### Symposium on Transcendental Meditation as a Clinical Health Intervention

OCTOBER 20, 2021 · WASHINGTON, DC

SESSION 2

### VETERANS AND FIRST RESPONDERS PTSD and Suicidality

#### **Symposium Abstracts**

## ABSTRACT 1 Transcendental Meditation for the Treatment of Veterans with PTSD

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An estimated 11 to 20% of veterans suffer from posttraumatic stress disorder (PTSD), approximately twice the prevalence of the general population. PTSD is the second most prominent cause of suicide in veterans, affecting an average of 20 veterans a day. Research on Transcendental Meditation (TM) in veterans has yielded favorable results, indicating TM as an effective treatment for PTSD and associated conditions such as depression and sleep problems (e.g., Rosenthal et al., 2011; Brooks and Scarano 1985; Bellehsen et al., 2021). In a Department of Defense funded phase 2 clinical trial, conducted at the San Diego VA with 203 veterans with documented PTSD, findings indicated that TM was as good or better than the "gold standard" cognitive behavioral therapy Prolonged Exposure (PE), and both treatments were superior to the health education (HE) control group over the three-month study period (Nidich et al., 2018). Within-group effect sizes on the Clinician-Administered PTSD Scale (CAPS) and Patient Health Questionnaire (PHQ)-9 depression scale were both large for TM (d = 0.90 and 1.22, respectively); medium to large for PE (d = 0.63and 0.89); and small for HE (d = 0.14 and .34). Percentages of participants with clinically significant improvement in PTSD symptom severity, using the CAPS (≥ 10 point reduction) were TM = 62%, PE = 42%, and HE = 32%. Post-hoc analysis found a large effect size in decreased suicidal ideation within the TM group (d = 1.38). Further, a preliminary cost effectiveness analysis from this trial showed that TM is highly cost-effective when compared to the existing standard of first-line treatments for PTSD. The above findings indicate that TM is a viable option for decreasing PTSD symptom severity in veterans and represents an effective alternative for veterans who prefer not to receive, or who do not respond to, traditional exposure-based treatments for PTSD. A Phase 3 multi-site clinical trial on veterans with PTSD is being planned to start during the first half of 2022 with PTSD symptom severity, suicidal ideation, substance usage, and cost effectiveness as the main outcomes, along with an emphasis on women veterans and minority groups.

#### **ABSTRACT 2**

#### A Sensible Rational Treatment Approach for Military MTBI/PTS

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In 2008 when we first began seeing patients in our newly developed Traumatic Brain Injury (TBI) Clinic, they were receiving symptomatic pharmacological treatment for post-concussion symptoms being prescribed by several different clinicians. It was clear that pharmacological treatment of the symptoms was not an effective approach to treatment. Pharmacological treatments that worked well in the civilian community were not getting results. Prophylactic and abortive treatment of headaches was not working well in our military population. Sleep meds were rarely effective. Many of our patients were on psychiatric meds that may have included antipsychotics and benzodiazepines in addition to SSRIs and SNRIs that caused side effects, significantly impacting day to day life. It became evident that in this population of patients who had been exposed to the extreme stressors of war, it was post-combat/post-deployment/post-traumatic stress that continued to play a big role in the propagation, prolongation, exacerbation, and constant triggering of the presenting post-concussion symptoms – headaches, memory/cognitive problems, sleep disturbance, and mood issues. These symptoms may have been triggered by concussion(s), but emotional stress continued to be a major contributing factor to the prolonged symptomatology.

We realized that if stress reduction became an integral part of their daily life, their symptoms would likely improve. The practice of Transcendental Meditation as a stress reduction strategy has proven to be effective in improving the physical symptoms including headaches, sleep problems, memory issues, and mood problems and has also resulted in the decrease of medication use and the consequent side effects of pharmaceutical treatments.

#### ABSTRACT 3

## **Transcendental Meditation as a Treatment for Posttraumatic Stress Disorder (PTSD) in Military Veterans**

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**Background:** Posttraumatic Stress Disorder can be a debilitating condition that impacts 6-9% of the population, and up to 18-20% of military combat Veterans. Existing treatments for PTSD are effective but are

difficult for some to sustain and may not be as effective for military veterans. Northwell Health- the largest healthcare system in the NY metropolitan region- has been conducting research into the impact of Transcendental Meditation (TM) on PTSD for combat veterans and has also been offering these services to healthcare workers impacted by the COVID-19 pandemic. The present study extended previous research with a pilot trial of TM as a treatment for PTSD via a single-blinded, randomized controlled design.

