

Incorporating Acupressure to Reduce Post-Operative Nausea and Vomiting in the Post Anesthesia Care Unit for Patients Undergoing Bariatric Surgery

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Introduction: Patients undergoing bariatric surgery experience high rates of postoperative nausea and vomiting (PONV) that can lead to extended post-anesthesia care unit (PACU) stays, a negative patient experience, and increased medical costs. Research has demonstrated that acupressure can be used as a complementary therapy to reduce PONV.

Identification of the Problem: At a 400-bed, non-profit, Magnet-designated, community hospital in the mid-Atlantic region, over 600 patients undergo bariatric surgery annually. Nursing staff in the PACU identified that these patients frequently reported PONV, a quality indicator measured and reviewed monthly. While these patients received pharmacological interventions to prevent PONV, the current standard of care did not include complementary therapies.

EPB Question/Purpose: The purpose of this project was to implement the evidence-based intervention of acupressure during Phase I recovery as part of the comprehensive treatment of PONV for the population having bariatric surgery. This project utilized PubMed and Ovid databases to conduct a systematic literature search.

Methods/Evidence: Guided by the Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) model, adult patients undergoing bariatric surgery during a 12-week implementation phase received the nurse-led acupressure intervention in PACU. Demographic and outcome data were gathered from chart reviews for analysis.

Significance of Findings/Outcomes: The pre-and post-implementation samples were descriptively comparable. Of 121 eligible participants, 91.7% received the intervention. The proportion of PONV decreased from 45.5% pre-implementation to 43% for the post-implementation group, a small but not statistically significant difference ($Z=-.404$, $p=.686$). The mean recovery time decreased from 116.3 minutes pre- to 112.5 minutes post-implementation but was not statistically significant ($p=.579$). While the initial implementation of acupressure did not demonstrate a statistically significant difference, clinical significance, which relates to the real-life application of findings to improve care and outcomes, was identified. Nursing staff were highly engaged, and patients expressed appreciation, which could support the sustainability of the low-cost intervention.

Implications for perianesthesia nurses and future research: As supported by research evidence, the implementation of the noninvasive, low-cost acupressure device was clinically significant and offers a nurse-driven, nonpharmacological intervention that is easy to use and document in the PACU setting. Continuation of the intervention may demonstrate a statistically significant improvement of PONV and recovery times with a larger sample or if applied earlier in the surgical process.