



# Nursing Student Cognitive-Affective Changes with Essential Oils

Dale Hilty, PhD & Kerry Fankhauser, MS, RN, UZIT

## Background

### Background:

Promote preliminary investigation exploring incorporation of essential oils (EO's) to nursing students in BSN college setting. OSU Medical Center (<https://wexnermedical.osu.edu/blog/urban-zen-healing-therapy>) uses essential oils in specific units with positive outcomes (patients, families, staff).

### PICOT Question:

Will nursing students who receive an essential oil alternative-complementary instruction reveal changes on pre-post Likert attitude questions from a 60-minute presentation?

### EBSCO Databases:

Academic Search Complete, CINAL Plus, with Full Text, Education Research Complete, Health Source: Nursing-Academic Edition, MEDLINE with Full Text, Psychology and Behavioral sciences Collection, and PsycINFO. Search terms: nursing, nurse, students, essential oil: Results=3



## Literature Review

Three investigations (Marzouk, El-Nemer, & Baraka, 2013; Najafi, Tagharrobi, Shahriyari-Kale-Masihi, 2014; Ni, Hou, Kao, Change, Yu, Wu, & Chen, 2013) used essential oils as experimental intervention. Researchers found decreased anxiety, increased sleep quality, and menstrual pain alleviation. Young (2011) outlines safety techniques, usages, implications, and applications for single oils and blends.

## Findings

Evaluation was based on three outcomes. Pre-post (five knowledge/comprehension questions) data showed significance ( $p=.001$ ) using dependent *t*-test. Open-ended questions revealed student applications based on qualitative theme analysis. Faculty members reported experiential learning while designing the presentation and measurement of student attitudes.



## Qualitative Student Feedback

- "It was great to experience a whole different side of holistic care. This was my first experience aroma therapy, and I was ... impressed by its effects. It will be great to find more uses in my life."
- "I really could smell how each oil affected my mood. I think these oils will be very helpful in my personal and professional life. I liked knowing the different uses ... HTN, anxiety, and relaxation for my health and the health of others. Thanks so much for doing this and the rose oil, it smells so good!"
- "This presentation was wonderful! I found it to be very insightful and informative. I loved the essential oils/aroma therapy was awesome! I felt very relaxed with the lavender essential oil."
- "It is interesting to know the chemistry of the plant, how it functions, and how it can benefit our health."
- "I fell in love with lemon ... Will definitely use ... to reduce stress."
- I will definitely look for lemon and peppermint essential oils. Thank you for sharing."

## Discussion

Recommendation: use correlational studies and experimental interventions to explore cognitive-affective changes in student self-care and in application to patient healthcare.

## Conclusions: Nursing Practice

- Nursing Knowledge, Usage, & Safety
  - Historical, Biblical, & Cultural Aspects
  - Usage: Diffusion, Inhalation, & Topical
  - Safety: Guidelines & Precautions
- Application in the Clinical Setting
  - Recommendations for health maintenance, protection, & restoration
- Patient Education Regarding Self-Care
  - Holistic: Spiritual, Physical, Mental, & Emotional Balance versus the Allopathic-Scientific Medical Model
  - Empowerment for active participation in the healing process (i.e., pain: patient preferred choice such as lavender, peppermint, wintergreen, helichrysum)



## References

- Marzouk, T., El-Nemer, A., & Baraka, H. (2013). The effect of aromatherapy abdominal massage on alleviating menstrual pain in nursing students: A prospective randomized cross-over study. *Evidence-Based Complementary and Alternative Medicine*, Article ID 742421, 1-6.
- Najafi, Z., Tagharrobi, Z., & Shahriyari-Kale-Masihi, M. (2014). Effect of aromatherapy with lavender on sleep quality among patients undergoing hemodialysis. *Journal of Kashan University of Medical Sciences*, June, 18(2): 145-150.
- Ni, C., Hou, W., Kao, C., Chang, M., Yu, L., Wu, C., & Chen, C. (2013). The anxiolytic effect of aromatherapy on patients awaiting ambulatory surgery: A randomized controlled trial. *Evidence-Based Complementary and Alternative Medicine*, Article ID 927419:1-5.
- Young, G. (2011). *Essential Oils: Pocket Reference (5th ed.)*. Lehi, UT: Life Science Publishing.