

Mindful- Acupressure Massage: An Evidence-Based Project to Promote Relaxation in Nurses

Precy DSouza, DNP, MSN,CPAN, PCCN, BSN, RN

Virtua Hospital, Voorhees, New Jersey



BACKGROUND

- **Burnout**
  - Is an Occupational syndrome caused by chronic workplace stress and a public health crisis.
  - Increases medical errors
  - Decreases clinician effectiveness
  - Decreases patient satisfaction
  - Burnout-related nurse attrition:\$4.4 million - \$6.9 million.
  - Nurses experience --11 times more depressive symptoms.
  - --2 times more Suicidal thoughts
- For every \$1 invested in wellness, Return On Investment : \$3 - \$6
- **Need for evidence-based integrative modalities** for stress relief
  - **Acupressure, mindful breathing, with guided imagery** are Evidence-based adjuncts that elicit a quick relaxation response

PURPOSE

To evaluate the effect of a 30-minute mindful acupressure massage on nurses' energy, stress, and relaxation levels

METHODS

**Setting:** Virtua Lippincott, Voorhees, and Marlton  
**Participants:** Health care providers (HCP) (n=16),  
**Intervention:** 30-minute mindful acupressure massage with box breathing and guided imagery

MEASURES

- A pre-and post-self-reported survey questionnaire to measure stress, energy, and relaxation levels
- Qualitative feedback to the 30-minute intervention.

PROCESS OBJECTIVES:

- 16 HCP will**
- Be educated on boxed breathing
  - Receive the acupressure massage with guided imagery of choice.
  - Complete the pre- and post-survey questionnaire.

OUTCOME OBJECTIVES:

- At the end of the 30 minutes
- The nurses can demonstrate mindful boxed breathing techniques for relaxation response
  - The nurses can feel the relaxation response elicited by the acupressure massage.
  - Qualitative feedback from nurses.

Figure.1  
Box Breathing

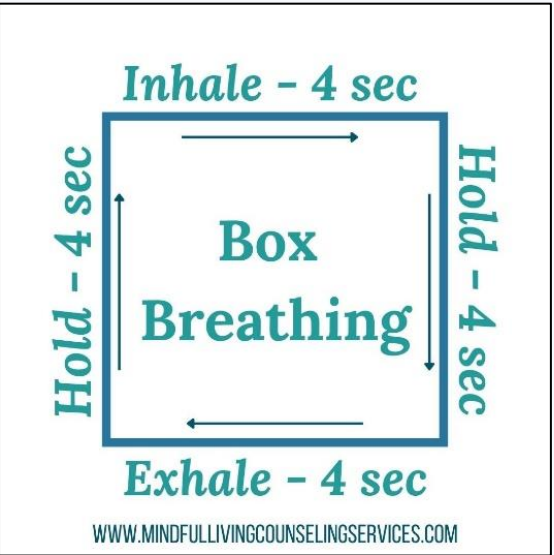


Figure.2  
Acupressure Technique

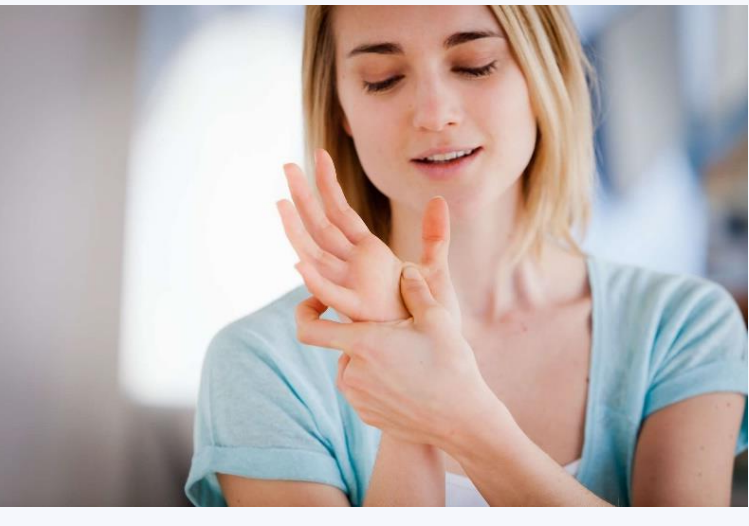


Table 1. Mindful Acupressure Massage Questionnaire

On a scale of 1-5, 1 being very low and 5 being very high please rate your energy, stress, and relaxation level before the wellness activity and after the wellness activity  
**1-very low, 2-low, 3-medium, 4-high, 5-very high**

