# Mind-Body-Spirit Interventions for Patients With PTSD

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PTSD is the quintessential mind-body-spirit (MBS) disorder that alters physiological, biological, and psychological homeostasis. People with PTSD and complex trauma often experience dysregulation of multiple systems that impairs physical, affective, and cognitive function, which can lead to a profound sense of disconnection from others and loss of purpose and hope.

Dissociation is common in PTSD and is associated with disabling sequelae, including substance abuse, self-harming behaviors, eating disorders, and chronic pain. In his analysis of the whiplash model of pain, Scaer1 suggests that the chronic pain syndrome that results from minor motor vehicle accidents does not correspond with the actual events—that it more likely represents dissociated memory that was laid down at the time of impact because of intense fear. Chronic illnesses and autoimmune disorders, such as rheumatoid arthritis, multiple sclerosis, lupus, and inflammation of the thyroid; digestive disorders, such as GERD and microbiome imbalance; diabetes; cardiovascular disease; and mitochondrial illnesses, such as chronic fatigue syndrome and fibromyalgia, all occur at higher rates in persons with PTSD.

MBS methods provide integrated approaches to psychophysiological self-regulation and promote self-care behaviors. These methods facilitate deep rest, help to reset circadian rhythm, and release endogenous opioids and cannabinoids that lead to a reduction in anxiety and an enhanced sense of well-being. Some may also offer a strategy (meditation, chanting, aerobic exercise, hot yoga) to gain awareness and control over the dissociative process. Relaxation techniques (eg, breathing exercises, guided imagery, progressive muscle relaxation) and energy psychology (eg, tapping, tai chi, qi gong) are practical and beneficial methods that are easily incorporated into daily routines.

Botanical therapies may be used to address symptoms of PTSD, most notably cannabis, kava, and St John's wort. Touch therapies, animal-assisted therapies, and group rituals are used to facilitate a complex psychobiological response that may improve the capacity for attachment through structured affective and sensory engagement with other caring beings. Group spiritual rituals and entheogenic (ie, psychedelic) rituals emphasize transper-

sonal approaches to engender self-compassion and meaning-making as the patient reevaluates his or her place in the cosmos following traumatic events.

### **MBS** approaches

MBS beliefs and methods should be identified and prioritized during assessment and treatment when working with recent immigrants, refugees, indigenous populations, or people for whom cultural/ethnic identity may be significant. When stigma about seeking mental health care exists, MBS methods may be especially useful because they engage the somatic and spiritual narrative as a pathway to the psyche. The DSM-5 Cultural Formulation Interview provides modules designed to elicit information on the use of MBS methods and traditional cultural practices using a personcentered approach.

Research on recreational, adventure, and nature-based therapies for PTSD—while promising—is inconclusive.2 Yet these therapies may be valuable for their combination of physical exercise, the exposure to the light/dark cycles of natural light that entrain circadian rhythm, and the opportunity to share nature with others.

# **Animal-assisted therapies**

Animal-assisted and equine therapies show a diverse range of results and offer techniques to harness the human-animal bond. Equine therapies provide for physical rehabilitation with riding, grooming, and trust building via the "affective mirror" that horses reflect back to humans. In some equine programs, veterans help rehabilitate horses that have been wounded and traumatized, leading to awareness of their own "wounded-healer" identity to be used as a pathway to mutual helping and healing.

Canine animal assistants help reduce anxiety in sexual abuse survivors and rape victims. Animalassisted therapies renew the capacity to develop attachment, to tolerate sensation and pleasure, and to give and receive non-sexual, caring touch through physical contact.<sup>3,4</sup>

# **Entheogens**

MBS rituals increasingly incorporate entheogens for the treatment of PTSD and its sequelae. Entheogens have been incorporated into psychotherapy and other rituals to treat anxiety and PTSD and to access a transcendent state in order to potentiate radical change. Promising results have been seen with entheogen- assisted psychotherapy for the treatment of PTSD and substance abuse, including the use of ayahuasca, psilocybin, lysergic acid diethylamide (LSD), N,Ndimethyltryptamine (DMT), iboga, and 3,4-methylenedioxymethamphetamine (MDMA).<sup>4-7</sup>

### Bodywork, massage, and somatic therapies

Considering the experience of somatic distress in PTSD, it is understandable why many people explore alternative interventions. Some bodywork therapies emphasize deep relaxation, while others incorporate guided imagery and psychotherapeutic exchange during massage or somatic awareness exercises.

Massage techniques range from a very light touch to a deep touch. Some use only pressure points; others use oil, rocking, stretching, petrissage, and cross-fiber friction with the patient either clothed or unclothed and draped. At least moderate pressure is required to stimulate vagal activity and induce parasympathetic response.

Massage controls pain severity through its effects on both physical and psychological symptoms. A significant reduction of PTSD symptoms has been seen in veterans after massage therapy.4 Moreover, findings suggest a reduction of substance abuse, anxiety, stress, depression, and dissociation.8-10 A community-based study with trauma survivors found significant improvement in the domains of interpersonal safety, interpersonal boundary setting, bodily sensation, and bodily shame in response to massage and energy-based therapies. <sup>11</sup>

#### **CASE VIGNETTE**

John was arrested during the Chicago riots of 1968 and was raped in the holding cell while he awaited release. For decades, he suffered from chronic constipation, hemorrhoids, and anal sphincter spasms, which led to long-term use of muscle relaxants and anxiolytics. He sought relief of his symptoms and alternatives to medication. Following psychoeducation using progressive muscle relaxation and guided imagery, he undertook a series of treatments that involved gentle massage of the perineal muscles while engaging in psychotherapeutic dialogue to decondition from intrusive imagery and muscular contraction. He experienced acute relief from painful spasms, and his condition improved over time as he practiced relaxation methods. He sought treatment occasionally as needed. He was able to stop using medication.

