

**Complementary and
Integrative Therapies
for the Management of Stress,
Anxiety, Fatigue and Burnout
in Nurses and
Health Care Workers:
An Evidence Based
Quality Improvement Project
Complementary & Integrative Therapies (CIT)**

Project Facilitator:
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Complementary Integrative Therapy (CIT)

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Purpose:

The purpose of this Quality Improvement Project is to evaluate and assess complementary and integrative therapies (CIT) in reducing stress and related illnesses in health care workers in hospital settings. Integrative health care brings together the conventional and complementary methodologies in a managed way. It emphasizes a holistic approach to patient-focused health care and wellness—a transpersonal approach including emotional, functional, mental, spiritual, social, and community environment aspects, treating the whole person rather than just one part or symptom. (National Center for Complementary and Integrative Health, *Complementary, Alternative or Integrative Health: What's In a Name?*)

The CITs selected include *aromatherapy*, *Reiki Therapy* and *Guided Imagery*. They were chosen because they could be administered in the given maximum time limit of 20 minutes and three CITs were currently being offered to hospitalized patients in the medical facility. The Emotional Freedom Technique, EFT was included for the reason that it is easy to learn use and is effective. "...it is safe and easy to apply to oneself and other. In fact, many of the most successful EFT practitioners have been trained primarily in the tapping methodology, with no formal study in psychology or medicine." (*The Tapping Soution*, p 11, Nick Ortner) There have been more than 60 investigators in more than 10 countries publish their results in more than 20 peer reviewed journals.

EFT research includes investigators affiliated with many different institutions. In the US, Harvard Medical School, the University of California at Berkeley, City University of New York, Walter Reed Military Medical Center, and Texas A&M University have had affiliated investigators research EFT. There are institutions in other countries whose faculty have contributed to EFT research include universities in the United Kingdom, Sweden, Philippines, England, Peru and Australia.

“The wide variety of institutions, peer-reviewed journals, investigators, and settings that have, in independent research, found EFT to be efficacious, are one indication of the breadth of existing research results.” (<https://eftuniverse.com/research-studies/eft-research>)

Complementary and Integrative Therapies for the Management of Stress, Anxiety, Fatigue and Burnout in Nurses and Health Care Workers: An Evidence Based Quality Improvement Project, was initialized by a participant of a Guided Imagery Project currently active at the community hospital.

According to the article *America’s #1 Health Problem*, The American Institute of Stress states that it has been estimated that 75 – 90 percent of all visits to primary care physicians are for stress related problems. *Job Stress is far and away the leading source of stress for adults. (<https://www.stress.org/americas-1-health-problem>) *Guided Imagery* and *Reiki Therapy* help patients, relieve stress, anxiety and even reduce pain.

The majority of hospitalized patients who receive *Guided Imagery* or *Reiki Therapy*, receive one treatment before they are discharged to go home and recuperate. The nurses, physicians and other health care workers who provide care to patients and their loved ones work long, difficult hours because of the continuous demand for their service and skills. This constant demand causes stress and strain, both physically and emotionally, that effects their health and the care they are able to provide. Because of the stress they endure on a daily basis, these health care providers greatly benefit from *Complementary and Integrative Therapies* (CITs). It is believed that, if the health care worker is in good mental and physical condition, devoid of mental and physical strain and stress, he or she will be able to provide better patient care which, in the long run, is monetarily beneficial to the hospital. Studies have shown this to be true (Dyrbye, L.N., T.D. Shanafelt, C.A. Sinsky, P.F. Cipriano, J. Bhatt, A. Ommaya, C.P. West, and D. Meyers. 2017. Burnout among health care professionals: A call to explore and address this underrecognized threat to safe, high-quality care. *NAM Perspectives*. Discussion Paper, National Academy of Medicine, Washington, DC. doi: 10.31478/201707b

<https://nam.edu/burnout-among-health-care-professionals-a-call-to-explore-and-address-this-underrecognized-threat-to-safe-high-quality-care/>).

“Findings from the National Academy of Medicine (NAM*) Action Collaborative on Clinician Well-Being and Resilience provide a wealth of evidence that, in NAM’s words, “Healthy clinicians provide better patient care.” But many clinicians and healthcare workers are exhausted and overwhelmed. Nurses, physicians, dentists, pharmacists, and others experience disturbing rates of burnout, creating an unsustainable burden on all healthcare organizations and endangering care delivery. Some of the coalition’s facts are alarming:

- 43% of inpatient nurses have a high degree of emotional exhaustion.
- Burnout is nearly twice as prevalent among U.S. physicians as among workers in other fields.
- Medical trainees experience higher rates of depression and burnout than individuals of similar ages pursuing different careers.