Level		1	2	3	4	5
Energy	Pre-activity					
	Post-activity					
Stress	Pre-activity					
	Post-activity					
Relaxation	Pre-activity					
	Post-activity					
Comments/Feedback						

RESULTS

Figure 3. Pre and Posttest Scores for Energy, Stress and Relaxation

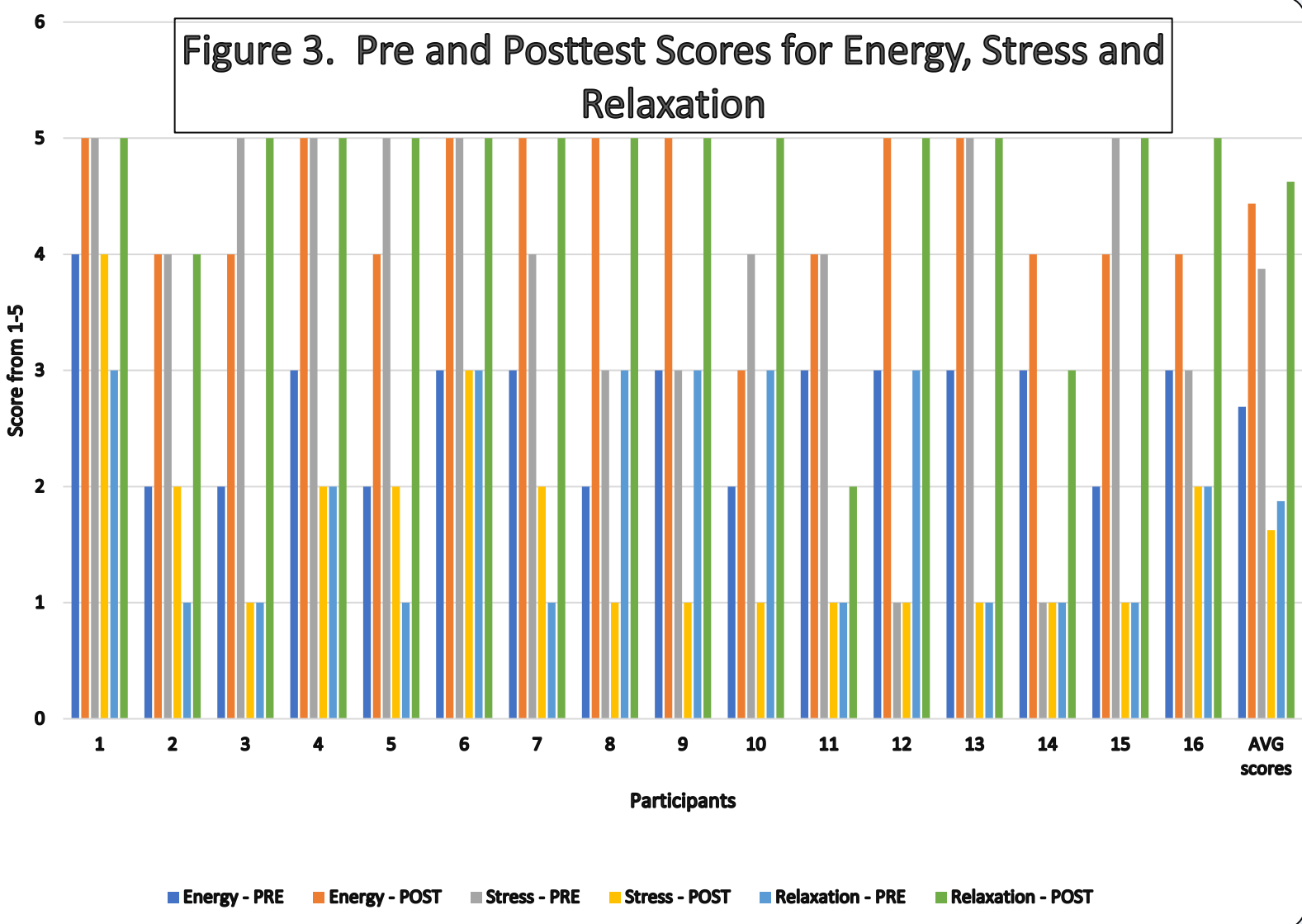


Table 2. Wilcoxon Signed Rank Difference in Pre and Posttest Scores

Participants	Difference in pre and posttest scores			Signed Rank Difference		
	Energy	Stress	Relaxation	Energy	Stress	Relaxation
1	-1	2	-3	-1	3	-2
2	-2	4	-6	-6	5	-9
3	-2	5	-7	-6	14	-12
4	-2	6	-8	-6	10	-9
5	-2	7	-9	-6	10	-12
6	-2	8	-10	-6	5	-2
7	-2	9	-11	-6	5	-12
8	-3	11	-14	-16	5	-2
9	-2	11	-13	-6	5	-2
10	-1	11	-12	-1	10	-2
11	-1	12	-13	-1	10	-1
12	-2	14	-16	-6	-1	-2
13	-2	15	-17	-6	14	-12
14	-1	15	-16	-1	-1	-2
15	-2	17	-19	-6	14	-12
16	-1	17	-18	-1	3	-9
Positive Sum				0	113	0
Negative Sum				-81	-2	-102
Test Statistic				0	2	0
Critical value				30	30	30

- The Wilcoxon signed rank test measured the difference in stress, energy, and relaxation levels pre-and post-intervention
- H0: No difference in pre and post-test
- H1: Difference in Pre and Post-test
- Critical value =30, two-tailed,  $\alpha=0.05$
- Test statistic(t) for energy=0
- Test statistic(t) for stress=2
- Test statistic (t)for relaxation=0
- H0 rejected as  $t < \text{Critical value}$

**Qualitative feedback:** Mindful Acupressure massage with guided imagery provided

- Stress relief
- Calming effect
- Energized
- Sight decrease in pain and muscle soreness post-intervention

DISCUSSION

Mindful acupressure massage effectively decreases stress, increasing energy and relaxation response.

CONCLUSION

A 30-minute mindful acupressure massage with guided imagery is an acceptable adjunct in decreasing stress and enhancing the relaxation response.

IMPLICATIONS FOR PRACTICE

Self-acupressure, mindful breathing, and guided imagery can be used as self-care tools to relieve stress and promote relaxation. Wellness activities using integrative modalities are cost-effective. Wellness activities can be tailored to the organizational needs to improve employee engagement and reduce burnout.

