

Kundalini Yoga for Trauma Recovery

Executive Summary

Post-Traumatic Stress Disorder (PTSD) is a condition of persistent physical and psychological stress triggered by experiencing or witnessing physical injury or emotional shock. Its symptoms include anxiety, anger, flashbacks, nightmares and impaired interpersonal and occupational function. Up to 20% of combat veterans and others exposed to trauma develop PTSD.¹ Moreover, people with PTSD often suffer in silence to avoid the stigma of a diagnosis of a mental health condition.

In addition to the toll that PTSD takes on those suffering and their families, the financial cost of PTSD is very high. The total cost of treating PTSD per year using either medication or a standard exposure therapy is \$8653 and \$7033, respectively.² This cost does not include disability benefits at an average of \$8890 per year for non-Vietnam Veterans and \$11,670 for Vietnam Veterans.³ PTSD can also be difficult to treat. One study using a standard behavioral therapy treatment found that 32% of Veterans did not improve and 11% deteriorated.⁴ With over 40% of Veterans unresponsive to standard treatments and the average cost of treating and providing disability benefits of about \$18,000 per year per person over a period of many years, there is clearly a need for a more cost-effective and beneficial treatment for PTSD.

Standard therapies currently used to treat PTSD address the mental health component but do not take into account the physiological benefits that are obtained by also incorporating a body-centered treatment.^{5,6} Results of a study conducted by a doctoral student at the University of Toronto,⁷ suggest that this drug-free, mind-body protocol is possibly more effective than standard therapies. This integrative approach provides tools to reset participants' nervous and endocrine systems, beliefs and thought patterns. PTSD may no longer mean a lifelong experience of suffering, impaired function and dependence on psychotropic medications.

While trauma can be experienced as a process of breakdown, recovery from trauma can be experienced as a process of renewal. Evidence suggests that whole person recovery is possible and people can go on to live happy, peaceful, productive lives.^{7, 8, 9}

Post Traumatic Stress and Post Traumatic Stress Disorder

Post Traumatic Stress (PTS) is defined as a natural response to a traumatic event. Both PTS and PTSD are associated with feeling fearful and/or nervous, avoiding the activity or place associated with the traumatic event, and sleep disturbance including nightmares. As a result, many clinicians use the terms PTS and PTSD interchangeably. However, there are differences between the two in symptom intensity, duration, and treatment. Symptoms of PTS usually subside a few days after the event and do not pose a significant interference with daily life. PTS is not a clinically diagnosed condition and therefore treatment is not generally called for.

Post Traumatic Stress Disorder

Although many people exposed to civilian and military trauma may experience PTS, most do not develop PTSD. What happens in the body and mind of those who do?

PTSD arises as the result of two changes. One change is physiological. In PTSD the brain and central nervous system get "stuck" in fight-or-flight mode, an intense activation of the sympathetic nervous system designed to help us respond to emergencies. Instead of resetting to baseline once the trauma is past, the nervous system of those experiencing PTSD remain on high alert, making it difficult or impossible to relax, sleep well, or even think clearly (PTSD also turns *down* the cerebral cortex, that part of the brain involved in reasoning). Moreover, many of what are considered psychological effects of trauma are actually rooted in physiological dis-regulation. These include hyper vigilance, chronic anxiety, depression and outbursts of anger.

Secondly, the survivor of trauma may experience a variety of changes in thinking. Their view of themselves and the world often becomes distorted. They may experience persistent negative beliefs and may generalize the traumatic event into a thought such as "'The world is essentially a dangerous place." Self-defeating beliefs such as "I can never trust others" displace former beliefs.

These beliefs give rise to thought patterns that continue the fear, anger and hopelessness that characterize the disorder. These negative emotions in turn drive self-defeating behaviors that oftentimes end up confirming the new beliefs, making them self-fulfilling prophesies.

10-Week Kundalini Yoga Trauma Recovery Program

Our integrative approach to treating PTSD addresses its physiological and psychological aspects with powerful, evidence-based technologies that are at the same time cutting-edge science and ancient wisdom.

Yoga is a science of mind-body wellness developed in India at least 5,000 years ago and is practiced today by millions of people worldwide. Western medicine is now identifying some of the mechanisms by which yoga has eased human suffering for thousands of years. One such mechanism involves the neurotransmitter GABA. GABA reduces anxiety and is a target for the benzodiazepine family of anti-anxiety medications. Researchers have found significant increases in GABA after a single one hour yoga session. Moreover, the GABA produced by yoga practice does not have side effects, withdrawal symptoms, or require a prescription.

