Aromatherapy in the Workplace

Elequil Aromatabs® Reduce Nurses’ Work-Related Stress

Maria Shonyo, President
Vela Technologies, LLC

Key Benefits Achieved

- Percentage of nurses feeling moderate-high levels of workplace stress decreased from 17% to 3%
- Overall 10% increase in those feeling no stress throughout their work day
- Statistically significant difference demonstrated in how nursing staff perceive stress at work when using Elequil aromatabs®
Healthcare Providers Face Extraordinary Stress

Without a doubt, healthcare workers experience high levels of stress in the workplace. Nurses in particular are especially hard hit due to a multitude of factors:

- Heavy workloads
- High nurse to patient ratios
- Rotating shifts
- Time pressures caring for patients with complex healthcare needs
- Too much responsibility and too little authority

Stress is not only difficult on the individual: The health and emotional well-being of healthcare workers can directly affect their quality of life and job satisfaction as well as the quality of care they deliver.

Aromatherapy Study

Objectives

A team of four BSN nursing students from the College of Saint Elizabeth in Morristown, NJ, conducted a capstone project study to determine if the use of lavender aromatherapy would help reduce perceived stress experienced by nurses working in the acute care hospital setting:

- Melissa Collado, BSN, RN
- Karen Landaverde, BSN, RN
- Anaelisa Ramirez, BSN, RN
- Jessica Spencer, BSN, RN

Study Methods

Study participants included 24 full-time registered nurses from a local community hospital in New Jersey:

- 14 nurses from the Med-Surg Telemetry unit
- 10 nurses from the Labor and Delivery unit

The study was conducted over three consecutive days in April 2020. Study participants filled out a simple stress level survey with a visual analog scale every four hours throughout their 12-hour shift. Both day and night shifts were included.

- Day 1: No use of aromatherapy.
- Day 2: Elequil aromabets Lavender (Beekley Medical®, Bristol, CT), at minimum aroma level, was applied to the nurse's outermost item of clothing.
- Day 3: Elequil aromabets Lavender, at maximum aroma level, was applied to the nurse's outermost item of clothing.

Jessica Spencer, one of the four nursing students conducting this study, commented, “I would hope that our findings one day show the importance of wellness in the nursing profession.”

Results

The nursing students drew the following conclusions from the results of their study:

- Without aromatherapy, 80% of nurses reported feeling mild to moderate-high levels of stress while 20% felt no stress.
- The percentage of nurses feeling moderate-high levels of workplace stress decreased from 17% to 3% with the use of Elequil® lavender aromatherapy at maximum aroma level.
- There was an overall 10% increase in those feeling no stress throughout their work day with the use of Elequil lavender aromatherapy at maximum aroma level.
- There was a statistically significant difference demonstrated in how nursing staff perceive stress at work when using Elequil®.

Visual Analog Scale Used in The Stress Level Survey

<table>
<thead>
<tr>
<th>Anxiousness Level</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
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<tbody>
<tr>
<td>Faces</td>
<td>![Smiley Face]</td>
<td>![Mild Face]</td>
<td>![Mild-Moderate Face]</td>
<td>![Moderate Face]</td>
<td>![Moderate-High Face]</td>
<td>![Highest Face]</td>
</tr>
</tbody>
</table>

Anxiety Level:
- 0: None
- 1: Mild
- 2: Mild-Moderate
- 3: Moderate
- 4: Moderate-High
- 5: Highest

Faces:
- 0: None
- 1: Mild
- 2: Mild-Moderate
- 3: Moderate
- 4: Moderate-High
- 5: Highest
The effects of stress and anxiety are as broad and wide-ranging as the causes. Healthcare workers today face even higher levels of stress as they struggle to deal with COVID-19, which has brought an entirely new set of challenges to all facets of healthcare.

A reduction in stress can benefit not only the nurse but also the patients they care for. Reduced stress can translate to fewer medical errors, better patient-caregiver relationships and higher patient satisfaction. Nurses who report more health promotion behaviors also report less job stress and/or higher job satisfaction, and nurses who are satisfied with their jobs are more likely to feel committed to their jobs. Conversely, work-related stress is associated with high turnover rates and psychosomatic complaints.

**Aromatherapy Alleviates Workplace Stress**

Elequil aromatabs® is an individualized, non-pharmacologic aromatherapy product created for the clinical setting. The self-adhesive tab is quick and easy to apply to the upper chest area of clothing and stays with the individual as they go about their day. **Elequil aromatabs was found to help alleviate work-related stress for nurses participating in this study.** Other studies have similarly supported the feasibility of utilizing essential oils for stress reduction among nurses. In one study, the pre-survey score had a significantly higher mean than the post-survey score, trending down from “feeling stress half of the time” to “once in a while.”

**The Effects of Stress on Your Body**

- **headaches**: Stress can trigger and intensify tension headaches.
- **heartburn**: Stress increases the production of stomach acid, which could lead to heartburn or make it worse.
- **rapid breathing**: When you’re stressed, the muscles that help you breathe tense up, which can leave you short of breath.
- **risk of heart attack**: Over time, an increased heart rate and high blood pressure damage your arteries, which could lead to a heart attack.
- **pounding heart**: Stress hormones make your heart pump faster so that blood can quickly reach your vital organs and limbs.
- **fertility problems**: Stress interferes with the reproductive system in both men and women, and may make it harder to conceive.
- **erectile dysfunction**: Your brain plays an important part in the process of getting an erection. Stress can interfere with this process.
- **missed periods**: Fluctuating hormones can throw your menstrual cycle off, or in severe cases stop it altogether.
- **tense muscles**: Stress makes muscles tense up, and chronic stress can lead to tension-related headaches and backaches.
- **increased depression**: Chronic stress can wear you down emotionally and lead to depression.
- **insomnia**: Stress makes it harder to fall asleep and stay asleep, which can lead to insomnia.
- **weakened immune system**: Long-term stress weakens your immune system’s defenses, leaving you more vulnerable to infections.
- **high blood sugar**: Stress causes your liver to release extra sugar (glucose) into your bloodstream, which over time puts you at risk for type 2 diabetes.
- **high blood pressure**: Stress hormones tighten blood vessels, which can raise your blood pressure.
- **stomachache**: Stress affects your body’s digestive system, which can lead to stomachaches, nausea, and other tummy troubles.
- **low sex drive**: Stress – and the fatigue that often comes with it – can take a toll on your libido.


**Forward-looking question posed by this capstone project:** “How can we as a society continue to work together to reduce workplace stress for healthcare workers, particularly nurses in acute care settings?”
References


2 Ibid.


4 Health promotion is defined by the World Health Organization as the process of enabling people to increase control over their health and its determinants and thereby improve their health; Study.com, Health Behaviors and Promotion: Definition & Explanation, retrieved from https://study.com/academy/lesson/health-behaviors-and-promotion-definition-explanation.html.


6 Ibid.


<table>
<thead>
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