

## **Postoperative Nausea and Vomiting (PONV) Practices in a Tertiary Hospital with Low PONV Incidence**

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**Introduction:** Postoperative nausea and vomiting (PONV) is one of the most frequent complications following general anesthesia (GA), with a reported prevalence of nearly 30% in the United States. It negatively impacts patient satisfaction, prolongs recovery, and increases healthcare costs.

**Identification of the Problem:** Despite lacking PONV prevention protocol, a tertiary hospital in West Texas documented a notably low PONV rate of 10% in 2023. This raises questions about whether existing practices align with current evidence-based guidelines and contribute to the reduced incidence.

**Purpose of the Study:** This study examined current PONV prevention practices, their consistency with guidelines, and the nurses' role in its prevention.

**Methodology:** A retrospective review of 2,272 outpatient surgical cases in 2023 was conducted. Eligible patients were adults who underwent GA with same-day discharge. Data collected included demographics, type of surgery, and PONV risk factors per Apfel criteria: female sex, history of PONV or motion sickness, nonsmoking status, and postoperative opioid use. Records were analyzed for risk assessments, prophylactic antiemetic use, mitigation strategies, and PONV occurrence using descriptive and correlational statistics ( $p < 0.05$ ), and compared with current guidelines.

**Results:** The PONV rate was 18%. Anesthesiologists assessed 96% of patients versus 99.5% by nurses, though no formal scoring tool was used. Risk factor identification correlated with PONV experience ( $p = 0.001$ ). About 44% received 1–2 mitigating strategies and 53% received 3–4, yet higher-risk patients still had PONV ( $p = 0.002$ ). Prophylaxis was guideline-based, with 93% of patients with 1–2 risk factors and 69% with  $\geq 3$  getting the recommended dose, though its effect was less evident in higher-risk patients.

**Discussion:** Evidence-based practices were generally followed, likely explaining the hospital's low PONV rate. Mitigation strategies and prophylaxis use were guideline-consistent, but their reduced effect in higher-risk patients highlights the need for protocols. The absence of standardized scoring may contribute to variation, reinforcing the value of structured systems to guide care.

**Conclusion:** Practices aligned with guidelines, supporting low PONV incidence. A standardized risk-scoring tool and PONV protocol may enhance consistency and outcomes, especially in high-risk group.

**Implications for perianesthesia nurses and future research:** Perioperative nurses minimize PONV through early recognition, timely communication, and advocacy for evidence-based care. Future research should assess nurse-led risk scoring, bundled strategies, and long-term outcomes.