Aromatherapy Reduces Nursing Stress in Urban Safety Net Hospital

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Introduction

Nurses and other healthcare workers often experience intense stress. Stress is a condition that occurs when the physical and psychological borders are threatened. If stress is experienced continuously and intensively for a long time, it can cause anxiety.

The stresses placed on healthcare workers is well documented:

- Work in healthcare is stressful due to demanding working conditions including taxing work, exposure to infectious diseases, long hours, and challenging interactions with coworkers, patients, and their families. Chronic exposure to stressful working conditions can lead to mental strain and contribute to worker turnover.¹
- Harassment (i.e., threats, bullying, verbal abuse, or other actions from patients and coworkers that create a hostile work environment) and violence can increase the risk for symptoms of depression, anxiety, posttraumatic stress, and suicidal thoughts.²

For nurses in particular, work stresses have been identified as a risk category that can negatively impact their well-being and the quality of patient care they deliver.

Hospital Study

A study was conducted at Parkland Health, an urban safety net county hospital located in Dallas, TX. The goal of this study was to investigate the effects of Elequil Aromatabs® lavender aromatherapy (Beekley Medical®, Bristol, CT) on the stress levels of nurses in both direct patient care settings and administrative roles.



Nobody ever thinks of staff being their own patients or care providers. We have only been taught to have an outward focus. But if you get that combination of caring for yourself as much as you care for your patients, you are going to have better patient outcomes.

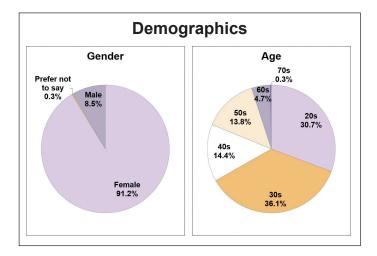
Key Findings

- Elequil Aromatabs aromatherapy provided a 37% reduction in staff stress
- 84% of nurse participants had a positive experience using Elequil Aromatabs
- 91% of nurse participants would recommend aromatherapy for managing workplace stress

Methods

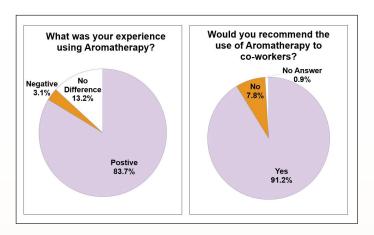
The study was conducted June – September 2021. A total of 319 male and female nurses (RN or LVN) volunteered to participate in the study.

Participants were provided a lavender Elequil Aromatab which they applied to their uniform top. Four hours later participants completed a survey about their experience using the aromatherapy.



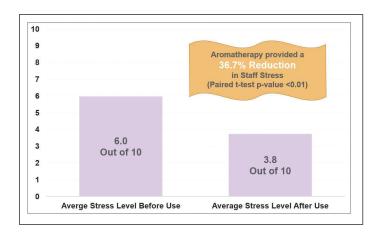
Results

Of those who used Elequil Aromatabs, 83.7% said they had a positive experience using the aromatherapy and 91.2% said they would recommend aromatherapy to their coworkers.



Stress Reduction

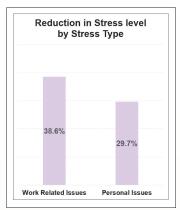
Using a 0-10 Likert scale, participants were asked about their stress level before and after using the aromatherapy. Across all participants the overall average reduction in stress levels was 36.7%.

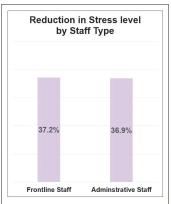


Stress Reduction by Stress Type and Nursing Role

The use of Elequil Aromatabs aromatherapy was shown to reduce stress from work-related issues by 38.6%. For stress resulting from personal issues, the reduction was 29.7%.

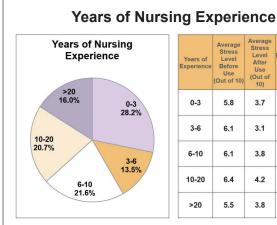
The use of Elequil Aromatabs aromatherapy was shown to reduce stress for frontline patient-facing staff by 37.2% and administrative staff by 36.9%. Although the source of the stress is different between these two groups, it is notable that both experienced a significant and similar reduction in stress levels with the use of Elequil.





Stress Levels by Years of Experience

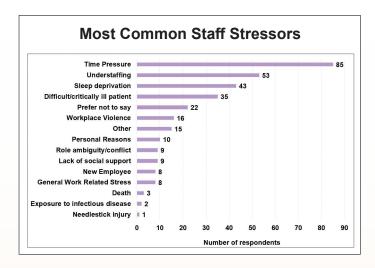
As shown in the table below, nurses with 10-20 years of experience had the highest stress level scores both before and after the use of Eleguil Aromatabs. This may be due to the fact that nurses with this level of experience are often carrying a heavier workload and/or have leadership responsibilities that can result in higher stress levels. The greatest reduction in stress levels was seen in nurses with 3-6 years of experience, with a nearly 50% reduction following the use of Elequil.



