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# Adjunct Application of Mindfulness-Based Intervention (MBI) in Post-Traumatic Stress Disorder (PTSD)

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## Abstract

In the management of post-traumatic stress disorder (PTSD), there is a need to reduce dependency on drugs with adverse effects and addiction potential as well as lessen the psychological burden to the patient and family and fiscal burden to governments and healthcare systems. Introduced in the late 1970s, mindfulness-based stress reduction (MBSR) or mindfulness-based intervention (MBI) blends nonsectarian practices, including body awareness, seated or walking meditation, yoga, and prayer. The adjunct use of one or more of these methods has proved helpful for specific patients in noting and controlling stressors and triggers to their condition and in some cases, reducing their dependency on medicines with adverse effects.

***Keywords:*** *Adverse Effects; Meditation; Mindfulness; Opioids; Prayer; Stress; Trauma; Yoga*

## Abbreviations

CPT: Cognitive Processing Therapy; MBCT: Mindfulness-Based Cognitive Therapy; MBI: Mindfulness-Based Intervention; MBSR: Mindfulness-Based Stress Reduction; PE: Prolonged Exposure Therapy; PTSD: Post-Traumatic Stress Disorder; TCA: Tricyclic Antidepressants; VHA: Veterans Health Administration

## Preface

According to Hafid and Kerna (2019): In the management of post-traumatic psychological conditions, there is a need to reduce the dependency on drugs with adverse effects, and to discover and apply adjunct therapies and methods for more effective outcomes with medical treatment. Introduced in the late 1970s, mindfulness-based stress reduction (MBSR) or mindfulness-based intervention (MBI) utilizes nonsectarian practices, including body awareness, seated or walking meditation, yoga, and prayer. The adjunct use of one or more of these methods is proving helpful for specific patients in noting and controlling stressors and triggers to their conditions and behaviors, and in some cases, reducing their dependency on medicines with adverse effects and resulting in more efficacious outcomes to their treatment [1].

## Introduction

Mindfulness-based stress reduction (MBSR) or mindfulness-based intervention (MBI) is composed of methods based on historical beliefs, traditions, and practices, including but not limited to Buddhism, Shambhala, Vipassana, and Zen ideologies. A prominent figure in

the Western adaptation of Eastern philosophies, beliefs, and practices in MBSR and MBI, Jon Kabat-Zinn, describes "mindfulness" as the capacity to maintain mental openness regarding tolerance and nonjudgmental focus in the present moment.

Other scholars have characterized "mindfulness" as a blend of awareness and focus on fostering self-consciousness or self-awareness and emotional "control" (paradoxically by dismissing the control of a state of being). MBSR and MBI emphasize neutral—nonjudgemental—attitudes and perceptions. In a pathological sense, harmful ideas, feelings, or states of being can promulgate and sustain a cycle of negative thought progression reinforcing negative states and, in specific cases, medical conditions such as PTSD [2].

The theoretical rationale for the application of MBSR and MBI is based on attention-discipline or attention-control via various methods, such as body awareness, meditation, yoga, and or prayer, in which negative inner thoughts, feelings, and attitudes are abandoned in an attempt to break the psychosomatic reinforcement cycle in specific conditions. MBI enables a person or patient to prompt a psychological state of nonjudgmental focus within the present moment experience, regardless of other ideas, feelings, and thoughts that might pass through consciousness during the "practice" or application of MBI.

In the western world, MBSR was developed and promulgated in the late 1970s by Jon Kabat-Zinn at the University of Massachusetts Medical Center [3]. The origins of MBSR include specific cultural practices and religious beliefs. However, MBSR does not adhere to or demand specific cultural practices or religious beliefs from its users or healthcare practitioners who recommend or prescribe them.

Mindfulness practices have come in various forms throughout human history. MBSR-based practices have been presented as a pathway to self-awareness and a deeper awareness of oneself, seen as an ephemeral and interrelated entity within the universe. While in a state of mindfulness, attention is diverted from physical desires of and connections to the material world, and directed toward inner awareness [4-6].

The experience of deliberately focusing attention on the present moment and allowing thoughts and feelings to flow through the mind, body, and spirit are essential in MBI. MBI methods include body awareness, seated or walking meditation, yoga, and prayer [4-6]. In summary, MBI historically and in the modern-day is performed to enhance mental plasticity, self-examine thoughts and feelings, and self-regulate emotions [2]. Two fundamental principles that epitomize mindfulness are deliberate focus given to the present time and nonjudgmental acknowledgment of feelings, ideas, and thoughts [5]. The essence of mindfulness practices is to focus intently on sensations, observations, and emotions which are experienced in the present moment.

Western medicine is slowly uncovering a scientific basis for the application of MBI as adjunctive therapy for specific conditions. Applying MBI as adjunctive therapy in PTSD patients may have the advantage of not only ameliorating or eliminating the psychological distress experienced by patients but also in reducing or eliminating dependence on pharmaceutical agents that can have adverse effects.

