Sleep, Trauma, and PTSD: Research Brief

Overview
- Insomnia, nightmares, and obstructive sleep apnea (OSA) affect upwards of 90% of patients with PTSD.
- 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 recovery.

Sleep and Posttraumatic Functioning
- Insomnia and nightmares are common reactions to trauma (even in the absence of PTSD) and are related to poorer overall health, including increased suicidality.
- Further, insomnia and nightmares—before or after trauma—increase risk of later PTSD and depression.
- OSA also directly affects PTSD symptoms, suicidal ideation, and quality of life.

The Role of Sleep in PTSD Maintenance and Recovery
- Insomnia persists after PTSD naturally remits or is successfully treated, including with Cognitive Processing Therapy (CPT) or Prolonged Exposure (PE).
- Insomnia may be maintained by factors other than PTSD, such as a fear of sleep.
- Given the links between insomnia and PTSD, patients whose insomnia persists after PTSD interventions may be at increased risk of PTSD symptom relapse.

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 PE.
- Indeed, PE is less effective in veterans with OSA, and could be enhanced by helping OSA patients access and adhere to using continuous positive airway pressure (CPAP).

Treatment Implications and Areas for Future Research
- Studies are now pairing PTSD treatments with behavioral sleep interventions.
- Examples of this include integrating PE with CBT for Insomnia, and sequencing CPT before or after CBT for Insomnia and Nightmares (CBT-I&N).
- 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).
- We have yet to identify optimal ways to leverage sleep to enhance exposure therapy.

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