The other mechanism involves structural and functional changes in the brain. Meditation is a component of yoga practice and many recent brain imaging studies on meditation have shown that it can specifically correct imbalances in parts of the brain affected by trauma including areas related to the regulation of emotion, hyperarousal, fear, and memory of trauma.

Kundalini Yoga is the style of yoga taught in a trauma sensitive manner to people with PTSD. In the past few years, there have been some research studies published showing the benefits of yoga for reducing PTSD symptoms. However, three recent studies on Kundalini yoga for PTSD ^{7, 8, 9} show that Kundalini yoga has a larger magnitude of effect on reducing PTSD symptoms than any other style of yoga researched to date. The Kundalini Yoga taught in our program is specifically focused on changing the brain, improving sleep, increasing self-efficacy, ¹¹ restoring hope and the capacity for self-regulation and changing beliefs and behavioral habits. The program also includes a meditation specific for self-regulation necessary for a return to natural sleep that has been shown to be effective in improving sleep quality in chronic insomnia population. ¹⁰

Although most often it is considered an adjunctive treatment, the practice of Kundalini Yoga therapeutically has demonstrated efficacy as a stand-alone treatment for PTSD.

The 10 Week Kundalini Yoga Trauma Recovery Program is strengths based, with a focus on physiologic change toward self-efficacy and self-regulation. Participants gain skill in the process of being present with their sensations. The curriculum includes:

- 1. Rhythmic, targeted movement in the form of Kriya. The intensity of yogic exercise matches that of the hyper vigilance often associated with PTSD, thus rebalancing the whole system.
- 2. Rhythmic breathing called pranayam. For people recovering from PTSD, voluntary changes in the pattern of breath—a technique used throughout the training--can account for as much as 40% of the variance in feelings of anger, fear, joy, and sadness, according to yoga therapy researcher Shirley Telles.¹²
- 3. Mantra based meditation. Dr Telles's research indicates that reciting a mantra aloud restores strength and balance to the parasympathetic nervous system. 12
- 4. Deep Relaxation

The Guru Ram Das Center for Medicine and Humanology

The Guru Ram Das Center for Medicine & Humanology (http://www.grdcenter.org/) is a non-profit organization with the mission to bring the techniques of Kundalini Yoga as a treatment modality into health care. To date, about 350 Kundalini Yoga teachers in 7 different countries have been trained to deliver the 10-week Kundalini Yoga Trauma Recovery program. Kundalini Yoga teachers receive 200 to 500 hours of training before they take 32 hours of additional training specific to teaching to people experiencing PTSD. They learn to teach Kundalini Yoga therapeutically within their scope of practice, to use trauma sensitive language and to support a student should they be triggered during a class.

Research conducted on the efficacy of the program indicates that the practice of Trauma Sensitive Kundalini Yoga has a larger magnitude of effect on reducing PTSD symptoms than any other style of yoga researched to date and that whole person recovery is possible. ^{7, 8, 9}

In 2016 we plan to train approximately 60 new Trauma Sensitive Kundalini Yoga teachers to provide the program to sites throughout the United States. In building a larger, stronger network of trauma sensitive trained teachers, we expand our outreach to serve veterans and active duty military personnel. Our model includes research on the effects of the 10 week program across key PTSD markers.

<u>Testimonials from Course Participants:</u>

What we see is that people have the capacity to do more than recover from trauma. They can use the experience of their own personal victory to give shape to their future. They can become more fully who they are. In the Trauma Sensitive Kundalini Yoga program, participants have the opportunity to recognize that they are not just getting through something, but becoming their original selves. Here are some comments taken from the end of course evaluations:

"The Kundalini Yoga trauma course has challenged and moved my trauma in ways that prior to starting I didn't think was possible. The yoga practice has been transformative. I have found that even through this trauma I have an inner teacher in myself too."

"The PTSD yoga course helped me to get to know me and to feel my pain in a good way and feel my emotions. I do not rely on food to squash my feeling as much as I used to and I am more confident with my capabilities. I am very happy I participated in this course."