Figure. 4

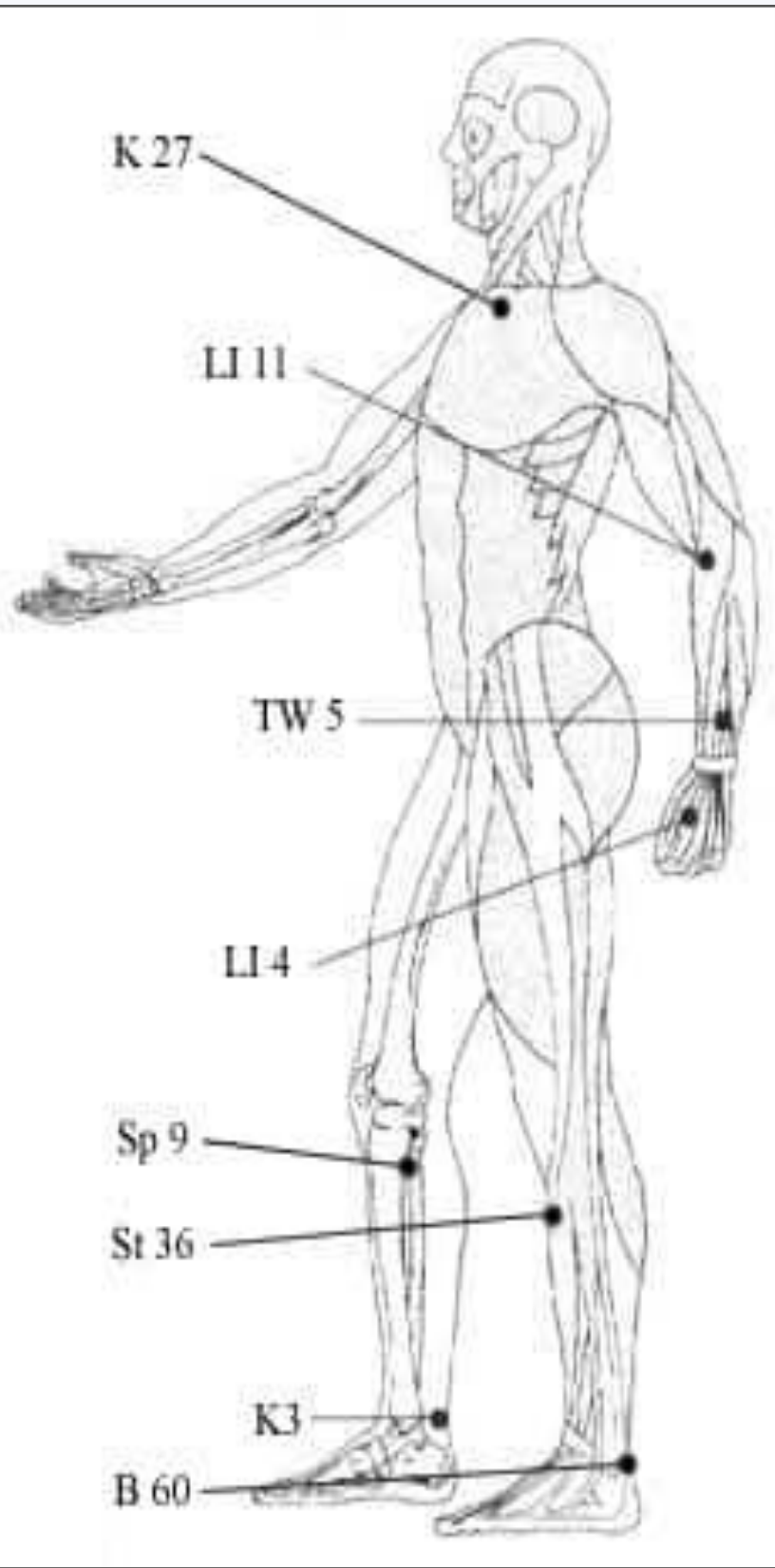


Figure. 5

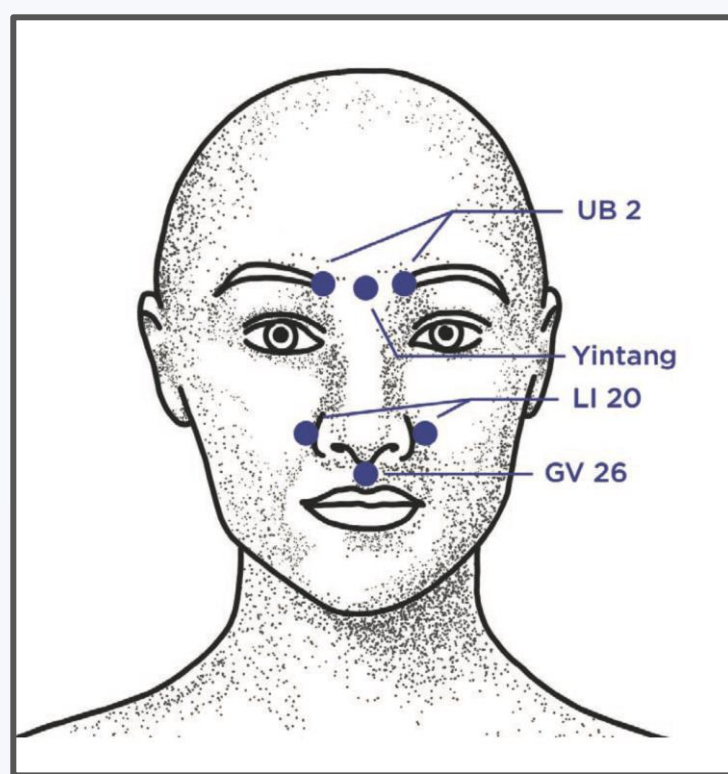
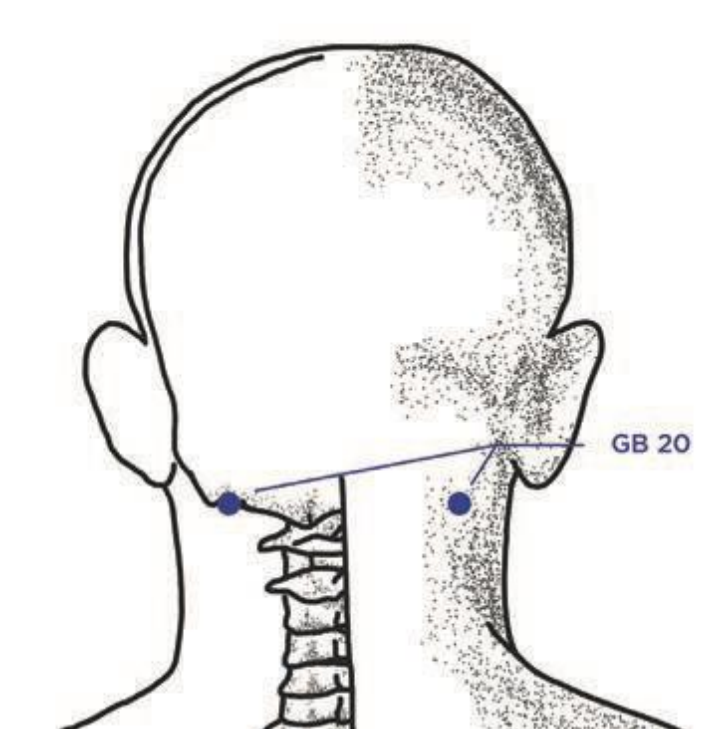


Figure.6



References

- Christensen, K., Anderson.M., Voss, M. (2020). Acupoint Location Guide Final Version.pdf. Earl E. Bakken Centre for SPIRITUALITY & HEALING. Regents of the University of Minnesota
- Hendrickson, R. C., Slevin, R. A., Hoerster, K. D., Chang, B. P., Sano, E., McCall, C. A., Monty, G. R., Thomas, R. G., & Raskind, M. A. (2022). The Impact of the COVID-19 Pandemic on Mental Health, Occupational Functioning, and Professional Retention Among Health Care Workers and First Responders. Journal of General Internal Medicine, 37(2), 397–408. <https://doi.org/10.1007/s11606-021-07252-z>.
- NSI Nursing Solutions, Inc. (2022). NSI National Health Care Retention and RN Staffing Report. Accessed from [https://www.nsinursingsolutions.com/Documents/Library/NSI\\_National\\_Health\\_Care\\_Retention\\_Report.pdf](https://www.nsinursingsolutions.com/Documents/Library/NSI_National_Health_Care_Retention_Report.pdf)
- Office of the Surgeon General. (2022). Addressing Health Worker Burnout. The U.S. Surgeon General's Advisory on Building a Thriving Health Workforce. <https://www.hhs.gov/sites/default/files/health-worker-wellbeing-advisory.pdf>.

Acknowledgments

Thank you to the Virtua Leadership, Healthy Work Environment Committee, Virtua Nursing colleagues, and Sue Politsky