

Q. What is yoga?

A. The practice of yoga originated in India thousands of years ago. Traditionally, the practice of yoga encompasses ethical living, spiritual practice, physical activity, breathing exercises, and meditation (Cramer, Lauche, Langhorst, & Dobos, 2013). In the United States, yoga has become a popular mind-body intervention, promoted to improve both physical and mental well-being. Various types of yoga are practiced, characterized by different emphases on aerobic exercise, stretching, alignment, and mindfulness. The most commonly practiced type of yoga in America is hatha yoga, which involves physical postures and can include meditation and breathing control (Uebelacker & Broughton, 2016).

Q. What are the potential mechanisms of action underlying yoga?

A. There have been different hypothesized mechanisms by which yoga might potentially influence posttraumatic stress disorder (PTSD). For example, the element of physical activity alone may improve PTSD symptoms (Rosenbaum et al., 2015). An integral feature of yoga is the synchronization of slow rhythmic breathing to body movements. This synchronization activates the parasympathetic nervous system (Papp, Lindfors, Storck, & Wandell, 2013) and may reduce amygdala hyperactivation and elevated cortisol levels (Streeter, Gerbarg, Saper, Ciraulo, & Brown, 2012). In particular, this may help with the hyperarousal symptoms of PTSD. At the present, however, there is limited empirical data supporting the beneficial effects of yoga on autonomic nervous system dysregulation (Kelly, Evans, Baker, & Taylor, 2018).

Q. Is yoga recommended as a treatment for PTSD in the Military Health System (MHS)?

A. **No.** The 2017 VA/DoD Clinical Practice Guideline (CPG) for the Management of Posttraumatic Stress Disorder and Acute Stress Disorder states that there is insufficient evidence to recommend any complementary and integrative health practice, including yoga.

The MHS relies on the VA/DoD CPGs to inform best clinical practices. The CPGs are developed under the purview of clinical experts and are derived through a transparent and systematic approach that includes, but is not limited to, systematic reviews of the literature on a given topic and development of recommendations using a graded system that takes into account the overall quality of the evidence and the magnitude of the net benefit of the recommendation. A further description of this process and CPGs on specific topics can be found on the VA clinical practice guidelines website.

Q. Do other authoritative reviews recommend yoga as a treatment for PTSD?

A. **No.** Other reviews have not substantiated the use of yoga for PTSD.

Several other recognized organizations conduct systematic reviews and evidence syntheses on psychological health topics using similar grading systems as the VA/DoD CPGs. These include the Agency for Healthcare Research and Quality (AHRQ) and Cochrane.

- AHRQ: No reports on yoga for PTSD were identified.
- Cochrane: No systematic reviews on yoga for PTSD were identified.

Q. Is there any recent research on yoga as a treatment for PTSD?

A. A March 2020 literature search identified several recent systematic reviews of yoga for PTSD, of varying quality. One of these reviews included a meta-analysis and used GRADE methodology to rate the quality of evidence (Cramer, Anheyer, Saha, & Dobos, 2018). This systematic review and meta-analysis of yoga for PTSD included seven randomized controlled trials (RCTs), with a total of 284 participants with PTSD. There was low quality evidence for clinically relevant effects of yoga on PTSD compared to no treatment, and very low quality evidence for comparable effects of yoga and attention control comparison

groups. The authors conclude that only a weak recommendation for yoga as an adjunct intervention for PTSD can be made, and more high quality studies are needed.

Q. What conclusions can be drawn about the use of yoga for PTSD in the MHS?

A. Based on the current evidence base, yoga is not recommended as a front-line treatment for PTSD in the MHS. More research is needed to establish the efficacy of yoga as a treatment for PTSD.

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