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# Acupressure Modality Effectiveness: Research Results for Pain and Anxiety

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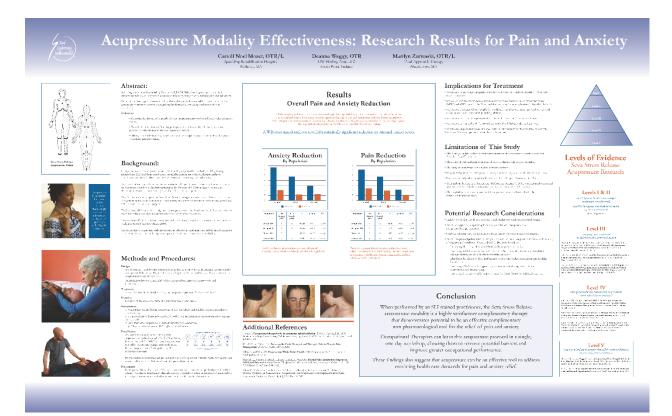
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#### Acupressure Modality Effectiveness: Research Results for Pain and Anxiety



This poster presentation was originally approved for presentation at the 2020 American Occupational Therapy Association (AOTA) Annual Conference in Boston, MA. The conference was cancelled due to the outbreak of Coronavirus. (please see the full poster under the additional link in the Journal of Transformative Touch)

#### **Abstract**

According to recent studies, including Monson et all, JACM, 2019, there is growing evidence for the effective and safe use of acupressure as a non-pharmacological approach to reducing pain and anxiety. Acupressure can quiet the mind, promoting a sense of well-being by decreasing anxiety.

A collaborative retrospective analysis of self-rated pain and anxiety scores before and immediately after administration of a stress release protocol indicate that acupressure is a highly satisfactory complementary therapy. Results were clinically significant for a decrease in self-rated pain and anxiety scores.

Occupational therapy practitioners as well as those who use the Kawa model of reference can utilize acupressure to promote improved occupational performance by reducing the barriers of pain and anxiety.

#### **Objectives:**

- Determine the impact of a specific 16-point acupressure protocol on self-rated pain and anxiety scores.
- Illustrate the importance of training participants to administer the self-care acupressure protocol for effectiveness in decreasing pain and anxiety.
- Identify a safe, effective, easy to self-administer technique as a nonpharmacological approach to decrease pain and anxiety.

**Background:** In response to an increasing need for non-pharmacological pain relief methods, Soul Lightening International (SLI) healthcare practitioners certified in acupressure collected data pre and post acupressure treatments to determine the effectiveness of decreasing pain and anxiety.

Participants either received acupressure from a trained SLI practitioner or were taught to self-administer the treatment. A total of 519 participants utilized the 16-point Seva Stress Release protocol to determine if it would decrease anxiety as well as pain in the participants (Monson, 2019).

The 16-point acupressure protocol (Seva Stress Release) is taught as a 6-hour workshop and can be used in treatment by trained practitioners as a preparatory modality for occupational performance as well as a self-care tool in a home-care program.

The Seva Stress Release protocol originated as a response to the shock and trauma of first responders in the 9/11 terrorist attack. Seva is a Sanskrit word for "compassionate service."

The Seva Stress Protocol has been researched in 8 publications, as well as documented in the case study book, Empowering Whole-Being Health (Miller & Waggy, 2018).

The modalities of acupressure and acupuncture are effective in decreasing pain and the use of analgesics in representative samples, including cancer patients (He, 2020).

#### **Methods and Procedures:**

#### Design:

The design was a collaborative retrospective database analysis of Level III evidence (Appendix 1) administered by Occupational Therapists, Physical Therapists, Registered Nurses and Massage Therapists trained in acupressure therapy through SLI.

An institutional review board, IRB Solutions, reviewed and approved the protocols and the research.

#### Treatment:

A one-time session consisted of a 16-point acupressure protocol (Seva Stress Release).

