## The Effect of Essential Oils in Perianesthesia Nursing

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#### **BACKGROUND**

Main cause of nurses' stress for many years:

- Workplace conflicts
- Difficulty with varying management styles
- Heavy workloads
- Emotional toll of nursing

Safe patient care is linked to healthy work environments and are empirically linked to:

- Patients' satisfaction
- Staff Nurse Retention
- Job satisfaction
- Decreased job stress and burnout

#### Essential Oils are:

- Volatile aromatic compounds extracted from plants
- Wide variety of functional chemical constituents giving each oil its unique aroma and therapeutic properties (AromaticScience.com)

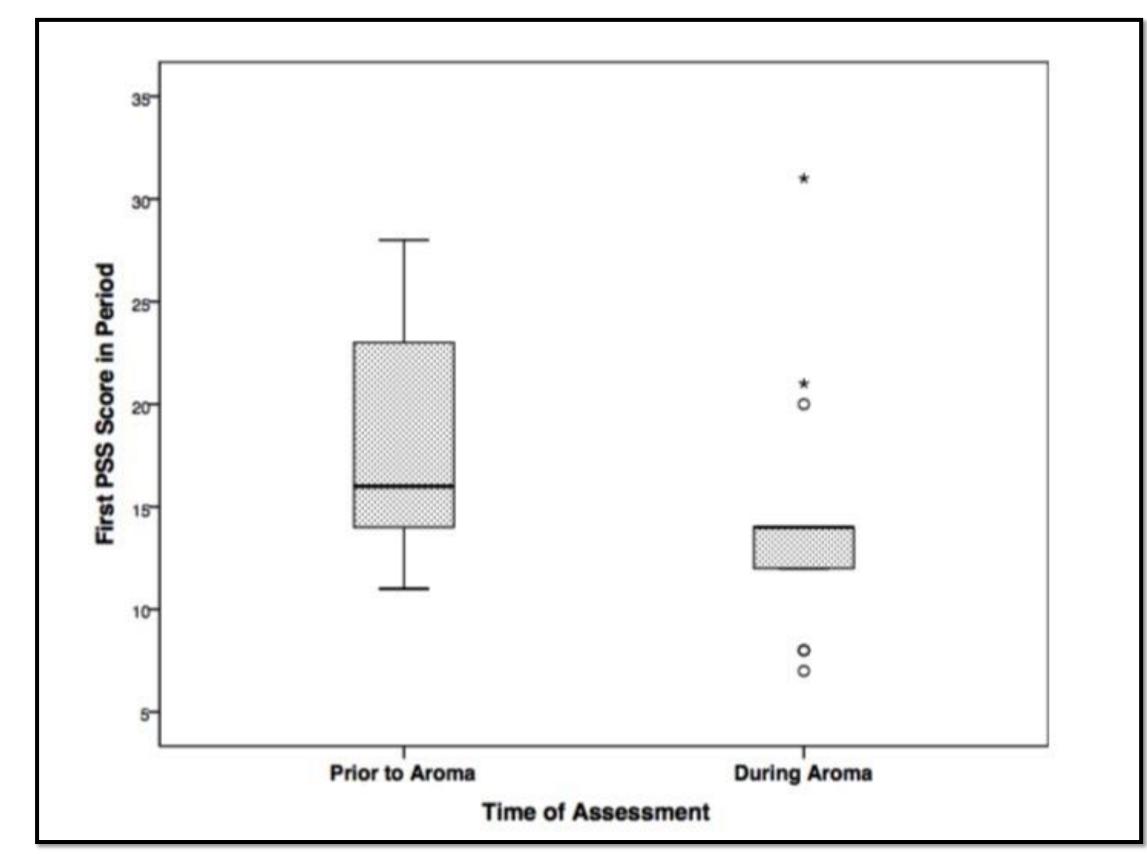
#### **STUDY AIMS**

Aim 1. Study the perceived stress among the nursing staff in the holding room.

