MACS
Maryland Addiction Consultation Service

THE ROLE OF SLEEP AND SUVOREXANT IN OPIOID USE DISORDER TREATMENT

FACT SHEET

Sleep and Opioid Use Disorder (OUD)

- Chronic opioid use and opioid agonist treatments (e.g., methadone, buprenorphine) can significantly impact sleep, leading to reduced sleep quality and daytime sleepiness.
- Patients with OUD often report severe insomnia, fragmented sleep, and circadian rhythm disturbances both during substance use and recovery.

Impact of Sleep Disturbances on OUD Treatment Outcomes

Return to use and overdose
Insomnia symptoms during OUD treatment predict return to use and risk of overdose.

Craving and emotional dysregulation
Sleep disruption worsens cravings and mood dysregulation, which could make recovery more challenging.

Quality of life
OUD patients with sleep disturbance report a lower quality of life.

Best Practices for Sleep Measurement

- **Patient-reported outcomes**
  - Sleep diaries, Insomnia Severity Index (ISI), Pittsburgh Sleep Quality Index (PSQI)
- **Objective measures**
  - Actigraphy (wrist-worn device), Polysomnography – the measurement of brain waves, breathing, heart rate and body movements overnight (in lab or with portable equipment)

1-855-337-MACS (6227) | www.marylandmacs.org | macs@som.umaryland.edu

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Evidence for Suvorexant as an Adjunctive Treatment

- The FDA approved suvorexant in 2014 as the first dual orexin receptor antagonist for the treatment of adult insomnia characterized by difficulties with sleep onset and/or sleep maintenance. Unlike traditional sedative sleep aids, suvorexant promotes sleep by suppressing the brain's wakefulness network.
- A growing body of research has found that the medication suvorexant (Belsomra®) could be a treatment for patients with OUD experiencing sleep difficulties.
- A randomized study (N = 38) tested suvorexant (20mg, 40mg) versus placebo in individuals with OUD undergoing a brief buprenorphine taper. Suvorexant led to:
  - Increased total sleep time and reduced withdrawal symptoms post-taper, with no evidence that it was used nonmedically.
  - Significant improvements in both self-reported and EEG-measured sleep. Notably, patients also experienced reductions in opioid craving despite already receiving standard MOUD, highlighting suvorexant's potential as a non-opioid adjunctive treatment.

Take-Home Messages

- **Sleep matters in recovery.** Sleep disturbances are common among patients with OUD and can increase risk of mood dysregulation, reduced quality of life, and return to use.
- **Improving sleep may improve treatment outcomes.** Treating sleep disturbances among patients with OUD may reduce cravings, improve mood, support cognitive functioning and enhance quality of life.
- **Suvorexant shows promise.** Unlike traditional sedatives, suvorexant targets the brain's wakefulness system. Early evidence suggests it can safely improve sleep and ease withdrawal symptoms in people tapering off opioids without increased risk of nonmedical use.

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