#### **Duration:**

Duration of the session for 96% of participants was < 30 minutes.

#### **Assessments:**

- 1. Wong-Baker FACES® Pain Rating Scale (0-10) for validity and reliability pre and immediately post treatment.
- Subjective Unit of Distress Scale (SUDS) (0-10), pre and immediately post treatment to measure anxiety levels.
- Wong-Baker FACES® Pain Rating Scale

  OO 2 4 6 8 10

  No Hurts Hurts Hurts Hurts Hurts Even More Whole Lot Worst
- 3. All participants completed a post-treatment rating of satisfaction.(1 = highest satisfaction and 10 = highest dissatisfaction)

#### Participants:

Participants: The total sample of 519 participants consisted of nurses, hospitalized patients, and the general population. Individuals voluntarily elected to participate either as a receiver of a session by a trained practitioner, or as a self-administered session with a guided demonstration.

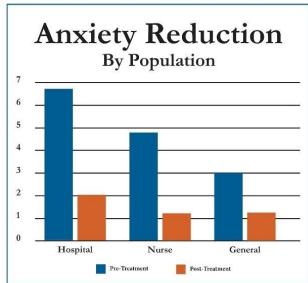
#### **Data Source:**

The data for this study came from a quality improvement database compiled by Soul Lightening International (SLI), a 501c3 non-profit organization that offers acupressure training and certification. It was compiled over a 7-year period by SLI trained practitioners.

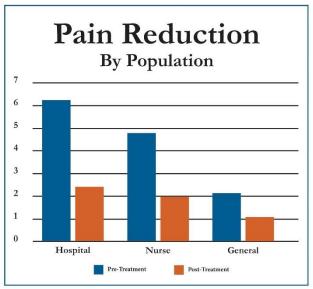
Practitioners recorded immediate pre and post data for hospitalized patients. Nurse participants and general public recorded their own immediate pre and post scores.

#### Results

General: 125



Hospital		Nurse		General				
Pre-Treatment Post-Treatment								
Pre Anxiety (Md)	Post Anxiety (Md)	z	p-value	ES				
5	2	-17.231	p<.05	r = .58				
7	2	-10.86	p<.05	r = .61				
5	1	-10.92	p<.05	r = .58				
	Pre Anxiety (Md) 5	Pre-Treatment  Pre Anxiety (Md)  5 2  7 2	Pre-Treatment	Pre-Treatment         Post-Treatment           Pre Anxiety (Md)         2         p-value           5         2         -17.231         p<.05				



Population	Pre Anxiety (Md)	Post Anxiety (Md)	z	p-value	ES
Overall: 519	4	2	-15.81	p<.05	r = .55
Hospital: 213	6	2	-8.7	p<.05	r = .60
Nurse: 181	5	2	-11.5	p<.05	r = .59
General: 125	2	1	-6.6	p<.05	r = .44

A Wilcoxon signed-rank test revealed a statistically significant reduction in pain and anxiety scores with the use of Seva Stress Release Acupressure Protocol.

r = .51

#### **Overall Pain and Anxiety Reduction**

- Of the sample populations, participants who were hospitalized reported the most improvement in pain and anxiety scores.
- The hospitalized sample also reported the most significant decrease in pain and anxiety among the total sample population.
- Self-rated post-treatment evaluation indicated a high degree of participant satisfaction across the entire population of participants.
- In all populations, pain and anxiety scores decreased, a finding that was both statistically and clinically significant.
- There was a greater decrease in pain and anxiety scores when treatments were administered by a trained practitioner as compared with the intervention being guided and self-administered by participants.
- This may indicate a high potential for efficacy as a modality for pain and anxiety.