**Methods:** Veterans with PTSD (N = 40) were assigned to a TM intervention or treatment-as-usual (TAU) control group. Participants in the TM group engaged in 16 sessions over 12 weeks, primarily in a 60-minute group format. Change in PTSD symptoms, measured via the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5) was the primary outcome. Secondary outcomes included self-reported PTSD symptoms and other mental health related factors. Assessments were conducted at baseline and 3-month posttest.

**Results:** Mean CAPS-5 score decreases were significantly larger for participants in the TM group compared to the TAU group, with a large effect size (p = .012; effect size, d = 0.84). At posttest, 50.0% of veterans in the TM group no longer met PTSD diagnostic criteria as compared to 10.0% in the TAU group (p = .007). Adjusted mean changes on self-report measures of PTSD symptoms, depression, anxiety, and sleep difficulties indicated significant reductions in the TM group compared to TAU, with large effect sizes (ds = .80-1.16).

**Conclusion:** These findings demonstrate the efficacy of TM as a treatment for Veterans with PTSD and for comorbid symptoms. This study is the first to definitely report on loss of PTSD diagnosis due to TM practice in veterans. Combined with other research, the findings indicate that TM may be a tolerable, non–trauma-focused PTSD treatment for veterans.

#### **ABSTRACT 4**

# Transcendental Meditation as a Potential Intervention for Prevention and Treatment of Suicidality in Veterans and First Responders

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Suicide in the United States continues to be an urgent public health concern. Over 47,000 individuals died by suicide in the United States in 2019, the year for which the latest data are available. Suicide was the tenth leading cause of death overall in 2019, the second leading cause of death for young individuals aged 10 through 34, and between the fourth and eighth leading cause of death for individuals in their middle years (35 – 64 year of age). Moreover, in 2019 there were an estimated 1.38 million suicide attempts, and approximately 12 million Americans who had serious thoughts of suicide. Veterans and First Responders are individuals at heightened risk of suicide. In 2019, the suicide rate was 1.5 times higher for Veterans than non-Veteran adults over the age of 18, and law enforcement officers and firefighters are more likely to die by suicide than in the line of duty. Trauma and PTSD — factors empirically shown to be associated with suicide — are likely contributors to the heightened risk of suicide among Veterans and first responders.

The mechanisms underlying suicide are complex and many factors have been empirically identified as increasing the risk of suicide, including mental disorders (particularly depression and alcohol use disorders), childhood adverse experiences, stressful life events (such as financial problems, relationship break-up or chronic pain and illness) and a family history of suicidal behavior. In addition, experiencing conflict, disaster, violence, abuse, or loss and a sense of isolation are strongly associated with suicidal behavior. The availability of a lethal method, recent exposure to a suicide in the media or in the community, and the lack of mental health services will facilitate deaths by suicide. Fortunately, suicide is preventable and during the past twenty years there has been significant progress in the development of effective empirically-based suicide prevention resources and programs - including those focused on education, screening, crisis lines, treatment and environmental change – in the general population and within the Veteran community. These prevention strategies are highlighted in the 2021 Surgeon General's Call to Action to Implement the National Strategy for Suicide Prevention and the President's Roadmap to Empower Veterans and End a National Tragedy of Suicide (PREVENTS).

Given the complexity of the mechanism of suicide, no one prevention/intervention strategy, by itself, is enough to combat this critical problem, and there is still a need to include bold new thinking about integrative health modalities. For example, given the preliminary studies showing Transcendental Meditation (TM) to be an effective treatment for post-traumatic stress disorder (PTSD), depression, and substance use disorders – all major contributors to suicidality – and evidence that TM produces changes counter to stress responses, and is an effective resilience-building tool, it is critically important to focus large-scale research efforts to assess TM's effectiveness to prevent the development of suicidal ideation and to treat individuals with suicide ideation, so that the armamentarium of suicide prevention and intervention strategies can be expanded.