Impact of Transcendental Meditation on Psychotropic Medication Use Among Active Duty Military Service Members With Anxiety and PTSD

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ABSTRACT The purpose of the study was to determine whether the regular practice of Transcendental Meditation (TM) decreased the need for psychotropic medications required for anxiety and post-traumatic stress disorder (PTSD) management and increased psychological wellbeing. The sample included 74 military Service Members with documented PTSD or anxiety disorder not otherwise specified (ADNOS), 37 that practiced TM and 37 that did not. At 1 month, 83.7% of the TM group stabilized, decreased, or ceased medications and 10.8% increased medication dosage; compared with 59.4% of controls that showed stabilizations, decreases, or cessations; and 40.5% that increased medications ($p < 0.03$). A similar pattern was observed after 2 ($p < 0.27$), 3 ($p < 0.002$), and 6 months ($p < 0.34$). Notably, there was a 20.5% difference between groups in severity of psychological symptoms after 6 months, that is, the control group experienced an increase in symptom severity compared with the group practicing TM. These findings provide insight into the benefits of TM as a viable treatment modality in military treatment facilities for reducing PTSD and ADNOS psychological symptoms and associated medication use.

INTRODUCTION

The prevalence of Post-Traumatic Stress Disorder (PTSD) in infantry groups deployed to Operations Enduring Freedom and Iraqi Freedom is 13.2%, based on studies conducted by the U.S. Army.[1] With an increasing number of military Service Members suffering from anxiety disorders and PTSD as a result of combat trauma and multiple deployments, the importance of effective, evidence-based interventions has become a central theme in the military behaviorial health community.[2] Seeking behavior health care is stigmatized within the military community and may have a negative impact on career advancement.[3] For those who seek treatment, current treatment protocols often fail to address the wide spectrum of neurocognitive health concerns associated with PTSD and Anxiety Disorder Not-Otherwise-Specified (ADNOS).[3]

Evidence-based treatments such as Prolonged Exposure (PE), Cognitive Processing Therapy (CPT), and Eye Movement Desensitization and Reprocessing are the recognized first-line treatments for combat-related PTSD and ADNOS.[4] Although these interventions are associated with significant reductions in PTSD symptoms, they do not extinguish them completely.[4] Psychotropic medications, especially the selective serotonin reuptake inhibitors, are also used for PTSD and ADNOS, but the response rate is low with less than 30% experiencing complete symptom cessation.[5] Treatment success may also be limited by complicated comorbidities such as traumatic brain injury, substance abuse, sleep and mood disorders. These limitations highlight the need for further solutions.

The Transcendental Meditation (TM) program has been recommended for improving soldier resilience,[6] and may be a viable adjunctive treatment option for PTSD and ADNOS. The TM technique is a simple, natural, self-guided procedure that is practiced 20 minutes twice daily, sitting comfortably with eyes closed, at a convenient time each morning and afternoon.[7] During the practice, thinking processes settle down, and a wakeful hypometabolic state characterized by neural coherence and physiological rest is gained.[8,9] The practice of TM has shown a wide range of health benefits,[10] including reductions in blood pressure,[11,12] use of antihypertensive medications,[13] sympathetic nervous system activation,[14] and cardiovascular morbidity and mortality.[10] A systematic review of 14 randomized clinical trials examining anxiety show TM to be more effective than usual care with the greatest effects on those with high anxiety.[15] A review of meditation studies also supports the safety and potential efficacy of meditative practices as treatments for medical illness, particularly in nonpsychotic mood and anxiety disorders.[16]

Preliminary findings for reducing PTSD symptomatology through TM suggested the worth of this intervention to practitioners in the military health care community.[17,18] A 3-month trial randomly assigned Vietnam veterans to either TM or psychotherapeutic treatment for PTSD. Compared with the control group participants who received only psychotherapy, the subjects who practiced TM experienced significant reductions in PTSD symptoms, including emotional numbness, depression, anxiety, insomnia, and substance abuse issues, as well as improvements in their career and family functioning.[17]