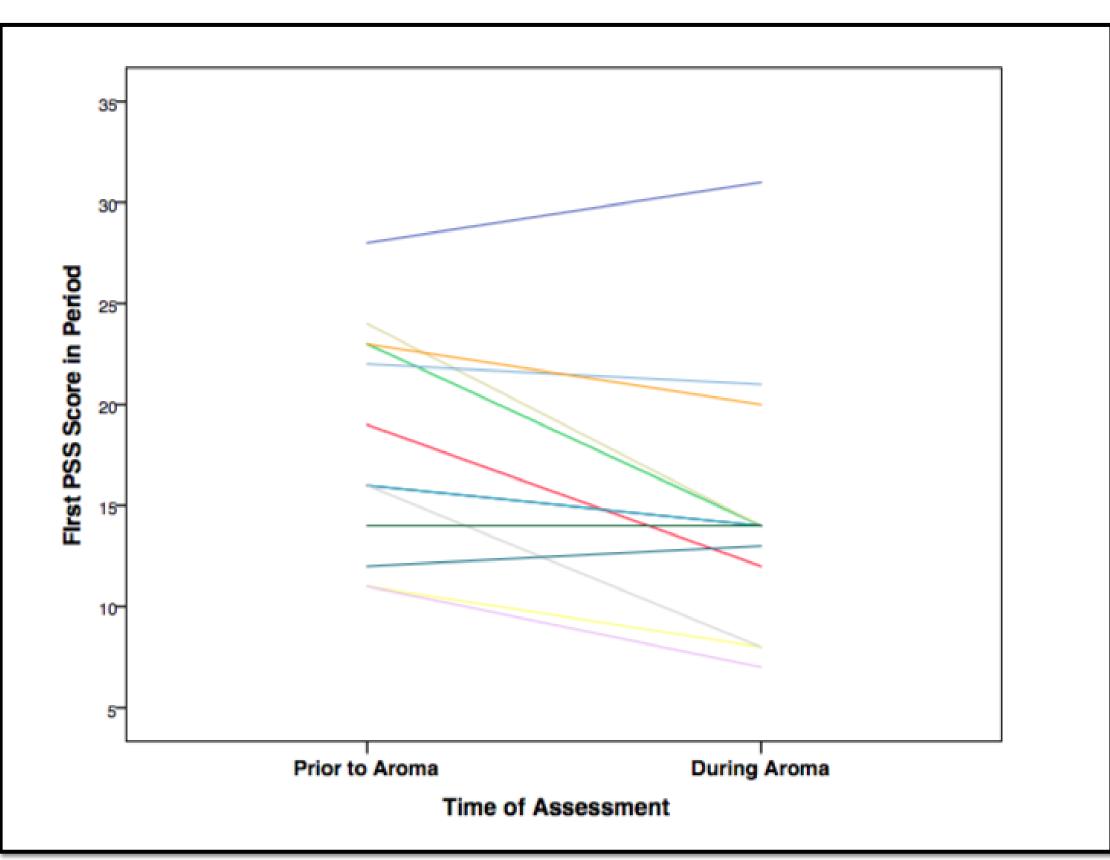
Aim 2. Study the effect of diffusing citrus essential oils in the Holding Room.

- IRB approval
- Internal VICTR funding
- High quality, tested essential oils diffused
- Pre and Post-survey design using validated PSS (Perceived Stress Survey)

#### TABLES/FIGURES



Impact on the Group: Decrease in Median PSS socre of 3 points



Individual reduction of Perceived Stress during intervention

#### CRITERIA FOR SAFE ESSENTIAL OIL USE

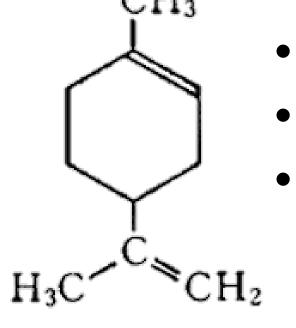
Indigenous Sourcing
Single Harvest
GC/MS data disclosure

#### Testing:

- Gas chromatography (GC)
- Mass Spectrometry (MS)
- Infrared Spectroscopy
- Organoleptic tests (taste, sight, touch, and smell).

#### **ESSENTIAL OILS IN RESEARCH**

# CITRUS OILS (Lemon, Lime, Wild Orange, Bergamot, Tangerine)



- Useful for reducing anxiety and stress
- Antioxidant capacity
- Positive effects on behavior and immune system

#### Lemon: Citrus limon

- Primary Constituent: d-limonene
- Other Main Constituents:
   Beta-pinene, Alpha pinene,
   Terpinene



Extraction Method: Cold Pressed

#### Lime: Citrus aurantifolia

- Main Chemical Components:
   Limonene, β-pinene, γ-terpinene
- Plant Part: Lime rind (peel)
- Extraction Method: Cold pressed

### Wild Orange: Citrus sinensis

- Main Chemical Components: Limonene
- Plant Part: Orange rinds (peel)
- Extraction Method:
   Cold pressed/expressed

Essential Oil References available upon request.



Hunt, R., Dienemann, J., Norton, H. J., Hartley, W., Hudgens, A., Stern, T., & Divine, G. (2013). Aromatherapy as treatment for postoperative nausea: a randomized trial. *Anesthesia & Analgesia*, 117(3), 597-604.

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Laschinger, H. K. S., & Leiter, M. P. (2006). The impact of nursing work environments on patient safety outcomes: The mediating role of burnout engagement. Journal of Nursing Administration, 36(5), 259-267.