

# March 2023

#### **Q: What is mindfulness-based stress reduction?**

**A:** Mindfulness-based stress reduction (MBSR) is one of multiple mindfulness-based interventions (MBIs) which integrate traditional Eastern mindfulness practices with more contemporary psychotherapy practices (Gu, Strauss, Bond, & Cavanagh, 2015). Along with mindfulness-based cognitive therapy (MBCT), MBSR is among the most used and evaluated MBIs. MBSR is an eight-week, group-based treatment that involves mindfulness meditation, body awareness, and yoga (Kabat-Zinn, 1982). MBSR was originally used to treat chronic pain but has since been used to treat a range of mental health conditions, including generalized anxiety disorder (GAD).

#### Q: What is the treatment model underlying MBSR for GAD?

**A:** MBSR is based on mindfulness, which Jon Kabat-Zinn, the creator of MBSR, defined as "the awareness that emerges though paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (Kabat-Zinn, 2003). In MBSR, mindfulness meditation is taught as a self-regulatory coping strategy. GAD is often characterized by rumination about the past and worry about the future. Decentering (i.e., one's ability to consider their thoughts as "psychological events" and to disengage and view them with perspective; Hoge et al., 2015) and mindfulness are both core features of MBSR and may help to address these components of GAD. One analysis found that changes in mindfulness and decentering significantly mediated the effect of MBSR on anxiety (Hoge et al., 2015).

### Q: Is MBSR recommended as a treatment for GAD in the Military Health System (MHS)?

A: There is no VA/DOD clinical practice guideline (CPG) on the treatment of GAD.

The MHS relies on the VA/DOD CPGs to inform best clinical practices. In the absence of an official VA/DOD recommendation, clinicians should look to CPGs and authoritative reviews published by other recognized organizations and may rely on knowledge of the literature and clinical judgement.

### Q: Do other organizations with CPGs or authoritative reviews recommend MBSR for GAD?

**A:** No. CPGs or authoritative reviews published by other organizations have not substantiated the use of MBSR for GAD.

Other recognized organizations publish CPGs or conduct systematic reviews and evidence syntheses on psychological health topics using similar grading systems as the VA/DOD CPGs. These include the American Psychiatric Association, American Psychological Association, and United Kingdom's National Institute for Health and Care Excellence (NICE). Additionally, Cochrane is an international network that conducts high-quality reviews of health care interventions.



## Q: Is there any recent research on MBSR as a treatment for GAD?

**A:** A 2022 systematic review examined the effectiveness of MBSR on anxiety, depression, and quality of life in women with breast cancer (Ladenbauer & Singer, 2022). Of the six studies that were included, four (including a meta-analysis representing a total of 1162 patients) found reductions in anxiety symptom severity, however, "anxiety" was not limited to a diagnosis of GAD, and one was a non-randomized trial. This is consistent with previous meta-analyses and systematic reviews that have had similar methodological limitations. Hoffman & Gomez (2017) noted in their review that many studies on MBIs are non-randomized and of low quality. Systematic reviews and meta-analyses which have found that MBIs may be effective in treating a variety of mental health disorders often group together MBIs and patient populations (e.g., individuals with different psychiatric diagnoses; Hofmann, Sawyer, Witt, & Oh, 2010; Khoury et al., 2013). One randomized controlled trial compared MBSR specifically to an active control for GAD (Hoge et al., 2013). Ninety-three individuals diagnosed with GAD were randomized to either 8 weeks of MBSR or to an attention control (Stress Management Education). MBSR was associated with a greater reduction in anxiety symptoms on secondary measures (the Clinical Global Impressions Severity of Illness and Improvement Scales and the Beck Anxiety Inventory) but not on the primary outcome measure (Hamilton Anxiety Rating Scale).

### Q: What conclusions can be drawn about the use of MBSR as a treatment for GAD in the MHS?

**A:** Although the body of literature on MBIs such as MBSR has expanded in recent years and found some promising results in the treatment of psychiatric conditions, methodological problems limit conclusions about its effectiveness. Additional high-quality RCTs that focus on MBSR in the treatment of GAD specifically, along with systematic reviews that include only RCTs and that grade the strength of the evidence, are needed to determine whether MBSR is an effective treatment for GAD.



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