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These factors were thought to be connected to psychopathological processes that contribute to PTSD[19] and their mitigation may be involved in the mechanism for reduction in PTSD symptoms.[15] An uncontrolled pilot trial examined the effects of TM practice in Operation Iraqi Freedom and Operation Enduring Freedom veterans with PTSD.[18] Five veterans with PTSD trained in the TM technique and followed for 12 weeks improved on self-report measures of PTSD symptom severity. These findings were supported by a clinical case series conducted with active duty military personnel.[15]

Although existing research presents a case for TM as an adjunctive treatment option for PTSD, this study was the first to examine associations of TM with the use of psychotropic medications for PTSD and ADNOS. Prior research was conducted on limited sample sizes, whereas the current study focuses on a larger sample and employs a control group, increasing generalizability. The purpose of this study was to determine whether the regular practice of TM was associated with decreases in PTSD and ADNOS symptom severity and the need for psychotropic medications required for PTSD and ADNOS symptom management. The researchers hypothesized that military Service Members with PTSD and ADNOS who practiced TM regularly would require fewer psychotropic medications to alleviate PTSD symptoms and exhibit decreased severity in psychological symptoms associated with PTSD and ADNOS as compared with Service Members who did not practice TM.

METHODS

A retrospective chart review was conducted at the Dwight D. Eisenhower Army Medical Center (DDEAMC) Traumatic Brain Injury (TBI) Clinic at Fort Gordon, Georgia. Medication prescription and usage data as well as psychological measures were collected and analyzed for a period of 6 months. Data collected at the start of TM practice were compared to results after 1, 2, 3, and 6 months. The Institutional Review Board at the DDEAMC approved the study.

Sample

The sample included 74 military Service Members with documented PTSD or ADNOS diagnoses, 37 who practiced TM and 37 who did not. To be considered for TM training, participants were required to be military Service Members with PTSD or ADNOS diagnoses who were stationed at Fort Gordon, GA at the time of the training. Of the 50 individuals who participated in TM training between March 2012 and January 2014, 37 qualified for participation in the current study because of completion of the TM training and self-report of regular TM practice (once per day, 5 days per week) for at least 3 months following the start of training. Study participants were also required to be enrolled in or to have completed PE or CPT with a licensed behavior health provider and to have been prescribed psychotropic medications by a DDEAMC psychiatrist (n = 37). Individuals who had either begun but failed to complete the training or those that did not practice TM regularly following the training were excluded (n = 13).

Referrals for the TM program were made from clinic providers, clinical social workers in the Warrior in Transition Battalion, psychology residents, and word of mouth from military Service Member participants. All Service Members with a diagnosis of TBI in the TM group were enrolled in the TBI Clinic for at least 3 months with the exception of 2 Service Members who did not have a TBI diagnosis. These 2 were in behavior health treatment for at least 3 months before enrollment.

A control group of 37 participants, selected from the TBI Clinic files in the Armed Forces Health Longitudinal Technology Application (AHLTA) database, included military Service Members with either PTSD or ADNOS who had been patients at DDEAMC within the last 5 years. To allow for a comparable sample population, the control group was matched to the experimental group with respect to age, sex, and PTSD/ADNOS diagnoses, and was selected chronologically beginning in 2009. As the TM program at DDEAMC was introduced in March 2012, chart records for the TM group did not extend before that date, whereas the control group included patients in the TBI Clinic between 2009 and 2014. As the TBI Clinic at DDEAMC has a limited capacity to provide behavior health treatment for patients at any given time, it was necessary to extend control group selection back 3 years before the start of TM to obtain a comparable control group. During this 3-year period, the TBI and behavioral health staffing, treatment algorithms, and practice demonstrated no significant changes.

The participants consisted primarily of men because of the higher proportion of men within the military and in direct combat positions. All patients were active duty military Service Members, reservists, or National Guard members between the ages of 24 and 61 years who had PTSD and/or ADNOS diagnoses obtained through formal testing by a DDEAMC behavior health or other military licensed behavior health provider.

