

## Implementing a Nurse-Driven Aromatherapy Protocol to Decrease the effect of Postoperative Nausea and Vomiting



**Julie A. George**

**DNP, MSN, RN, CSSM,  
CNOR**

**Nurse Executive**

### **PURPOSE**

The purpose of this quality improvement project was to evaluate the effect of aromatherapy on postoperative nausea and vomiting (PONV) as a cost-effective adjunct therapy to PONV care. Nurse-driven aromatherapy was introduced as a proactive, low-risk, low-cost quality improvement project to improve the effect of PONV, length of stay (LOS) in PACU and to decrease the need for rescue antiemetics for the 12-bed post-anesthesia care unit (PACU) unit at the community hospital in the Southeast region, Houston, Texas.

### **BACKGROUND**

The delay in obtaining antiemetic orders from the physicians and reactive PONV care presented considerable patient discomfort, dissatisfaction, and increased LOS in PACU.

### **METHODOLOGY**

- The project utilized IOWA evidence-based practice, Logic model, and Plan-Do-Study-Act (PDSA) framework
- PONV status, incidence, and PACU LOS documented upon arrival to PACU and after 5 minutes of aromatherapy through Aromatherapy Case Report Forms (CRF).
- Project included - all adult outpatient (OP) surgical patients >18 years old with general

anesthesia and excluded – non consented, known allergic, non-English-speaking patients

- PACU RN proactively offered the patient preferred essential oil drops of either lavender or ginger to 2x2 gauze in a container

### **RESULTS**

A total of 200 patients consented to participate in the quality improvement project between April to July 2021. An additional retrospective case review of 200 patients was conducted to obtain the baseline data. The results indicate that the introduction of nurse-driven aromatherapy protocol in the PACU unit did not demonstrate a statistical difference in PONV reduction (p 0.6469), antiemetic usage (p 0.0277), or average length of PACU stay between the groups (p 0.0012).

### **IMPLICATIONS**

Even though nurse-driven aromatherapy did not show a statistically significant reduction in PONV, the project team agrees that proactive PONV care is critical to keeping the patient comfortable and facilitating patient throughput. Factors outside the project's control influenced the effectiveness of the nurse-driven aromatherapy protocol. The project's lessons learned can be applied to future evidence-based practice projects in the clinical setting.