

AROMATHERAPY AS ADJUNCTIVE THERAPY FOR POST-OP NAUSEA AND VOMITING



Primary Investigator: Nancy Castellano, BSN RN
 CPAN CAPA CCAP
 Overlook Medical Center, Summit, New Jersey
 Co-Investigator: Nowai Keleekai-Brapoh, PhD RN-BC

Introduction: Essential oils are complex chemical compounds extracted from various parts of plants. Research has demonstrated that aromatherapy using certain essential oils can reduce nausea and vomiting. A significant number of bariatric surgery patients experience post-operative nausea and vomiting (PONV) and may benefit from the addition of aromatherapy to standard antiemetic therapy.

Identification of the problem: Data from the study organization revealed reports of prolonged PONV in bariatric surgery patients, which can increase pain, the need for medication, and length of stay all of which decrease patient satisfaction/outcomes and increase costs.

EBP Question/Purpose: The purpose of this evidence-based practice project was to determine if the addition of the blends of ginger-red mandarin, ginger-red mandarin-peppermint, or red mandarin-peppermint essential oil for aromatherapy in the post-anesthesia care unit (PACU) would lower the rating of PONV and/or the number of antiemetics used by bariatric patients compared to standard treatments alone.

Methods/Evidence: Bariatric patients rated their nausea on a scale of 0-4 and were not offered any aromatherapy during the one-month baseline data collection period. Thereafter, patients were offered the option to receive aromatherapy in addition to standard antiemetics. Three blends of essential oils were studied consecutively. Two drops of the essential oil blend were placed on a 2x2 gauze and the gauze placed on the patients' chest, close to the face. Patients rated their nausea at routine intervals until discharge from the PACU.

Significance of Findings/Outcomes: A total of 130 patients participated in this project. On average, those who received any of the three essential oil blends reported 20% less PONV than those who received none (58.1% vs 78.3%). All patients who received aromatherapy had an average discharge PONV rating of "1" compared to a rating of "2" in those who did not receive aromatherapy. The ginger-red mandarin-peppermint blend was the only blend that resulted in a decreased number of medications used (2 vs 1).

Implications for perianesthesia nurses and future research: PONV remains a significant issue upon discharge from the PACU. Aromatherapy may assist in decreasing PONV in bariatric patients. Peppermint-red mandarin-ginger blend, specifically, reduced the number of antiemetics used and should be further explored in future research studies.

SURGERY CENTER QUALITY IMPROVEMENT STUDY: IDENTIFYING BARRIERS TO PATIENT READINESS TO THE OPERATING ROOM—PHASE I



Primary Investigators: Christine Deitrick, BS RN CAPA, Sandra Price, MS RN CAPA, Gianna Cocuzzi, RN CAPA, Cherie

Buckley, MS RN, Cynthia Lucieer, BSN RN CAPA
 University of Rochester Medical Center's Same Day Surgical Center, Rochester, New York
 Co-Investigators: Theresa Carter, MS RN, Lisa Englerth, BSN RN CAPA, Elizabeth A. Anson, MS

Introduction: Operating room (OR) delays have significant implications on workflow and resource efficiency. Time is the OR's most valuable resource; delays in OR start times can lead to dissatisfaction for the patient, nurse, anesthesiologist and surgical team.

Identification of the problem: OR delays can negatively impact the perioperative team, environment and patient experience.

Purpose of the Study: The purpose of this nurse driven quality improvement (QI) prospective study was to identify barriers that contribute to first case OR delays.

Methods: Registered nurses (RNs) collected data on first case surgery patients for one month including additional nursing care contributing to delays. A nursing related delay was defined as not having the patient ready 20 minutes prior to OR start time. A Lean Six Sigma (LSS) process improvement model analyzed the prevalence of barriers contributing to patient readiness for the OR. Nurses provided solutions using an "Ever Better" poster board tool.

Outcomes/Results: Total first case patients (n=230) undergoing surgical procedures during a 4-week period revealed 19% (n=44) met the nursing related delay definition, nearly half of the patients 47% (n=109) required additional nursing interventions. The top five of 20 barriers contributing to delayed patient readiness were: communication with health care providers (15%); additional day of surgery testing (15%); difficult intravenous access (9%); physical disabilities requiring additional staff (0.6%); and unplanned medications (0.6%).

Discussion: Solutions to the delay in patient readiness for the OR cannot be understood unless barriers are addressed. Awareness of the problem requires a multidisciplinary team approach.

Conclusions: Findings revealed additional nursing interventions contributed to approximately one quarter of first case OR delays by an average of 18 minutes. With further education, communication, and workflow changes using a multidisciplinary team approach the number of delays can be decreased.

Implications for Perianesthesia Nurses & Future Research: Delays in OR procedures cause frustration to the patient, nurse, anesthesiologist and surgical team. Phase II of this QI project will implement developing a patient portal informational website, utilizing pre-surgical screening by anesthesia, improving perioperative staff communication, and changing workflow by staggering patient admission times to decrease patient delays.