Description of the TM Technique

The TM technique is taught in the United States by the Maharishi Foundation (a 501(c)(3) nonprofit educational organization) by certified teachers.[7] The TM practice is a cyclical process characterized by movement of attention from the active level of thinking to more silent and abstract levels to reach a level of fully awake self-awareness, followed by movement of attention back to the active thinking level.[20] A state of deep rest for the body and increased alertness for the mind facilitates release of mental and physical stress.[20]

Standard teaching materials and format were used as previously described.[7] TM training involved a seven-step course of instruction comprising six 1.5- to 2-hour individual and group meetings conducted over 5 days. Follow-up and maintenance sessions were provided weekly for the first

month and twice monthly for the next month at the DDEAMC.[15] Participation was voluntary, and military Service Members were given the opportunity to discontinue participation at any time for any reason.

Measures

Psychotropic medications were defined as any medication intended for emotional and behavior modification. Review of treatment records included psychotropic medications such as, antidepressants, anxiolytics, including benzodiazepines, antipsychotics, and antiepileptics used for psychiatric indications. Dosages were measured by milligram amount. Psychotropic medication administration, determined per military Service Member self-report and frequency of medication refills, was defined as the total dosage of psychotropic medications taken per week by the participant at baseline, and 1-, 2-, 3-, and 6-month time intervals. Prescription refill information from the primary psychiatrist/physician assistant and behavior health provider was retrieved from the electronic medical records systems used by the Department of Defense, AHLTA encounter notes, and the Composite Health Care System (CHCS). This information was reviewed at baseline and 1, 2, 3, and 6 months from the start of TM training, or, for the control group, from the start of TBI care as measured by the first appointment with a TBI behavior health specialist. Because appointments did not always occur precisely at those time intervals, the closest appointment to each marker (±1 week maximum) was used for data collection. For the control group, initial dosage determinations were made on the date of the first appointment with a TBI Clinic psychiatrist or physician assistant. For the TM group, initial determinations were made on the date of the first day of TM training. Information on psychotropic medication prescription and self-administration was collected to address the question of whether TM practice decreases the need for medication to alleviate psychological symptoms. Medication administration was measured by the regularity of refills, as the prescription dosage in itself does not display the regularity of participant medication usage.

Psychological symptom severity was determined from self-report surveys in common use at the DDEAMC: (1) The BASIS-24, (Basis and Symptom Identification Scale) is a 24-item standardized scale intended to identify a wide range of symptoms and problems that occur across the diagnostic spectrum, including depression and functioning, relationships, self-harm, emotional lability, psychosis, and substance abuse.[21] Internal consistency reliability (Cronbach α) coefficients ranged from 0.75 to 0.89 and test–retest reliability coefficients (intraclass correlation coefficients) ranged from 0.81 to 0.96 for inpatients.[22] (2) The OQ-45, (Outcome Questionnaire) is a 45-question self-report outcome tracking instrument, which assesses symptom distress, interpersonal functioning, and social role.[23] The OQ-45 has a good internal consistency ($\alpha = 0.93$) and test–retest reliability ($r = 0.79$).[24] (3) The PCL-S is a 17-item self-report measure of the 17 DSM-IV symptoms of PTSD with high internal consistency ($\alpha = 0.97$) and test–retest reliability ($r = 0.96$).[25] The OQ-45 was selected for usage by the DDEAMC Behavior Health Care Line staff and was the primary outcome measure used from 2008–2013. In 2013, the Army Medical Command mandated a change to the BASIS-24 and PCL-S. These outcome measures were chosen for their high validity and reliability as well as their applicability across populations. Although the OQ-45 and BASIS-24 were not designed specifically as measures of PTSD or ADNOS symptom severity, they measure the core aspects of these disorders, cut across diagnoses to assess improvement over time, and provide cut-scores for reliable change and recovery,[26,27] aims that are consistent with the research questions identified in the present study. The researchers chose to include all three of the aforementioned psychological measures in collection and analysis to gain the most thorough understanding of changes across time intervals. Although the OQ-45 was in regular use from 2009 to 2012, the BASIS-24 was most commonly used from 2013 to 2014, whereas the PCL-S was utilized intermittently across all time intervals. To include only one of these measures in analysis would have provided an incomplete picture of psychological changes in the sample population. The researchers chose to measure percent change in psychological testing scores and increases versus decreases in overall medication prescription usage as these measures were the clearest indicators of changes in symptomatology given the availability of data.

