The Impact of Diffused Essential Oil on Staff’s Emotional State in an Endoscopy Lab

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BACKGROUND

The purpose of this study is to investigate the impact of the essential oil, Bergamot Citrus bergamia, on the endoscopy clinical staff at the Huntsman Cancer Institute and University of Utah Hospital. The second goal of this study is to identify whether a change in staff mood can affect patient satisfaction scores as reported in Press Ganey.

INTRODUCTION

- There is increasing evidence to suggest that the essential oil, Bergamot Citrus bergamia, has a subjective effect on mood.
- Bergamot is known for its ability to minimize symptoms of stress-induced anxiety, mild mood disorders, and cancer pain.
- Despite the growing body of evidence in therapeutic aromatherapy, there is limited data on diffused essential oil use in hospital staff members.

METHOD

- This study took place over a 4 month period.
- During the first and fourth month, the essential oil diffusers were turned off.
- During the second and third month, the essential oil diffusers were turned on.
- Participants filled out a Perceived Stress Questionnaire, 3 times a week, after 6 hours of being on shift.
- The data from the Perceived Stress Questionnaire was then compared to the Press Ganey patient satisfaction scores.

RESULTS

Eight questions were evaluated during the 4 month period:

- How motivated were you?
- How often did you feel highly engaged in patient care?
- How often did you take the initiative to support your co-workers?
- How often did you feel well equipped to handle stressors?
- How often did you feel that you had optimal energy?
- How often did you feel that you made a difference in the lives of your patients?
- How often did you feel focused?
- How often was your work fulfilling?

This figure represents the average score for each question among four different times. The questions with an asterisk indicate that there’s a statistically significant different between on and off (p<0.05). Results were achieved using the Wilcoxon rank sum test. We were not able to utilize a hierarchical model to use individuals for random effect. Also, the statistical inference did not take demographical factors into account.

Statistical significance was found with the questions “How motivated were you?” and “How often did you feel optimum energy levels?”.

When the diffusers were on, staff members felt more “motivated” and had “optimum energy levels”.

No statistical significance was found between staff mood and patient satisfaction scores as reported by Press Ganey.

DISCUSSION

- Essential oil use, via the olfactory system, has been shown to reduce stress and stress responses in adolescents, engage autonomic nervous system activity, as well as improve parasympathetic nervous system activity.
- The results from our pilot study indicate that the use of the essential oil, Bergamot Citrus bergamia, can possibly influence motivation levels and the feeling of optimum energy levels.
- Future efforts should be made to further research the effects of essential oils as well as incorporate aromatherapy in patient care and staff support.

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