Reduction in work related stress has shown to reduce domestic stress and even help prevent burnout. “Burn-out refers specifically to phenomena in the occupational context,” the WHO notes, “and should not be applied to describe experiences in other areas of life.” WHO’s classification, adopted May 25, 2019, “burnout has three components:

- 1) Feelings of energy depletion or exhaustion,
- 2) Increased mental distance from one’s job, or feelings of negativism or cynicism related to one’s job, or
- 1) Reduced professional efficacy

That trio makes clear why companies should want to address burnout head-on. While personal exhaustion may be the first and perhaps most acknowledged symptom of burnout, the other two suggest that burned-out employees simply can’t work as effectively”. “Burnout is making us worse at our jobs, according to the WHO | World Economic Forum.””

A definition of from WebMD states – “Burn-out, is a state of physical, emotional, and mental exhaustion that may be accompanied by a change in attitude -- from positive and

carings to negative and unconcerned.” (Recognizing Caregiver Burnout, WebMD June 1, 2018 <https://www.webmd.com/healthy-aging/caregiver-recognizing-burnout#1>).

Background:

What Are the Benefits of Integrative Therapy?

When using integrative therapy, the recipient of the therapy benefits from a sense of control over his/her own health and healing. In seeking care beyond conventional medicine, the patient takes a more active role in his/her health care. Science has shown that one's emotional state can affect health. (Positive Emotions and Your Health, <https://newsinhealth.nih.gov/2015/08/positive-emotions-your-health>, How do Our Emotions Affect Our Immune Response, Written by Maria Cohut, Ph.D. on January 5, 2019 - Fact checked by Jasmin Collier, <https://www.medicalnewstoday.com/articles/324090.php#1>) “A majority of people respond well to complementary treatments because they induce a sense of well-being while often relieving symptoms of the medical condition itself.” (Integrative Therapy Programs, <https://www.bannerhealth.com/services/integrative-therapy/programs>)

Guided Imagery and *Reiki* help patients, by relieving stress and anxiety and, in some instances, by reducing pain, thus being beneficial for both the patient and family members. At the community Hospital and medical center, *Reiki Therapy* is already provided as part of the integrative therapy program. The purpose is to aid in the recovery and rehabilitation of the patients. After administering *Reiki* treatments to several staff members and nurses at the hospital it became apparent, from the results of the sessions and recipient comments, that more attention should be given to the health care worker.

Stress in the health care field is an endemic problem and has been shown to cause health problems in nurses thus, decreasing their efficiency. Documenting the causes and extent of stress in any healthcare unit is essential for successful reduction and causal alleviation.

According to the [American Nurses Association's Health Risk Appraisal](#), "An overwhelming majority of nurses surveyed (82 percent) consider workplace stress to be the biggest issue affecting our health. Plus, more than half of nurses regularly work 12-hour shifts. These factors can contribute to nurse burnout."
<https://engage.healthynursehealthynation.org/blogs/8/374>

In April of 2019, a Quality Improvement Project of the medical/surgery department nursing staff at the community hospital, was created to assess the use of complementary and integrative therapies (CIT) to reduce stress, anxiety, fatigue, burnout and other ailments listed by its participants. Therapies offered included aromatherapy, *Reiki*, *Guided Imagery* and the Emotional Freedom Technique, EFT known as Tapping. These therapies are non-invasive modalities having no known side effects.

Aim:

The aim was to establish the magnitude of work stress and related ailments in nurses and health care workers in hospital settings, by identifying the intensity of the related stress conditions and illnesses. Thus, reduce and diminish their impact on the health care worker using Complementary and Integrative Therapies (CIT).

Methods & Implementation:

This Quality Improvement Project invited practitioners of complementary and integrative therapies who met specific criteria set by the hospital volunteer department, to volunteer their time working primarily with patients throughout the hospital and secondarily the med/surge nursing staff, who are the project participants. The staff, project participants, received 15 to 20 minute CIT sessions as their time allowed and completed a pre-survey and post-survey using a Likert type 11 point Subjective Unit of Discomfort (SUD) scale. Sessions were made available to all shifts and were held in the break room or conference room. At times *Reiki* was administered at their workstation. *Guided Imagery* was offered to all the Med/Surg Team at all the August staff meetings.