Statistical Analysis

All data and statistical analyses were performed using SPSS Version 20.[28] Comparative analyses evaluated differences between the experimental (TM) and control groups after each time interval to determine whether TM, in conjunction with PE or CPT, served as a more effective method of reducing the severity of PTSD and ADNOS symptomatology and medication reliance for symptom management than PE or CPT alone. For the 74 participants included in analysis, 27 medications were prescribed as part of 8 different medication categories. Each participant was prescribed between 1 and 12 medications during the 6-month study period. As such, the most accurate, reliable method of quantifying medication prescription usage across multiple medications and time intervals was selected. Psychotropic medication information was recorded in terms of increases, decreases, or stabilization of prescription amounts, as well as when new additional medications were introduced at each time interval. Changes in medication dosage were determined as being greater, equal to, or less than previous prescription amounts as modified from the initial measurement. For all mean calculations, pair-wise exclusions of missing data were performed. All cases with available data at each specified time interval were included in analyses for that time point. This method of analysis directly addressed the question of a correlation between decreases in reliance on psychotropic medications and TM participation, as

it allowed for a quantified comparison of overall medication usage between study groups.

Changes in psychological symptom severity (where a decrease in symptom severity represents an increase in wellbeing) were measured from the baseline at 1, 2, 3, and 6 months from the start of treatment for both groups. A 2-period forecast trend line was created to display the predicted trend in psychological symptoms following treatment. To determine wellbeing, simple unweighted frequencies evaluated increases, stabilizations, and decreases in symptom severity between groups. For all participants, mean change scores were formulated based on the psychological test (BASIS-24, OQ-45, PCL-S) taken most frequently across time intervals. Because participants typically completed only one of the three tests across time intervals, percent change scores of the representative test were utilized to compare results by group as a method of generalizing across tests. The χ^2 tests evaluated the significance of the between-groups relationship for medication dosage changes at each time interval. The dependent variables were psychotropic medication dosage changes and a composite of changes in psychological symptom severity based on BASIS-24, OQ-45, and PCL-S scores. A one-way analysis of variance (ANOVA) was used to test for differences in psychological wellbeing between the two groups. Data (i.e., psychological test scores) were analyzed as dependent variables using: 2 (Intervention: TM vs. Control) by 2 (Time: baseline vs. 1, 2, 3, and 6 months postintervention) repeated measures analyses of variance with time as the repeated measure. Percent changes in psychological symptom severity were measured from the start of the study period as well as between intervals to determine whether TM had a long-lasting or temporary effect on psychological wellbeing.

RESULTS

Table I displays participant demographics as reported in AHLTA. There were no statistically significant differences between the groups on age, gender, or PTSD/ADNOS diagnosis ($ps > 0.36$). Of the 74 participants included in the study, 73.0% ($n = 27$) of the TM group and 70.3% ($n = 26$) of the control group were already taking psychotropic medications at the start of treatment.

Table II compares changes in the dosage of existing medications and addition of new medications prescribed to the TM and control groups at 1, 2, 3, and 6 months from the start of treatment. The TM group was less likely to increase medication dosages and more likely to show medication stabilization, decreases, or cessations. At 1 month, 83.7% ($n = 31$) of the TM group stabilized, decreased, or ceased medications and 10.8% ($n = 4$) increased medication dosage. In the control group, 59.4% ($n = 22$) showed stabilizations, decreases, or cessations and 40.5% ($n = 15$) increased medications (χ^2 [3] = 9.243; $p = 0.026$). A similar pattern was observed after 3 months, when 75.6% ($n = 28$) of the TM group showed decreases or stabilization as compared to 59.4% ($n = 22$) of the control group (χ^2 [3] = 16.899; $p = 0.001$). At 1 month, 5.4% ($n = 2$) of the TM group and 32.4% ($n = 12$) of the control group added additional medications (χ^2 [1] = 8.197; $p = 0.004$), and at 3 months, only 2.7% ($n = 1$) of the TM group added an additional medication as compared to 27.0% ($n = 10$) of the control group (χ^2 [1] = 8.118; $p = 0.004$).

