced by cancer patients receiving chemotherapy.
- Approximately 80% of cancer patients experience CINV at some point in their treatment, and it has a significant impact on their quality of life.
- Uncontrolled nausea and vomiting can cause poor outcomes such as electrolyte imbalances, malnutrition, dehydration, anxiety, and depression.
- Prevention and control of CINV are imperative for the initiation and completion of chemotherapy treatment.

Methods
- Setting
  - Moffitt Cancer Center: Hematological/Surgical Unit
- Design
  - Single group pre/post-test design
- Sampling/Sample Size
  - Convenience sampling
  - 30 RN’s who met study criteria participated in the project.

Nurses’ Knowledge and Intention of Use of Acupressure for Chemotherapy-Induced Nausea and Vomiting Questionnaire
- Self-developed questionnaire
- Domains
  - Knowledge: 8 items
  - Attitude: 3 items
- Implementation:
  - Pre-test was provided prior to the Educational Intervention
  - 13 minute recorded PowerPoint presentation provided individually and/or as a group.
  - Post-test was provided directly after viewing the Educational Intervention.

Results
- The most frequently observed category of Pre-test Knowledge was 75% (n = 10, 33%). The most frequently observed category of Post-test Knowledge was 87.5% (n = 12, 40%).

Discussion
- There was improvement of knowledge after the intervention, which resulted in a 1 item correction. This may have been due to immediate recall since the post-test was provided directly after the intervention.
- The confidence was reduced after the intervention. This may have been due to viewing the intervention and realizing how vital it is to be aware of alternative treatments to help manage CINV.
- More nurses reported using acupressure after the intervention, but their confidence was decreased. This may be due to having increased awareness and desire to use acupressure after watching the intervention, but still needing more education and training to feel more confident using acupressure.
- There was no difference in anticipated use, which may be due to nurses having low confidence. Providing further educational interventions and training may be strategies to help increase nurses’ confidence and intention of use of acupressure for CINV.

Implications for Nurses
- Acupressure is an evidence-based practice with the potential to improve CINV. Nurses play an important role in integrating acupressure for patients experiencing CINV, and in teaching patients and their families about the appropriate use of this nonpharmacological strategy.
- Providing nursing education for the use of acupressure to manage CINV is important in improving nurses’ confidence and actual usage of acupressure in clinical practice.
- Better assessment and control of CINV has the potential to improve patient satisfaction and patient outcomes and reduce reluctance to initiate or complete chemotherapy.

Limitations
- Small sample size due to being limited to a specific unit, and not all nurses on that unit were able to participate.
- Time constraints of nurses participating in the educational sessions.
- Nurses’ workload prevented participation of several nurses from selected unit.

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University of South Florida College of Nursing
Tampa, Florida