



Sleep, Trauma, and PTSD: Research Brief

Overview

- ✓ Insomnia, nightmares, and obstructive sleep apnea (OSA) affect upwards of 90% of patients with PTSD¹
- ✓ Historically, these sleep disturbances were thought to result from PTSD symptoms (e.g., hyperarousal)
- ✓ However, it is now recognized that sleep disturbances also contribute to PTSD onset, maintenance, and recovery²

Sleep and Posttraumatic Functioning

- ✓ Insomnia and nightmares are common reactions to trauma (even in the absence of PTSD)^{3,4} and are related to poorer overall health, including increased suicidality^{5,6}
- ✓ Further, insomnia and nightmares—before or after trauma—increase risk of later PTSD and depression^{7–17}
- ✓ OSA also directly affects PTSD symptoms, suicidal ideation, and quality of life¹⁸

The Role of Sleep in PTSD Maintenance and Recovery

- ✓ Insomnia persists after PTSD naturally remits¹⁹ or is successfully treated, including with Cognitive Processing Therapy (CPT) or Prolonged Exposure (PE)^{20–24}
- ✓ Insomnia may be maintained by factors other than PTSD, such as a fear of sleep²⁵
- ✓ Given the links between insomnia and PTSD, patients whose insomnia persists after PTSD interventions may be at increased risk of PTSD symptom relapse²⁶

The Mechanisms Underlying the Sleep and PTSD Relationship

- ✓ Sleep disturbances hinder emotional learning that is key for naturally recovering from PTSD and benefiting from certain PTSD treatments, namely PE²
- ✓ Indeed, PE is less effective in veterans with OSA,²⁷ and could be enhanced by helping OSA patients access and adhere to using continuous positive airway pressure (CPAP)²⁸

Treatment Implications and Areas for Future Research

- ✓ Studies are now pairing PTSD treatments with behavioral sleep interventions^{29,30}
- ✓ Examples of this include integrating PE with CBT for Insomnia,³¹ and sequencing CPT before or after CBT for Insomnia and Nightmares (CBT-I&N)³²
- ✓ More awareness of OSA in PTSD is needed, including the importance of referring patients to objective OSA screening (in VA, this is done with Pulmonary Sleep Clinics)
- ✓ We still need to determine if sleeping prior to or immediately post-trauma helps prevent PTSD in at-risk populations (e.g., pre-deployment, emergency department patients)³³
- ✓ We have yet to identify optimal ways to leverage sleep to enhance exposure therapy³⁴

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