The Med/Surg *Aromatherapy* participants and staff were surveyed using a Professional Quality of Life, (ProQOL) self-assessment tool to gauge where the unit was with compassion fatigue and Nursing burnout. (Stramm, B.H. 2010)

Education and awareness of the project were announced at all April staff meetings with an explanation of the complementary modalities being offered. These included:

- Aromatherapy
- *Reiki*
- *Guided Imagery*
- EFT - Emotional Freedom Technique

And a pre-survey, indicating the therapy being used, what ailment was being addressed (below), and the level of distress using a SUD scale of 0 to 10, was completed prior to the administration of the therapy.

- Anxiety
- Burnout
- Fatigue
- Stress
- Other (pain)

A post-survey was completed at the end of the session to evaluate the effect of the therapy using the same scale.

A ProQOL survey was re-introduced to evaluate the effect on caregiver burnout and compassion fatigue after a three-month period ending in July 31, 2019.

Results & conclusions:

Prior to launching the Quality Improvement Project, an educational presentation was made to all Med/Surg Team members at all three April 2019 staff meetings. When the Quality Improvement Project was initiated, it was limited to Medical Surgery on the fifth and sixth floors. The project which began April 30, 2019 was originally planned to begin in May 7, 2019 and end in July 31, 2019, it was extended through the end of August 2019 to increase the number of participants. *Aromatherapy* was provided by trained clinical managers in Med/Surg. *Guided Imagery*, *Reiki* and EFT modalities were provided by volunteers. The constraint placed on the volunteers was to first provide their services to the patients throughout the hospital and as time allowed to offer their services to the Med/Surg staff on the fifth and sixth floors. The program began with two volunteers. An additional four volunteers were recruited to assist with the project.

At the launch of the program, there was some difficulty getting the nurses to participate because of their workload. Once the nurses were assured that they could ask a teammate to cover for them while they received the service offered, participation increased. In order to offer the services to all members of the Med/Surg Team, a volunteer was made available at the 7 AM and 7 PM shift changes. This plan was non-productive because of the duties and tasks required of the nurses at shift changes made it impossible for staff members to breakaway for a CIT session. A volunteer was

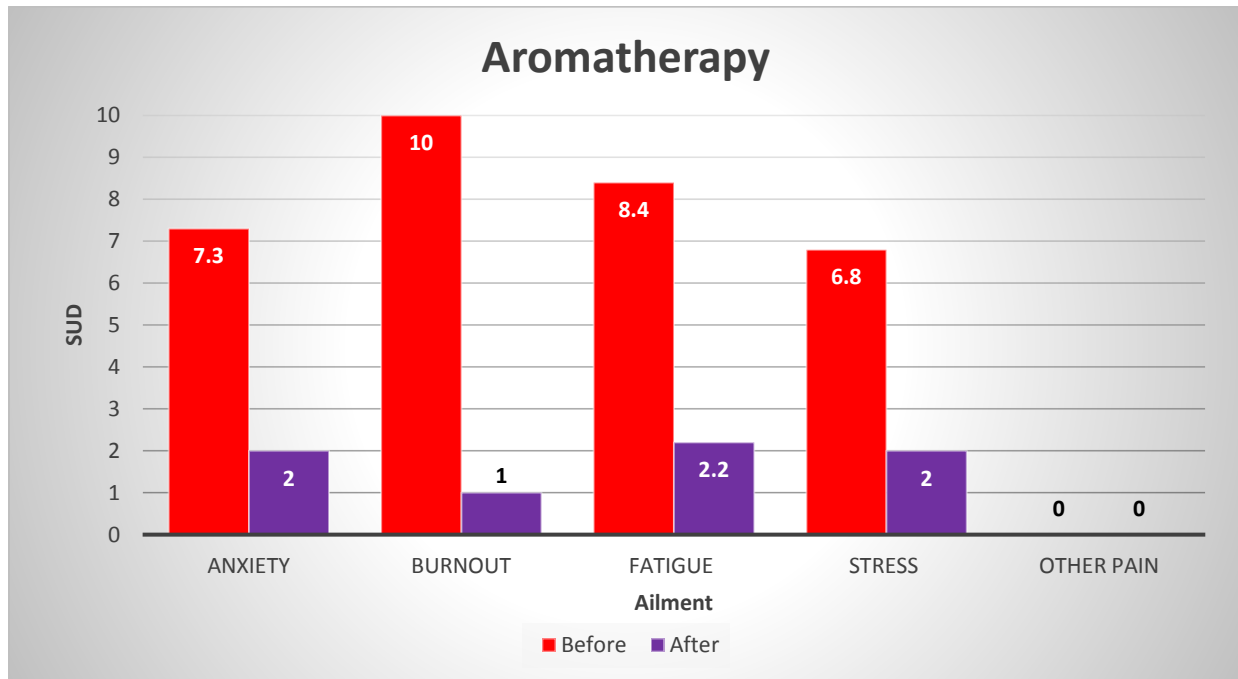
then scheduled to cover the night shift and arrive at 4 AM to offer *Reiki*, *Guided Imagery* and EFT services. The day shift received services from volunteers scheduled from 8 AM and 9 AM through 12 PM and 1 PM. A target was set to provide CITs to 75% of the 125 Med/Surg staff members. This target was met with participation at the three August 2019 Med/Surg staff meetings' *Guided Imagery* sessions.