#### **Implications for Treatment**

- Acupressure is an emerging preparatory method to address pain and anxiety within a 30-minute treatment session.
- The use of acupressure enhances occupational performance and the ease of movement during IADL's and ADL's based on the Kawa model of removing/decreasing barriers (pain) within the body.
- Acupressure decreases reliance on pills by providing a non-pharmacological approach to pain and anxiety as mandated by the 2018 JCAHO guidelines.
- Acupressure can promote a parasympathetic relaxation response for anxiety caused by stress and hypersensitivity following trauma.
- Acupressure can quiet the mind, promoting a sense of well-being by decreasing anxiety.
- Acupressure empowers the patient to take personal responsibility for their wellness by using the Seva Stress Release acupressure protocol as a self-care tool.

#### **Limitations of This Study**

- This database analysis did not allow for randomization of participants or control groups for Level I or Level II evidence.
- The source of pain and characterization of acute or chronic pain was not recorded.
- The rating of anxiety was not based on a standardized tool.
- Hospitalized patients reported pain and anxiety scores verbally, which could create subject bias.
- Data was not analyzed to compare effectiveness of specific practitioners or disciplines.
- Tools such as the Canadian Occupational Performance Measure (COPM) were not used over several sessions to assess overall impact on occupational performance for OT patients.
- The longitudinal effects on various participant populations are unknown due to the nature of this episodic study.

#### **Potential Research Considerations**

- Endeavor to design Level I & II evidence based studies with randomized control groups.
- Assess the impact of hospital length of stay with the use of acupressure in occupational therapy treatment.
- Continue collecting data for decreasing pain and anxiety for occupational performance.
- Assess occupational performance of OT patients with the use of acupressure modality with a variety of diagnosis and conditions. This could include but is not limited to:
  - Decreasing blood sugar levels in diabetics with acupressure modality.
  - Improving ability for concentration to perform school or work tasks for attention deficit and hyperactivity disorders & autism spectrum disorders.

- o Identifying the effects of sleep performance over several weeks using acupressure modality for insomnia.
- Improving AROM in neck /upper body rotation for safe driving and additional occupational performance tasks.
- o Improving functional mobility and movement for IADL/ADL's in Parkinson's patients.

#### Conclusion

When performed by an SLI trained practitioner, the Seva Stress Release acupressure modality is an effective complimentary therapy that demonstrates potential to be non-pharmacological tool for the relief of pain and anxiety.

Occupational Therapists can learn this acupressure protocol in a single, one-day workshop, allowing them to remove potential barriers and improve greater occupational performance.

These findings also suggest that acupressure can be an effective tool to address escalating health care demands for pain and anxiety relief.

#### Additional References

- Costa, O. (2016). Occupational therapy's role in countering opioid addiction. *OT Practice*, 22(1), 12-16.
- Driscoll, M. & Baker, N.A. (2016). Breaking the Cycle: Occupational Therapy's Role in Chronic Pain Management. *OT Practice* 21(19), 8-14.
- Miller, C., & Waggy, D. (2018). Empowering Whole-Being Health. (pp. 17-57). Soul Lightening International.
- Monson, E., Benham, B., Bird, R., Elias, E., Linden, K., & Waggy, D. (2019). Beyond Pills: Acupressure Impact on Self-Rated Pain and Anxiety Scores. *The Journal of Alternative and Complementary Medicine*. 25(5), 517-521. https://doi: 10.1089/acm.2018.0422
- Soul Lightening International Acupressure <a href="https://www.soullightening.com/acupressure-research/">https://www.soullightening.com/acupressure-research/</a>
- The Joint Commission. (2015) Clarification of the pain management standard. <a href="https://www.jointcommission.org/assets/1/18/Clarification of the Pain Management Standard.pdf">https://www.jointcommission.org/assets/1/18/Clarification of the Pain Management Standard.pdf</a>. [Accessed 2/12/2020].
- Wong-Baker FACES Foundation (2019). Wong-Baker FACES® Pain Rating Scale.

