

**Promoting Evidence-Based Nursing Practice Through
Lavender-Sandalwood Aromatherapy for Postoperative Pain Management
in the Post-Anesthesia Care Unit**

Primary Investigator: Rigel D. Bauza BSN
Columbia University/New York Presbyterian Weill Cornell, New York, NY

Introduction: Aromatherapy is an evidence-based, holistic nursing intervention recognized in the Nursing Interventions Classification (NIC) for promoting nursing autonomy and patient-centered care. Nursing programs across the United States increasingly emphasize complementary and integrative therapies to prepare nurses for their safe and effective use. Although institutional guidelines support aromatherapy, 18% of Post-Anesthesia Care Unit (PACU) nurses utilized and documented lavender-sandalwood aromatherapy, revealing a significant practice gap.

Identification of the Problem: Opioids have long dominated postoperative pain management, but growing concerns about side effects and dependency have prompted a shift toward multimodal approaches that include non-pharmacologic interventions. Despite being recognized as a safe and effective adjunct, aromatherapy's clinical use remains inconsistent due to limited education, unclear protocols, and documentation gaps. Improving nurses' knowledge, confidence, and consistency in implementing holistic practices is essential for integrating evidence-based aromatherapy into perioperative care.

QI Question/Purpose of the Study: The purpose of this nurse-led quality improvement (QI) project was to increase the utilization and documentation of lavender-sandalwood aromatherapy among PACU nurses through targeted education and standardized implementation.

Methods: Guided by the Plan-Do-Study-Act (PDSA) model, this pre- and post-intervention project evaluated aromatherapy use and documentation in the electronic health record (EHR) from July to August 2025. The Plan phase identified knowledge gaps and established the goal of increasing documentation from 18% to 95%. The Do phase implemented staff education, standardized protocols, and visual reminders. The Study phase analyzed post-education surveys and EHR audits, while the Act phase reinforced successful strategies and sustained education.

Outcomes/Results: Within six weeks, aromatherapy utilization and documentation increased from 18% to 100%. Post-education surveys showed all nurses correctly identified aromatherapy protocols, and confidence levels improved from 27% to 72%.

Discussion: Nurses reported feeling empowered and motivated to offer aromatherapy, citing improved teamwork and enhanced patient relaxation. Minor barriers, such as scent sensitivity, were addressed through patient screening and individualized care strategies.

Conclusion: Targeted education and reinforcement effectively improved aromatherapy utilization and documentation, aligning with national multimodal pain management standards.

Implications for perianesthesia nurses and future research: Integrating aromatherapy into PACU workflows strengthens holistic, nurse-driven pain management while enhancing patient comfort and professional development. Future research should evaluate patient outcomes and long-term sustainability to support broader implementation.