## Discussion

### Etiology of post-traumatic stress disorder (PTSD)

Individuals, such as first-responders or military veterans (who have repeatedly experienced traumatic events or scenes) carry a lifetime risk of 6.8% in developing post-traumatic stress disorder (PTSD) [5]. An epidemiological overview of PTSD-rates among inhabitants of North America found that three out of four people will experience a traumatic event at some point in their lives. From those individuals, about 3% are expected to develop PTSD [6]. Events that carry a long-term risk of PTSD include but are not limited to sexual assault or rape, physical and or emotional abuse, neglect, severe accidents or disasters, and exposure to war or combat.

PTSD symptoms include but are not limited to negative thoughts, evasion of trauma reminders, altered view of self or world, and hypervigilance. Of nearly one million military veterans who sought care from the Veterans Health Administration (VHA) medical centers, slightly more than 50% suffered from a mental disorder. From those that presented to VA healthcare facilities with psychological conditions, about 30% were diagnosed with PTSD [6]. Multiple-traumatic events increase the rate of lifetime PTSD [7].

### Pros and cons of current treatment regimes for PTSD

Conventional pharmacotherapy for PTSD include antidepressants, adrenoreceptor antagonists, anticonvulsants, atypical antipsychotics, and benzodiazepines. However, the efficacy of pharmacotherapy for PTSD has not been well established. Nonetheless, the most promising drugs in the treatment of PTSD are selective serotonin reuptake inhibitors (SSRIs) and tricyclic antidepressants (TCAs) [7].

Some research suggests that military veterans may lack appropriate coping skills and versatility to implement cognitive-affective processing strategies [4]. First-line nonpharmacotherapeutic intervention regarding PTSD involves prolonged exposure therapy (PE) and cognitive processing therapy (CPT) [6]. While a significant number of individuals improve using these therapies, efficacy is not universal.

Pharmacological intervention and psychotherapy still leave PTSD patients with unresolved symptoms from their traumatic experiences [4]. Thus, other treatment options and adjunctive therapies should be considered in PTSD.

### Application of MBI in PTSD

The application of MBI has been successful in a wide range of psychological disorders, including PTSD [5-8]. MBI offers nonpharmacological intervention, particularly for those who fail to respond with PE and CPT. Also, a growing number of military veterans have sought care at VHA centers for psychological conditions associated with PTSD without resolution with pharmacotherapy [4]. MBI has shown positive therapeutic and preventative outcomes in PTSD patients.

MBI addresses and influences the psychopathological aspect of the traumatic event, reducing the perceived severity of the traumatic events and providing a sense of comfort and emotional support and regulation [2,9]. MBI can be taught and learned as well as altered, refined, and modified to meet specific patient needs. MBI is gaining momentum in its application in PTSD in that it lowers anxiety and depressive scores [4].

Currently, there is a rise in mental disorders, such as PTSD. MBI may be combined with other interventions to address these illnesses and conditions better [2]. MBI methods, techniques, and skills may be beneficial in high-stress occupations by reducing the effects of a traumatic event, immediately and over time. MBI and mindfulness-based cognitive therapy (MBCT) are promising as adjunctive therapy in PTSD [6]. Mindfulness-based methodologies, including MBI, MBSR, and MBCT, are thought to address key features of PTSD, such as hyperarousal, negative thoughts, “shame and blame”, and separation. Specific factors are associated with individual resistance to PTSD, including long-term individual resilience, evidence of an internal locus of control, social support, psychological adaptability, religious beliefs, and altruism [5].

### Limitations of MBI in the treatment of PTSD

MBI is not necessarily a “one size fits all” therapeutic intervention. A patient's active participation is vital in developing MBI skills, which some trauma-exposed victims have not considered or are hesitant to undertake (in a continuing effort to deny the traumatic experience and defer the recognition and treatment thereof). The ease of taking a prescription medication to “treat” the condition can result in a patient's refusal to participate in or withdrawal from MBI, particularly in individuals slow to respond to MBI. Another hurdle in the application of MBI is the lack of precise and established guidelines for its use in PTSD.

## Conclusion

According to Hafid and Kerna (2019), mindfulness practices have been used in various forms throughout human history to gain self-awareness and a more profound sense of connection to the human “spirit” or a creator or creative force. Western medicine is beginning to seek a scientific basis for the application of MBI as adjunctive therapy for specific conditions [1]. MBI may have an advantage in addressing the sequelae of traumatic events (e.g., PTSD) by lessening symptoms and avoiding or minimizing drugs that have adverse or addictive effects. Currently, there is no standard medical protocol for mindfulness-based intervention in post-traumatic stress disorder, which makes its universal and protocol-based application challenging. However, for specific PTSD patients, it may be well worth a referral

to a competent practitioner or center for body awareness, meditation, yoga, or prayer.

## Conflict of Interest Statement

The authors declare that this paper was written in the absence of any commercial or financial relationship that could be construed as a potential conflict of interest.

## Supplementary Note

Healthcare providers interested in integrating MBSR methods into their practices should consider the following resources:

- Mindfulness-Based Stress Reduction, Professional Training-Mindfulness-Based Stress Reduction, Curriculum Guide and Supporting Materials, Integrating Mindfulness Meditation into Health Care (https://www.umassmed.edu/globalassets/center-for-mindfulness/documents/mbsr-curriculum-guide-2017.pdf).
- Palouse Mindfulness, Mindfulness-Based Stress Reduction (https:/palousemindfulness.com).

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