A total of one-hundred and eighteen (118) surveys were collected over the four month period. Of those received, thirteen (13) were incomplete and one-hundred and five (105) surveys were complete, with before and after session information. Several participants noted on their forms which CIT they received - *Reiki* or *Guided Imagery* previously.

A total of twenty-three (23) ProQOL surveys were completed prior to the project rollout and twenty-three ProQOL surveys were completed at the end of a three-month period ending in July 2019. There was a reduction in burnout and trauma/stress post-project, and an increase in compassion satisfaction with the use of Complementary and Integrative Therapies.

The CIT surveys included the ailment reason and impact of the selected therapy on the ailment for one-hundred and five (105) surveyed nurses. The following graphs show each CIT, the ailment addressed by each, and the decrease in the level of each ailment by the offered CIT.

Aromatherapy



Administered by clinical managers trained in aromatherapy. There was no time recorded for the length of the sessions.

The highest SUD reported on the survey was 10 and the lowest 1

Anxiety – highest 8 lowest 1

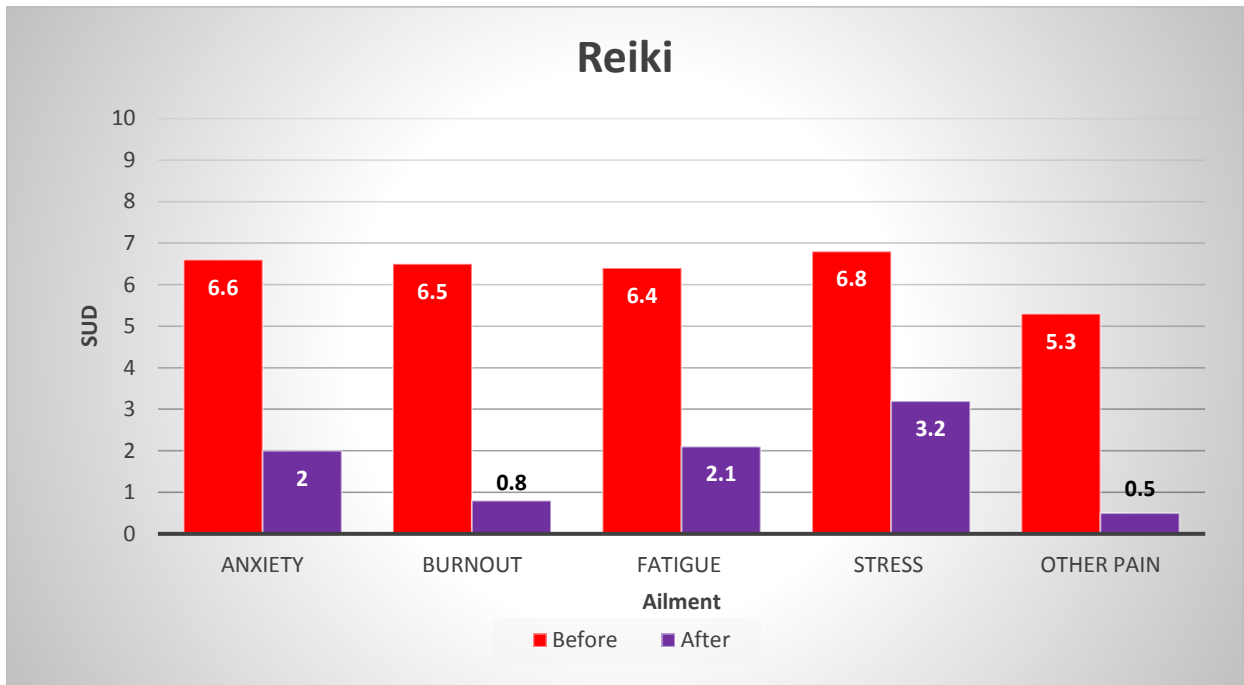