Body-centered psychotherapy is conducted by dual-trained clinicians and combines touch and psychotherapy as a process-oriented technique. It may also serve as exposure therapy, in which the body-mind is contacted in order to decondition autonomic hyperarousal associated with somatic memories. Energy freedom techniques include self-touch, during which the patient "taps" on specific acupuncture points while recalling intrusive memories. Some methods (eg, somatic experiencing) focus on a non-touch approach to facilitating patient awareness of his or her interoceptive, kinesthetic, and proprioceptive experience.

### Acupuncture

Traditional Chinese needle insertion along meridians, electro-acupuncture, and auricular acupuncture are widely used for the treatment of PTSD symptoms. Systematic reviews of acupuncture for PTSD show results ranging from positive to mixed.12,13 Both body and auricular acupuncture reduce the severity of withdrawal symptoms associated with rapid opiate detoxification, increase participation rates of patients in long-term treatment programs, and reduce cravings and relapse.

Of particular clinical interest for PTSD are 5-element acupuncture, a method that actively incorporates a spiritual and emotional approach, and Japanese-style acupuncture that uses very light needle insertion, which is ideal for young children, the elderly, and needle-sensitive individuals. The National Acupuncture Detoxification Association protocol is also a widely used, 5-point auricular protocol for substance abuse recovery that is often applied to large numbers of individuals concurrently in community-based settings and in war zones, in refugee camps, and during disasters. Lay acupuncture practitioners are approved to provide this protocol in many states under medical supervision, making this a convenient adjunct to residential and out-patient behavioral health care delivery. The practice of acupuncture also includes the application of moxibustion, the burning of the herb Artemisia vulgaris on or near acupuncture points.

# Assessment

Some patients prefer acupuncture, while others prefer touch therapies. Many choose to experience both but at different stages in their recovery. Evaluation for an acupuncture or touch therapy referral should include assessment for the meaning of penetration by needles for survivors who are victims of "penetration" and also the meaning of touch and the type of touch engendered by tactile proximity. Touch can engender a preverbal state reminiscent of early attachment that "needling" does not. This may be beneficial at one stage or frightening at another. Clinician gender also plays an important role in the choice of referral, and the patient may want a therapist in the room during the initial sessions in order to feel safe.

#### **Breathing and yoga**

Hyperventilation and breathing pattern disorders are common in PTSD and have a bi-directional effect on anxiety. Approximately 11% of the general US population use breathing exercises and 10% practice yoga. Breathing exercises are a well-established part of trauma-informed cognitive behavioral therapy, dialectical behavioral therapy, and mindfulness meditation.

Breath has long been considered to be the link between mind, body, and spirit. Yoga scholars suggest that if "you control the breath you control the mind." Different methods that demonstrate efficacy include Pranayama, Kundalini, and Kriya yoga.14,15 These techniques vary by how they alter the nasal cycle, which correlates

to the physiological states of rest and activity. Greater airflow in the left nostril reflects the resting phase, and greater airflow in the right nostril correlates with the activity phase. Forcing the breath through only one nostril stimulates the contralateral hemisphere and ipsilateral sympathetic nervous system via the hypothalamus. Research on yoga breathing for PTSD shows a reduction of symptom severity, depression, and risk of alcohol and drug use. <sup>15-19</sup>

Hatha yoga incorporates physical movements, focus, and attention, along with methods that control breath. A PTSD-informed Hatha yoga model is a safe and effective adaptation to address the specific needs of patients. Hatha yoga increases perceived self-efficacy in women with PTSD.19 The frequency of yoga practice is a predictor of decrease in depressive and PTSD symptoms and suggests the value of incorporating yoga practice into an ongoing, self-care program. <sup>17</sup>

#### Conclusion

Patients with PTSD often present with the daily distress of intractable psychosomatic symptoms. Many of these individuals do not seek psychotherapy or pharmacotherapy. Indeed, they often search for MBS alternatives. Although patients will self-treat using an MBS intervention, they will not necessarily share this information with their clinicians unless asked specifically. Asking about self-medication increases patient safety, especially regarding drug-nutrient-herb interactions, and suggests the importance of exploring self-care and self prescribing practices during the initial intake.

The central clinical challenge to effective application of MBS therapies is to identify methods that are isomorphic to the individual and optimal for his or her stage of recovery. Options for implementation of MBS methods include in-office psychoeducation such as teaching breathing exercises, offering the development of 12-week MBS groups to practice these methods or rituals, or referral to specific classes or practitioners. Effective clinical implementation of MBS methods addresses religious and cultural beliefs and socioeconomic barriers.

#### **Disclosures**

Dr. Korn has a private practice in Integrative Medicine for Mental Health. She reports no conflicts of interest concerning the subject matter of this article.

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