  Retrieved 2-7-2020 with permission from <a href="http://www.WongBakerFACES.org">http://www.WongBakerFACES.org</a>. Originally published in Whaley & Wong's Nursing Care of Infants and Children. © Elsevier Inc.
- He Y, Guo X, May BH, Zhang AL, Liu Y, Lu C, Mao JJ, Xue CC & Zhang H. (2020). Clinical Evidence for Association of Acupuncture and Acupressure with Improved Cancer Pain: A Systematic Review and Meta-Analysis. *JAMA Oncol.* 6(2):271-278. doi: 10.1001/jamaoncol.2019.5233.

## Appendix 1 Levels of Evidence – Seva Stress Release Acupressure Research Projects

**Level I:** Systemic Reviews, meta-analysis, randomized controlled trials **Future opportunity** 

Level II: Two groups, non-randomized studies (e.g. cohort, case-control) Future opportunity

**Level III** One group, non-randomized (e.g. before and after, pretest and posttest)

- Duncan, A., Liechty, J., Miller, C., Chinoy, G., & Ricciardi, R. (2011) Employee Use and Perceived Benefit of a Complementary and Alternative Medicine Wellness Clinic at a Major Military Hospital: Evaluation of a Pilot Program Journal of Alter-native and Complementary Medicine, 17(9):809-15
- Monson, E., Arney, D., Benham, B., Bird, R., Elias, E., Linden, K., McCord, K., Miller, C., Miller, T., Ritter, L., & Waggy, D. (2019) Beyond Pills: Acupressure Impact on Self-Rated Pain and Anxiety Scores Journal of Alternative and Complementary Medicine, 25(5): 517-521.
- Reiser, V., & Sand-Jecklin, K. (2018) Use of the Seva Stress Release (SSR) Protocol with hospitalized patients receiving cancer treatment: Journal of Hospice & Palliative Nursing, 20(6):529-530.

**Level IV** Descriptive studies that include analysis of outcomes (single subject design, case series)

- McCord, K., Miller, T., Monson, E., Eversmann, E., Ritter, L., Sission, A., & Zavala, J. Calm in the Storm: Prevention of Nurse Burnout in the Critical Care Setting Through the use of Complementary Therapies. (2013) Good Samaritan Regional Medical Center, Corvallis, Oregon.
- Monson, E. (2014) Acupressure for ADHD: A Pilot Program to teach an Acupressure Protocol to Parents of Children Diagnosed with ADD/ADHD for Adjunctive Symptom Management Samaritan Heart and Vascular Institute, Corvallis, Oregon
- Salmond, C. (2012) The Use of Acupressure to Manage Anxiety in Hospitalized Orthopedic Trauma Patients Requiring Surgical Intervention University of Maryland, Baltimore, Maryland, Doctoral Dissertation
- Sand-Jecklin, K., Miller, C., & Calmond, C.K. (2015) Teaching Nurses and Nursing Students a Tool for Stress Reduction: The Seva Stress Relief Protocol. West Virginia University School of Nursing. Pilot study and poster presentation.
- Sisson, A., Miller, T., Monson, E., Bird, R., & Ritter, L. (2014) Creating Calm in the Storm: An Innovative Approach to Integrating Complimentary Therapies into Patient Care. Good Samaritan Regional Medical Center, Corvallis, Oregon. Presented at the ANCC Critical Care Symposium, Portland, Oregon
- Wetherill C., & Mattanah, J. (2006) The Effects of Acupressure on Stress: A Self Help Approach Towson University, Baltimore, Maryland.

<u>Level V</u> Case reports; expert opinion that include narrative literature reviews and consensus statements

- Miller, C., & Waggy, D. (2018). Empowering Whole-Being Health. Soul Lightening International. Ninety case studies submitted by certified Soul Lightening Acupressure practitioners and faculty.
- Sand-Jecklin, K. (2017) Acupressure for Symptom Management: The Evidence to Date and Research Opportunities. Unpublished manuscript, University of West Virginia, Morgantown, WV

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