Burnout – highest 10 lowest 1

Fatigue – highest 10 lowest 1

Stress – highest 10 lowest 1

Other – Pain not measured

Reiki



Reiki was administered by volunteers, with sessions of 15 to 20 minutes each. Five sessions were interrupted because the participant was called back to his/her workstation and therefore did not complete a survey form. A complete reiki session is generally 1 to 1 ½ hours in length.

The highest SUD reported on the survey was 10 and the lowest 0

Anxiety – highest 8 lowest 0

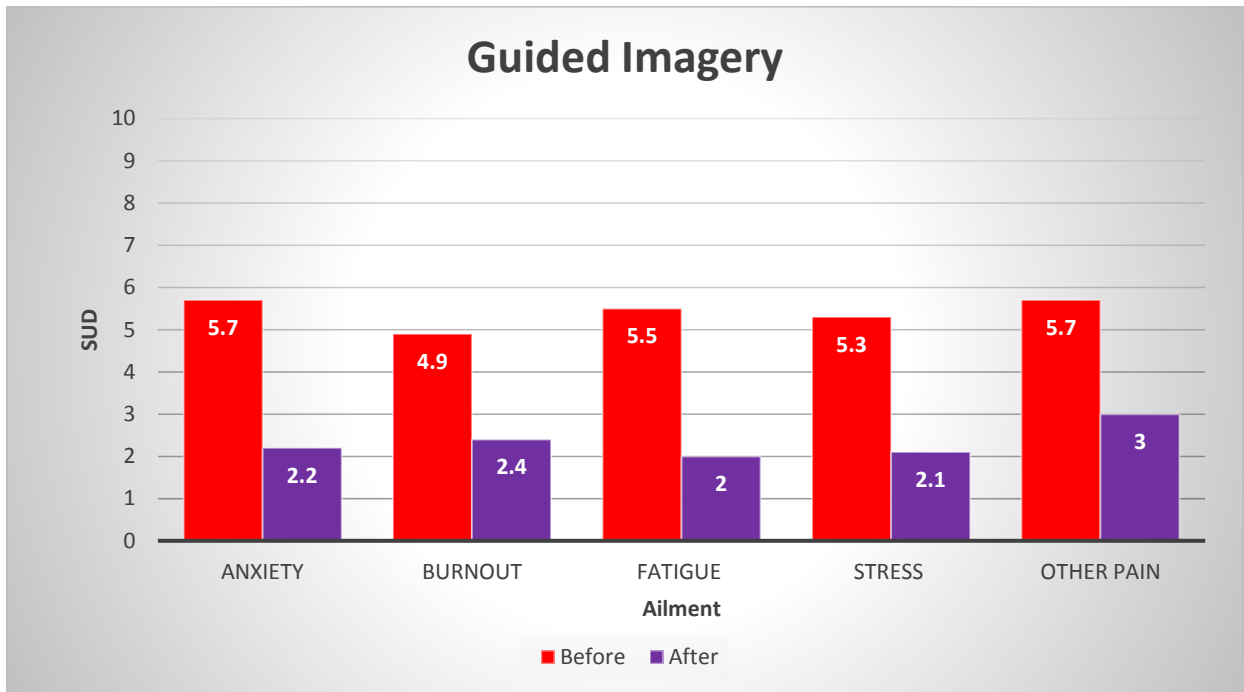
Burnout – highest 8 lowest 0

Fatigue – highest 8 lowest 0

Stress – highest 10 lowest 1

Other – Pain 10 lowest 1

Guided Imagery



Guided Imagery sessions were conducted with one to three participants during the working hours. A general script was adapted for each situation and session. One script was used for the staff meetings where the participants selected which ailment(s) was most distressing, recorded the number prior to the session. After the session they recorded their results. The sessions were 7 to 15 minutes, conducted in the conference rooms. Three sessions were interrupted by Vocera communicator calls, requiring the participant to return to his/her workstation and therefore did not complete the survey form.