Years of Experience	Average Stress Level Before Use (Out of 10)	Average Stress Level After Use (Out of 10)	Reduction in Stress Level	Paired T-test p-value
0-3	5.8	3.7	36.2%	<0.01
3-6	6.1	3.1	49.2%	<0.01
6-10	6.1	3.8	37.7%	<0.01
10-20	6.4	4.2	34.4%	<0.01
>20	5.5	3.8	30.9%	<0.01

Reasons for Stress

The survey also asked participants the primary reason for the stress they were experiencing. The top three reasons were time pressure, understaffing, and sleep deprivation.



Conclusions

Nurses are facing unprecedented burnout, understaffing, and time pressures. Work-related stress has become one of today's most serious occupational hazards. Aromatherapy can be a non-invasive, inexpensive, and convenient method of stress relief.

Eleguil Aromatabs contribute to a calmer work environment and can help make staff feel happier and more relaxed. Positive working conditions are associated with less burnout and better mental health.3 Protecting and promoting health worker mental health has important implications for the nation's health system and public health.4

This study showed that Elequil significantly reduced stress levels for nurses in direct patient care and administrative roles. These positive results led to the recommendation to make Elequil Aromatabs aromatherapy available not only to nurses but to all staff working in high stress areas of Parkland Health.

About the Author

J.D. Buchert, MSN, M.Ed., MS, RN, is Quality & Safety Manager -Perioperative Services, and Workforce Safety Manager - Quality & Safety Operations at Parkland Health in Dallas, Texas. J.D. is active in nursing organizations including AORN, TCORN, AONL, ASHRM, International Nurses Association, and the Institute



for Healthcare Improvement. He sits on the Texas Nursing Legislation Action Coalition and was appointed to the governors committee on workplace violence. He is a former four-time president of the Dallas Chapter of AORN and the current president of the Texas Collaboration of Perioperative Nurses. J.D. has earned four Master's degrees in nursing and is working toward his DNP. His dedication to his profession has been locally, nationally, and internationally recognized. J.D. has been awarded the "Outstanding Achievement in Perioperative Nursing Research" at the AORN Global Expo where he also won two 1st place ribbons for his research and DEI posters.

About Parkland Health

Parkland Hospital first opened its doors to the citizens of Dallas, Texas, in 1894. Today, Parkland Health is an integrated health system comprised of a state-of-the-art acute care hospital and outpatient health centers located throughout Dallas County. It is the only burn center in North Texas verified by the American Burn Association and the American College of



Surgeons Committee on Trauma to treat pediatric and adult patients and the second largest civilian burn center in the U.S. Parkland Health is also a Cancer Center of Excellence Accredited by the Commission on Cancer. In 2018, Parkland achieved the Pathway to Excellence designation by the American Nurses Credentialing Center (ANCC), a subsidiary of the American Nurses Association. Parkland employees are called by our mission of caring for Dallas County's most vulnerable patients. Our compassionate staff is committed to the health and well-being of every patient - treating the body, mind, and spirit.

Elequil Aromatabs® Aromatherapy

Elequil Aromatabs aromatherapy is a simple non-pharmacological intervention that uses 100% pure essential oils. Elequil Aromatabs aromatherapy has a unique controlled delivery system with easy hands-free application, adheres to the patient's gown or clothing, and allows minimum and maximum aroma exposure.



Lavender-Peppermint

Lavandula angustifolia-Mentha piperita

Lasts up to 8 hours

Lavender-Peppermint promotes relaxation during pain, helps comfort and calm anxiousness, and soothes queasiness



MAX SCENT

MIN SCENT

elequil
aromatabs

Lavender
Lavandula angustifolia
Lasts up to 8 hours

Lavender-Sandalwood Lavandula angustifolia-Santalum album Lasts up to 24 hours

Lavender and Lavender-Sandalwood promote relaxation during pain, help comfort and calm anxiousness





Orange-Peppermint

Citrus sinensis-Mentha piperita

Lasts up to 8 hours

Orange-Ginger
Citrus sinensis-Zingiber officinale
Lasts up to 8 hours

Orange-Peppermint and Orange-Ginger uplift and can soothe queasiness

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 https://www.cdc.gov/mmwr/volumes/72/wr/mm7244e1.htm?s_cid=mm7244e1_w.
- 2. Ibid.
- 3. Ibid.
- 4. Ibid.

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