

# Posttraumatic Sleep Disturbances in Veterans: A Pilot Randomised Controlled Trial of CBT-I and IRT

Prguda, E., Evans, J., McLeay, S., Romaniuk, M., Phelps, A.J., Lewis, K et al.  
Veteran Mental Health, Gallipoli Medical Research Foundation

## Introduction / Background

Posttraumatic stress disorder (PTSD) is associated with sleep disturbances including insomnia and nightmares. This study compared Cognitive Behavioral Therapy for Insomnia (CBT-I) with CBT-I combined with Imagery Rehearsal Therapy (IRT) for nightmares to evaluate if the combined treatment (CBT-I + IRT) led to greater reductions in trauma-related sleep disturbances in Australian veterans.

## Methods

Veterans with diagnosed PTSD, insomnia, and nightmares ( $N = 31$ ) were randomised to eight group CBT-I sessions or eight group CBT-I + IRT sessions. Self-reported sleep, nightmare and psychological measures (primary outcome measure: Pittsburgh Sleep Quality Index), and objective actigraphy data were collected. The effect of obstructive sleep apnea (OSA) risk on treatment outcomes was also examined.

## Contact Information:

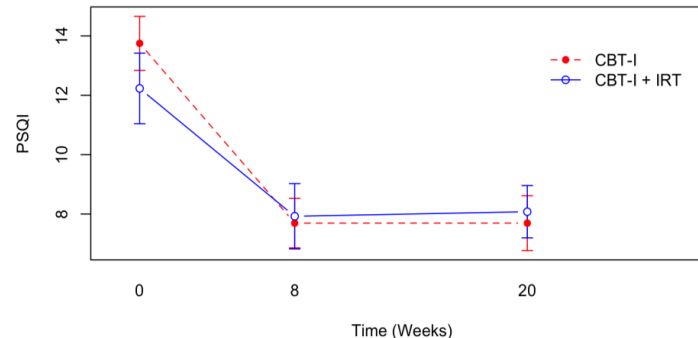
PrgudaE@ramsayhealth.com.au

## Results

No treatment condition effects were detected for the combined treatment compared to CBT-I alone, and no moderating effect of OSA risk was detected. On average, participants from both groups improved on various self-report measures over time (baseline to 3-months post-treatment). Despite the improvements, mean scores for sleep-specific measures remained indicative of poor sleep quality.

There were also no significant differences between the groups on the actigraphy indices. Nonetheless, consistent with the self-report findings, there were noteworthy improvements for both groups over time. Total sleep time improvement: 59.1 minutes for the CBT-I groups; 47.2 minutes for the CBT-I + IRT group.

**Figure.** Pittsburgh Sleep Quality Index scores by treatment over time



## Conclusions

The findings indicate that there is potential to optimise both treatments for veterans with trauma-related sleep disturbances. Future research directions: examine whether certain subgroups of veterans are most likely to benefit from IRT, examine veterans' treatment perceptions, and the OSA findings warrant further investigation in veteran samples.

## Acknowledgments

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