One hour is allotted for a regular *Guided Imagery* session, which included an interview with the individual. In the hospital setting a session complete lasted 15 to 20 minutes.

The highest SUD reported on the survey was 10 and the lowest 0

Anxiety – highest 8 lowest 0

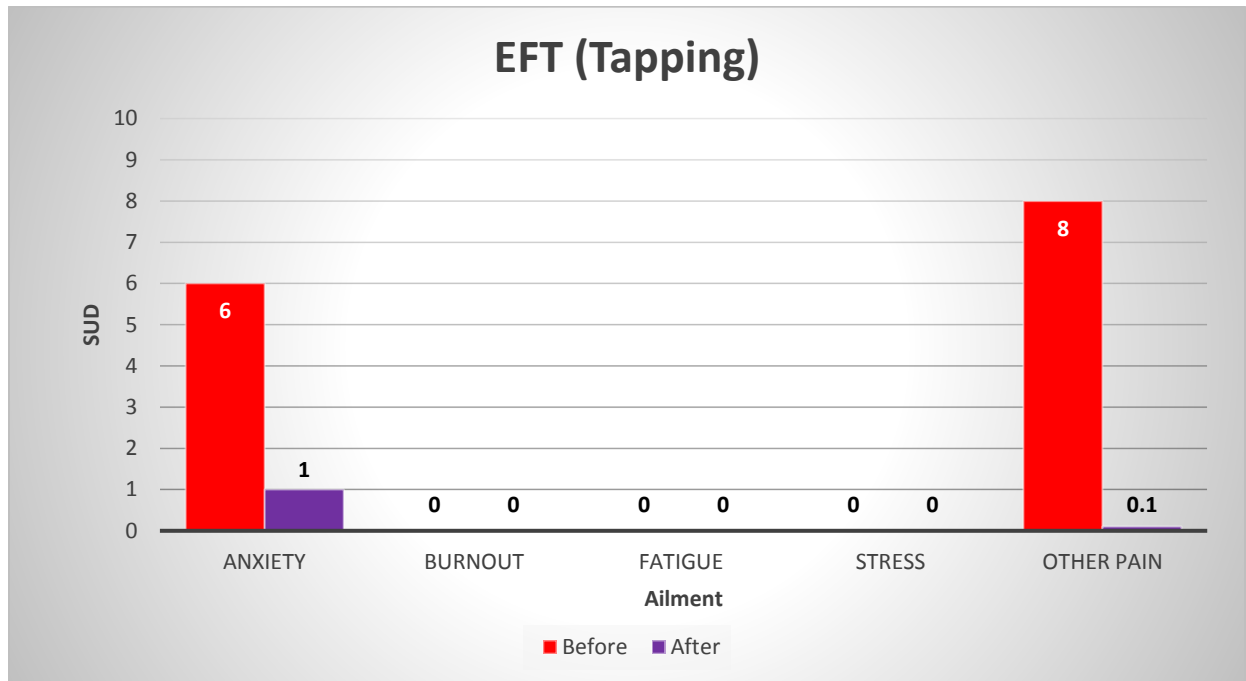
Burnout – highest 8 lowest 0

Fatigue – highest 8 lowest 0

Stress – highest 10 lowest 1

Other – Pain 10 lowest 1

Emotional Freedom Technique, EFT Tapping



EFT tapping was administered in 15 to 20 minute sessions. This included a brief review of the procedure, defining the ailment, rating the issue, crafting the affirmation, the tapping points(?) and three to four repetitions of the tapping sequence. There were four sessions that were interrupted and incomplete.