"I would say my biggest benefit has been that I am more emotionally balanced. Often after class, I would feel really strong and balanced and really, really alert, but like with a deep calm. I would be able to return to that feeling the days I wasn't in class."

"Emotional shifts were coming from the practice. I would have emotional patterns come up especially like kind of the middle point of the class. I would be more aware and could then think more clearly how best to respond. When I would do that I'd feel really peaceful after and just be able to work with my emotions and experiences in a healthier way."

"There are certain practices and techniques that make total sense. That in itself has stopped a lot of my negative thought loops."

"When things happen, you know I get really annoyed and aggravated, I would walk away and get away from the situation. But now I would say 'Oh, that is really annoying.' I would verbalize it, to try to change and improve the situation. It's definitely a lot better, but like I said, sometimes I wonder, 'Is this me?' So it's kind of strange and it's amusing. I am finding myself kind of like laughing at my behavior because it's just so different from where I was a few months ago."

"I feel stronger. Also more, gentle. Just a lot more hope. A lot of my thinking was very stunted. The Kundalini Yoga practice was very empowering. I do not feel so small anymore. It brought me a long way. A lot.

"You cannot feel control of your life until you feel safe in your body. For the first time in years, I feel safe."

"In the past, I was consumed by emotions. With yoga, I could breathe and link my body and mind. I could feel my legs shaking at times, my arms aching. For the first time, I could sense my breath. I noticed that with this yoga, overall, I felt better afterwards. Everywhere in me. My mind and body."

Citations

- 1. http://www.sidran.org/resources/for-survivors-and-loved-ones/post-traumatic-stress-disorder-fact-sheet/. Accessed May 25, 2015
- 2. Le QA, Doctor JN, Zoellner LA, Feeny NC. Cost-effectiveness of prolonged exposure therapy versus pharmacotherapy and treatment choice in posttraumatic stress disorder (the Optimizing PTSD Treatment Trial): a doubly randomized preference trial. *J Clin Psychiatry* 2014;75:222-230.
- 3. Blimes A. Soldiers returning from Iraq and Afghanistan: The long-term costs of providing Veterans medical care and disability benefits. John F. Kennedy School of Government-Harvard University. Faculty Research Working Paper Series. RWP07-001; 2007.
- 4. Alvarez J, McLean C, Harris AH, Rosen CS, Ruzek JI, Kimerling R. The comparative effectiveness of cognitive processing therapy for male veterans treated in a VHA post-traumatic stress disorder residential rehabilitation program. *J Consult Clin Psychol* 2011;79:590-599.
- 5. Streeter CC, Jensen JE, Perlmutter RM et al. Yoga Asana sessions increase brain GABA levels: a pilot study. *J Altern Complement Med* 2007;13:419-426.
- 6. Streeter CC¹, Gerbarg PL, Saper RB, Ciraulo DA, Brown RP, Effects of yoga on the autonomic nervous system, gamma-amino butyric-acid, and allostasis in epilepsy, depression, and post-traumatic stress disorder.. Med Hypotheses. 2012 May; 78(5): 571-9. doi: 10.1016/j.mehy.2012.01.021. Epub 2012 Feb 24.
- 7. Jindani F. *Explorations of wellness and resilience: A yoga intervention for post-traumatic stress* [dissertation] University of Toronto; 2014.
- 8. Jindani FA, Khalsa GF. A Yoga Intervention Program for Patients Suffering from Symptoms of Posttraumatic Stress Disorder: A qualitative Descriptive Study. *J Altern Complement Med*. 2015 Jul; 21(7): 401-8. doi: 10.1089/acm.2014.0262. Epub 2015 Jun 2.
- 9. Jindani, FA, Turner, N and Khalsa, SBS A Yoga Intervention for Posttraumatic Stress: A Preliminary Randomized Control Trial. *Evidence-Based Complementary and Alternative Medicine* 2015, Article ID 351746
- 10. Khalsa SB. Treatment of chronic insomnia with yoga: a preliminary study with sleep-wake diaries. *Appl Psychophysiol Biofeedback* 2004;29:269-278.
- 11. Khalsa, SSK, The Effects of Two Types of Meditation Techniques on Self-Efficacy Beliefs in Persons in CDC Stages II and III of HIV Disease, doctoral dissertation, Columbia Pacific University 1993
- 12. Telles, S, personal communication, 2012