Figure 1 displays the changes in prescription medication by treatment group, including increases in medication dosages and the introduction of additional medications over a 6-month period. The control group increased medication dosages significantly more often than the TM group after 1 month ($p = 0.026$) and 3 months ($p = 0.001$) but the changes were not statistically significant at 2 and 6 months (ps = ns). There was also a greater introduction of additional medications among the control group as compared to the TM group after 1 month ($p = 0.004$) and 3 months ($p = 0.004$) that were not statistically significant at 2 and 6 months (ps = ns).

Figure 2 displays mean changes in psychological symptom severity. The TM group was associated with a decrease in symptom severity from baseline after 6 months ($M = 0.898$, SD = 0.212), with a two-period forecast trend line predicting a continued decrease in symptom severity after 6 months. The control group was associated with an increase in symptom severity from baseline after 6 months ($M = 1.103$, SD = 0.552), with a 2-period forecast trend line

TABLE I. Participant Demographics

Item	TM Group $n = 37$	Control Group $n = 37$	Total $N = 74$
Age (N)	($M = 41.22$, SD = 8.14)	($M = 41.01$, SD = 8.73)	($M = 41.01$, SD = 8.73)
21–30	8.11% (3)	18.92% (7)	13.51% (10)
31–40	37.84% (14)	24.32% (9)	31.08% (23)
41–50	40.54% (15)	40.54% (15)	40.54% (30)
51–60	10.81% (4)	16.22% (6)	13.51% (10)
61–70	2.70% (1)	0	1.35% (1)
Gender (N)			
Female	8.10% (3)	8.10% (3)	8.10% (6)
Male	91.9% (34)	91.9% (34)	91.9% (68)
Diagnosis (N)			
ADNOS	54.05% (20)	54.05% (20)	54.05% (40)
PTSD	45.95% (17)	45.95% (17)	45.95% (34)

TABLE II. Psychotropic Medication Usage

Time Interval	One Month			Two Months			Three Months			Six Months		
$N = 74$	TM	Control	χ^2 (df)	TM	Control	χ^2 (df)	TM	Control	χ^2 (df)	TM	Control	χ^2 (df)
New Medication Introduced (N)	5.4% (2)	32.4% (12)	8.20 (1)**	10.8% (4)	18.9% (7)	0.96 (1)	2.7% (1)	27.0% (10)	8.12 (1)**	13.5% (5)	21.6% (8)	0.36 (1)
Medication Change N (%)			9.24 (3)**			2.64 (2)			16.90 (3)**			3.36 (3)
1+ Medications Ceased	5.4% (2)	8.1% (3)		13.5% (5)	10.8% (4)		13.5% (5)	0		16.2% (6)	21.6% (8)	
Medication Decreased	2.7% (1)	0		0	0		0	2.7% (1)		8.1% (3)	5.4% (2)	
Medication Stable	75.6% (28)	51.3% (19)		70.2% (26)	56.7% (21)		75.6% (28)	56.7% (21)		35.1% (13)	27.0% (10)	
Medication Increased	10.8% (4)	40.5% (15)		16.2% (6)	32.4% (12)		5.4% (2)	40.5% (15)		13.5% (5)	32.4% (12)	
Unknown	5.4% (2)	0		0	0		5.4% (2)	0		27.0% (10)	13.5% (5)	

*$p < 0.05$, **$p < 0.005$. All χ^2 results displayed represent the total between-groups relationship for each variable at the specified time interval. Changes in the amount of medication prescribed since the start of treatment.