The highest SUD reported on the survey was 10 and the lowest 0

Anxiety – highest 9 lowest 0

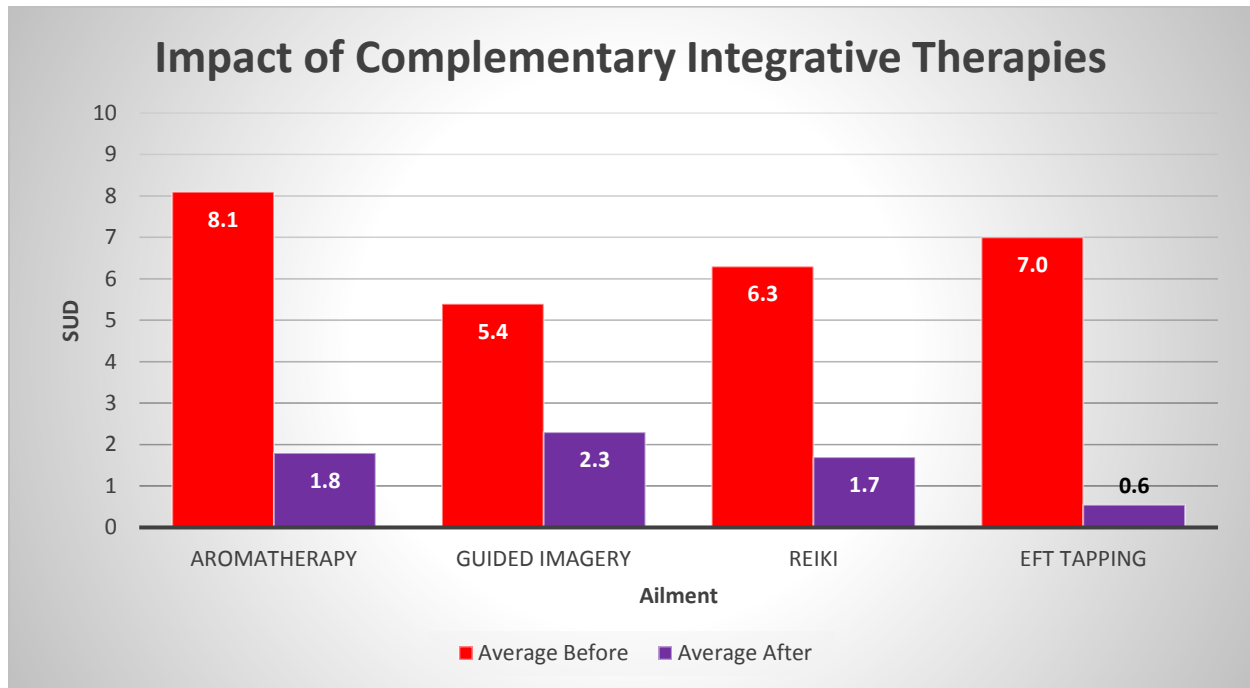
Burnout – highest 0 lowest 0

Fatigue – highest 0 lowest 0

Stress – highest 0 lowest 0

Other – Pain – highest 9 lowest 1

Impact of Complementary Integrative Therapies



The results of this Quality Improvement Project showed these CITs to be effective in reducing stress and associated ailments. Each of the CITs – *Aromatherapy*, *Guided Imagery*, *Reiki Therapy* and EFT reduced levels of distress in all listed ailments, anxiety, burnout, fatigue, stress and other ailments including pain. Individual participants reported reduced symptoms on the SUDs scale from 10 to 1 with aromatherapy and reiki, 9 to 0 with *Guided Imagery* and EFT. Compassion fatigue and caregiver burnout can be alleviated.

In order to combat anxiety, burnout, fatigue, stress and other ailments that arise during their shift, making CITs available for the nursing staff could alleviate these ailments. Implementing awareness of the need for nurses and other health care providers to take care of themselves and allowing them the time to receive the CITs is the first step to promoting a sense of wellness. Providing these modalities to nursing staff can help diminish the pressures of such a high stress environment and the “side effects” of these modalities help promote job retention, job satisfaction, patient care and safety.

This Quality Improvement Project needs further research, investigating whether just providing the therapies for the caregivers is sufficient to help maintain stress relief or providing the therapies and training to teach the modalities to be self-administered. The

project must also include the cost involved in providing the CITs to the health care staff and measure the benefits achieved and returns to the medical facility. Also, how the benefits of the CITs carry over to the personal environment of the caregivers, improving their personal life outside the medical facility.

Thank you: to the Medical Center staff who helped with the Quality Improvement Project, the nurse participants who received the CITs and completed the surveys and the volunteers who provided their services and collected the data, without their assistance this project would not have been possible.

