

## What?

**Nightmare disorder** (ND) is defined as having dreams with strong negative emotions during rapid eye movement (REM) sleep that impact nighttime or daytime functioning. Left untreated, ND can carry on for **decades**, which can result in chronic sleep disorders including **insomnia**.<sup>1</sup>

## Why?

Chronic sleep deprivation as a result of ongoing ND can increase **mortality and morbidity**, and reduce performance during waking activities, leading to **accidents** and an overall **reduction in quality of life**.<sup>2</sup>

## Nightmare-focused psychotherapy<sup>3</sup>

Imagery Rehearsal Therapy (IRT) is a cognitive behavioural technique that involves:

- Recalling the nightmare.
- Changing the storyline from negative to positive.
- Rehearsing the dream scenario during the day.



## Proposed Ad-hoc Treatment<sup>1</sup>

Targeted Memory Reactivation (TMR) is used (in combination with IRT) to manipulate memory processing through cues applied during sleep. The study found that **playing a sound** associated with the positive scenario **during REM sleep** can **reduce the frequency of nightmares** and **promote positive emotion in dreams, relative to IRT alone**.



*Note: Currently IRT is only listed under NICE guidelines as an intervention method for PTSD<sup>5</sup>*

## Who?

**Stress, anxiety** and **trauma** have been **strongly associated** with causing nightmares. While frequent nightmares are common in children, they are also observed in adults. Current evidence indicates that nightmares are more **commonly reported by women** than men during adolescence and young adulthood.<sup>4</sup>

## Author Comments

While the study for TMR indicates benefits to ND treatment, there were limitations. A placebo effect is suggested from the expectation of knowing that TMR boosts IRT success. However, this could also apply to knowing the outcome from successful IRT. The use of a sham group would help identify the extent of the placebo effect and whether the effects are greater when knowing about TMR-IRT than just IRT.