

## Introduction:

- A. 6.3 million fractures happen in the USA every year.
- B. The project was led by a team consisting of 2 CNSs, one certified registered nurse anesthetist (CRNA), and four registered nurses (RNs) from the unit practice council
- C. Postoperative nausea is experienced by
  - a. approximately  $\frac{1}{3}$  of the general population.
  - b. Nausea and vomiting combined may be seen in up to 70% of high-risk patients.
- D. Aromatherapy is not an opioid and can be used in the healthcare setting to decrease symptoms of pain, nausea, and anxiety.
- E. Aromatherapy is important because it stimulates the part of the brain that releases the hormone dopamine
- F. 60 patients were included in the study.
  - a. 30 patients with a fractured limb in the emergency room
  - b. 30 patients were the control
- G. Patients were given lavender, mandarin, and spearmint essential oil and QueaseEase as the control

## Purpose:

The purpose of this study is to understand how essential oils and aromatherapy can decrease the patient's pain, anxiety, and nausea.

## Methods:

- A. Three essential oils were involved in this study: lavender, mandarin, and spearmint or QueaseEASE.
- B. A paper-based Aromatherapy Data Collection Tool was created to capture patients' self-report of pain, nausea, or anxiety.

C. The tool asked the patients about their anxiety, pain, and nausea on a scale of 0-10. 0= having no symptoms, 10= having the worst symptoms.

D. Inclusion

1. 24-bed medical surgical unit and gynecology service in a postanesthesia care unit at a level 1 military trauma center that provides care for 26,300 inpatients and 15,000 surgical patients annually.
2. Postoperative nausea is experienced by  $\frac{1}{3}$  of the population. Nausea and vomiting are seen in up to 70% of high-risk patients.
3. 184 patients were divided into four groups (three groups were given aromatherapy and the control group was given water only.)

E. Developmental

1. Aromatherapy is a safe, low-cost-effective, nonpharmacological option that promotes comfort, healing, and well-being.
2. The program objective was to decrease patients' self-reported pain, anxiety, and nausea assessment scores after using essential oils.

F. Explanatory Phase

1. The Joint Commission (2020) requires organizations to offer nonpharmacologic pain treatment modalities according to standard LD.04.03.13 EP2
2. If preventative care is not used to control postoperative nausea and vomiting, increased medical care costs, longer hospital stays, and hospital readmission occur.
3. Data collection took place over 2 months for 57 patient encounters.

Results:

- A. Data collection over 2 months
- B. Essential oils used (Lavender, spearmint, mandarin, and queaseEase)

- C. Used in Pacu and med surg
- D. 57 patient encounters
- E. Assessing pain, anxiety, and nausea
- F. Standard scale rating 0-10, 0 no complaint, 10 worst pain imaginable.
- G. Pain: 15 patients on a med surg unit (average pre score 6.276) ( average post score 4.800)
- H. Anxiety: 7 patients on med surg (average pre score 4.857) (average post score 1.875)
- I. Nausea: 35 patients med surg and pacu (average pre score 5.829) (average post score 2.543)
- J. Limitations: small sample size

Conclusion:

- A. Utilization of aromatherapy for treatment of nausea, pain, and anxiety in place of opioids, antiemetics, and benzodiazepines.