Testimonials

Comments from Reiki therapy:

“I feel much more relaxed after the reiki therapy.”

“Very helpful and I will do it again over and over.”

“It’s a blessing to receive reiki, lesson discomfort.” (Headache tension reduced from 8 to 0)

“This was very helpful I feel a sense of relief that I haven’t felt in a long time. Thank you!”

“Yes, it helps relax you without the use of medication.”

Comments from Guided Imagery:

“Very useful tool on a hospital for your time aside to center is needed.”

“I think this may be good to do before a shift starts. If possible or after a shift is over.”

“This is the first time I’ve had guided imagery, but like the Reiki it helps calm my anxiety from the obsessive disorder. Any time I have it my work becomes easier to handle even when I feel like it is something I cannot control.”

“Yes, it was useful... Will be more effective for lasting results it done at home and on a regular basis. Thanks!”

“This usually never works for me, but I listened, and this time seemed to really help.”

Comments from EFT, tapping:

“This service was very helpful♥!”

“... great thanks for helping us”

References:

*Job Stress:

America's Leading Adult Health Problem, by Paul J. Rosch, M.D., F.A.C.P., in USA Magazine, May 1991. American Academy of Family Physicians Survey, 1988, U.S. News & World Report, December 11, 1995. also, Research by Perkins (1994) cited in the Harvard Business Review showed that 60% to 90% of doctor visits were stress-related.

Kane, Pratibha P. "Stress causing psychosomatic illness among nurses." *Indian journal of occupational and environmental medicine* vol. 13,1 (2009): 28-32. doi:10.4103/0019-5278.50721

Jordan TR, Khubchandani J, Wiblishauser M. The Impact of Perceived Stress and Coping Adequacy on the Health of Nurses: A Pilot Investigation. *Nurs Res Pract.* 2016;2016:5843256. doi:10.1155/2016/5843256

Dyrbye, L.N., T.D. Shanafelt, C.A. Sinsky, P.F. Cipriano, J. Bhatt, A. Ommaya, C.P. West, and D. Meyers. 2017. Burnout among health care professionals: A call to explore and address this underrecognized threat to safe, high-quality care. *NAM Perspectives*. Discussion Paper, National Academy of Medicine, Washington, DC. doi: 10.31478/201707b

Lynda Lampert, RN, Depression in Nurses: The Unspoken Epidemic, *Mar 1, 2016 Magazine, Minority and Community Health, Nurse Health, Nursing Stress Management*

Audrey Lyndon, PhD, Burnout Among Health Professionals and Its Effect on Patient Safety, Perspectives on Safety, February 2016, *PSNet, Patient Safety Net*, <https://psnet.ahrq.gov/perspectives/perspective/190/burnout-among-health-professionals-and-its-effect-on-patient-safety>

Survey of stress and coping strategies to predict the general health of nursing staff, Javadi-Pashaki N, Darvishpour A. Survey of stress and coping strategies to predict the general health of nursing staff. *J Educ Health Promot.* 2019;8:74. Published 2019 Apr 24. doi:10.4103/jehp.jehp_355_18

Onishi K, Tsujikawa M, Inoue K, Yoshida K, Goto S. The effect of complementary therapy for hospital nurses with high stress. *Asia Pac J Oncol Nurs* 2016;3:272-80. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5123520/pdf/APJON-3-272.pdf>

Institute of Medicine (US) Committee on the Use of Complementary and Alternative Medicine by the American Public. Complementary and Alternative Medicine in the United States. Washington (DC): National Academies Press (US); 2005. <https://www.ncbi.nlm.nih.gov/books/NBK83807/?report=printable>

Thrane S, Cohen SM. Effect of Reiki therapy on pain and anxiety in adults: an in-depth literature review of randomized trials with effect size calculations. *Pain Manag Nurs.* 2014;15(4):897–908. doi:10.1016/j.pmn.2013.07.008, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4147026/pdf/nihms511785.pdf>

Cuneo, C. L., Curtis Cooper, M. R., Drew, C. S., Naoum-Heffernan, C., Sherman, T., Walz, K., & Weinberg, J. (2011). The Effect of Reiki on Work-Related Stress of the Registered Nurse. *Journal of Holistic Nursing*, 29(1), 33–43. <https://doi.org/10.1177/0898010110377294>