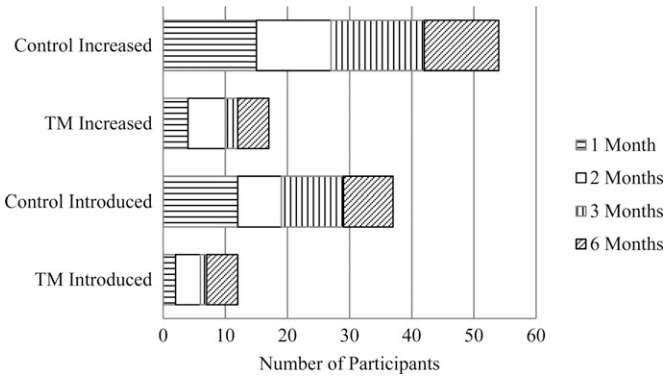

FIGURE 1. Increases in prescribed medication by treatment group: Comparison of the Transcendental Meditation (TM) and control groups on the number of participants with added medications or increased dosages over a 6-month period. Among the control group, more participants added additional medications than the TM group after 1 ($p = 0.004$) and 3 months ($p = 0.004$). The control group was also more likely to increase dosages than the TM group after 1 ($p = 0.026$) and 3 months ($p = .001$).

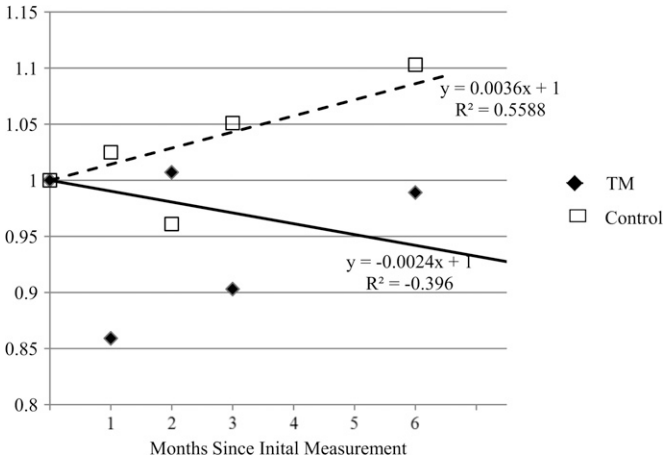

FIGURE 2. Changes in symptom severity by treatment group: Comparison of the Transcendental Meditation (TM) and control groups on the mean proportion change in psychological symptom severity from the baseline $Y = 1$, with results >1.00 signifying an increase in symptom severity. $Y = 1$ was defined as the baseline psychological score, with means over 1.0 signifying increases in symptom severity.

predicting a continued increase in symptom severity after 6 months, signifying a 20.5% difference between outcomes. Although not statistically significant at 2 and 6 months, changes in the psychological symptom severity scores differed between the two groups with a decrease for the TM group compared with an increase in controls after 1 month (F [1, 57] = 5.744, $p = 0.020$) and 3 months (F [1, 57] = 3.015, $p = 0.088$).

DISCUSSION

Overall, the results suggested that active duty military Service Members with PTSD or ADNOS who regularly practice TM, in addition to receiving traditional therapies, may experience decreases in medication reliance and psychological symptom severity compared with those who received the

same therapies without TM. The practice of TM was (1) more likely to be associated with decreasing, ceasing, or stabilizing psychotropic prescription dosages; (2) less likely to be associated with additional medications; and (3) more likely to be associated with decreases or stabilizations on self-report measures of psychological symptom severity compared with controls. The association of medication decreases for the TM group was statistically significant after 1 and 3 months. These findings were in accord with previous results of a 12-month study of patients with hypertension, which found that the practice of TM significantly decreased the use of antihypertensive medications compared to controls.[13]

Although the relationship between the TM and control groups with respect to decreases or stabilizations in medication prescription after 2 and 6 months was not statistically significant, the introduction of new medications for the control group was observed at almost twice the frequency of the TM group with more TM subjects showing a decrease or stabilization in medication usage. Although not statistically significant, psychological wellbeing improved among the TM group after 6 months, whereas the control group showed a slight decrease in wellbeing. It is important to note that although both groups displayed relatively stable psychological scores, the TM group was able to stabilize scores without increasing medication dosages, whereas the control group required increases in medication dosages for similarly stable or worsened results. Studies indicate that medication and therapy in combination serves as a more effective treatment for behavior health conditions than either treatment strategy alone.[29] In the Department of Defense and the Veterans Administration, medication treatment of PTSD is not considered a class "A" recommendation. The TM program may serve to address the stigma of being seen by a military behavior health provider, making it a potentially attractive treatment option for Service Members.[6]