INTRODUCING THE CLINICALLY ALIGNED PAIN ASSESSMENT



Primary Investigators: Penny McClain, RN CPAN, Theresa Nelson, RN BSN CPAN
 Providence St Vincent Hospital, Portland, Oregon
 Co-Investigator: Mary J. Waldo, PhD RN GCNS-BC

Introduction: The Clinically Aligned Pain Assessment (CAPA) is an innovative way of assessing pain by engaging patients in

Note: All abstracts are printed as received from the authors.

a brief conversation about their comfort, change in comfort, pain control, functionality, and sleep.

Identification of the problem: According to the Joint Commission (TJC) and the American Society for Pain Management Nursing (ASPMN) the use of the commonly used numeric rating scale (NRS) can lead to opioid overdose and ineffective treatment.

Purpose of the Study: To compare post-surgical patients' perceptions of the effectiveness of two pain assessment tools, CAPA and NRS.

Methodology: An IRB approved, prospective observational study was conducted. Patients undergoing elective spinal surgery who stayed at least one night in the hospital (n=40) were included. Nurses trained in the use of CAPA, assessed patients' pain levels first with CAPA then NRS. Patients completed a survey on discharge comparing their perception of CAPA and NRS.

Results: Patient survey results show no significant difference between the numerical scale and the CAPA tool in ease of use by patients ($p > .05$). In addition, there was no significant difference between patients perception of nurse response between the two tools, ($p > .05$). However, there was a statistically significant difference in patient comfort level with the two tools. ($p = .018$)

Discussion: CAPA, compared to NRS, was similarly easy for patients to use and similar in RN response. However, patients reported more comfort with use of CAPA. Changing a nurses' longstanding practice and asking nurses on another department to cooperate with a research study were limitations to this study.

Conclusion: CAPA shows promise as an alternative to simply having patients assign a number to a complex situation, like pain.

Implications for perianesthesia nurses and future research: Patients emerging from anesthesia, often find the NRS difficult to use. Pain management standards for safe and effective pain management start with CAPA conversations, giving the nurse a way of documenting it. Future research to evaluate how CAPA effects pain management and patient/nurse satisfaction. To address the limitations of this study, a similar study is being conducted in our ambulatory setting. Preliminary findings will be available for discussion.

GEL IN GEL OUT: PERIOPERATIVE HAND HYGIENE COMPLIANCE

Primary Investigator: Sherie Munaretto, BSN RN
CPAN CAPA
City of Hope, Duarte, California



Introduction: Proper hand hygiene is the number one preventative measure to the improving patient health outcomes following surgical intervention. 1 in 4 hospitals fail in hand hygiene, and 1 in 25 hospital patients have at least one healthcare associated infection (HAI) on any given day. Hand hygiene compliance of the peri anesthesia team in the Pre-op and

PACU area was measured prior to and after implementing measures to determine an evolving change in hand hygiene compliance.

Identification of the problem: Noncompliance with appropriate hand hygiene before and after patient care.

QI question/Purpose of the study: The purpose of this study was to see what variables could be implemented to assist the staff at achieving hand hygiene compliance.

Methods: Observational measurements were obtained pre and post intervention by a 'secret shopper,' in addition to monitoring the frequency of the gel sanitizer replacements in the perioperative area.

Outcomes/Results: Following the introduction of additional hand sanitizer dispensers in patient care areas, as well as ongoing staff education, the rate of hand hygiene compliance significantly improved.

Discussion: This study did not measure the rates of healthcare associated infections (HAI) due to the multifactorial influences that contribute to HAI in this vulnerable patient population. By instituting additional practices to improve awareness and knowledge, as well as improved accessibility to dispensers, compliance rates did increase. Meeting regulatory standards and achieving hand hygiene benchmarks continues to be a priority at our institution.

Conclusion: Prior to implementation of "Gel In Gel Out," compliance with hand hygiene was well below acceptable levels for the preoperative and PACU team at City of Hope. By providing ongoing education and statistics to staff, as well as increasing accessibility of hand gel sanitizer dispensers in the treatment area, compliance improved.

Implications for perianesthesia nurses and future research: It is imperative that maintaining an effective infection control program for continued compliance is the forefront for improved patient outcomes. A concerted effort to further determine what factors contribute most to lower rates of compliance in the peri-anesthesia area is of continued importance.

SCREENING MATTERS FOR OSA

Primary Investigator: Kathy Lopez-Bushnell, EdD
MPH MSN APRN

University of New Mexico Hospitals, Albuquerque,
New Mexico

Co-Investigator: Connie Hardy Tabet, MSN RN CPAN CAPA
FASPAN



Introduction: Obstructive sleep apnea (OSA) is a life-threatening concern in the ambulatory surgical setting. Sleep that is thwarted after receiving anesthesia, sedating medications, alcohol consumption, or pre-existing comorbidities together they remain a potential concern for patient safety and airway patency.

Identification of the problem: Perianesthesia nurses noted prolonged post anesthesia recovery, lower oxygen saturation levels and delayed discharge times in an ambulatory surgical center. A nurse-initiative protocol was established following a literature review.

Purpose of the Study: The purpose of this study was to identify OSA candidates prior to surgery using perianesthesia nurse-