If TM is to be considered as an effective adjunct therapy for relief of PTSD and ADNOS symptoms, the findings suggest that a reduction in the use of psychotropic medication use may be expected. An important consideration is the hesitancy that behavior health providers may have discontinuing a medication that seems to be working. Consider the scenario of a patient who is on psychotropic medication(s) and practicing TM who reports his symptoms as stable or perhaps even improving. In such a situation where both therapies have been initiated, the provider faces a difficult decision in his evaluation of the patient's progress, as there is no definitive way to know whether the stabilization or improvement in symptoms is due to the medications or TM.

Study Limitations

Internal Validity

The findings may be viewed with caution because of the small convenience sample size. The confounding variable of maturation was controlled for by the use of a matching control group, such that "time" was not observed to have an effect on recovery independent of TM practice. All individuals who fit the subject study criteria were included in the analyses to increase the possibility of equitable selection.

The instrumentation for the quantification of medication changes was a potential limitation to the study design. Because this study was completed through retrospective chart review, the authors could not control for medication prescription changes or limit the total number of medications prescribed. There was also the difficulty of quantifying multiple medications. Among participants in both groups, prescription of 27 different medications over 8 different medication categories resulted in limitations to generalizability of dosage changes. It was necessary to extend control group selection back 3 years before the start of TM to obtain a group of comparable size. During this period, the TBI and behavior health staffing, treatment algorithms, and practice demonstrated no significant changes.

Misuse of medication among patients who may have been medication noncompliant may have adversely impacted data collection on prescribed medication dosages and regularity of filled prescriptions but this effect applied to both groups. With regard to the statistical analysis, our methodology directly addressed the question of a correlation between decreases in reliance on psychotropic medications and TM participation, as it allowed for a quantified comparison of overall medication usage between study groups.

Although both the control and the TM group were subject to the same therapeutic interventions, CPT and PE therapy were not administered in an identical time frame to both groups. The control group participated in psychotherapy during an earlier time frame than the TM group and external factors affecting the controls may have changed, including mental health providers' treatment styles, organizational policies, military culture, and war-related events and media coverage.

Data missing because of lack of availability of documentation and the lack of a consistent severity tool limited the psychological symptom findings. In addition, patients did not always complete psychological testing measures within the specified time intervals. A further limitation listed was the lack of participant information following discharge from the military. Many members receiving treatment for behavior health conditions were also undergoing medical disability reviews and were not always available 6 months after the start of treatment, as they may have been discharged from active duty military service. Consequently, participants may have filled prescriptions through civilian pharmacies, at which point the AHLTA or CHCS databases may have falsely read as "no active medications." To address these issues we reasoned that because the TM and control groups were matched, it was likely that this effect was similarly prevalent in both groups and consequently less likely to pose a risk to the validity of the results.

External Validity

A larger sample size would have allowed for better generalization of study results, however, we were limited to 37 individuals who fit the criteria for the intervention group. Further research will need to be conducted to determine whether the findings can be repeated in other Army hospitals with active duty Service Members, Veterans, and civilians who have never served in the military. It is unknown whether these findings are generalizable to other meditation and mindfulness practices as alternative therapies.

Military Relevance and Conclusion

The most effective course of treatment for PTSD has been highly debated and is currently a central focus in the military community because of the large number of Service Members returning from recent deployment with PTSD.[30] The most pressing concern among military behavior and physical health providers is how best to provide effective, quality care to Service Members. Overall, the findings suggest that TM practice decreases psychotropic medication dosages and improves psychological testing scores compared with matched controls. It is anticipated that this chart review will provide valuable insight into the benefits of TM as a viable treatment modality in military treatment facilities. The retrospective chart review provided a valuable tool for quickly and inexpensively gathering pilot data and aids in guiding the development of future prospective studies. Based on our findings, a prospective randomized clinical trial of TM and its effects on behavioral wellness and psychotropic usage is warranted to determine if TM may serve as a viable supplement to therapy or as an alternative to psychotropic medication therapy.

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