



# Cognitive-behavioural therapy for insomnia: effective, long-lasting and safe

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**ABSTRACT FROM:** Trauer JM, Qian MY, Doyle JS, *et al.* Cognitive behavioral therapy for chronic insomnia: a systematic review and meta-analysis. *Ann Intern Med* 2015;163:191–204.

## WHAT IS ALREADY KNOWN ON THIS TOPIC

Numerous well-conducted randomised controlled studies of cognitive-behavioural therapy for insomnia (CBT-I) have demonstrated that it is efficacious in both the immediate post-treatment and long terms in a wide variety of patient populations.<sup>1–3</sup> This includes individuals with uncomplicated chronic insomnia<sup>1</sup> and those whose chronic insomnia is comorbid with medical or psychiatric disorders.<sup>2,3</sup> Trauer and colleagues have conducted a systematic review and meta-analysis to collect all the relevant evidence about CBT-I and quantify its overall effects.

## METHODS OF THE STUDY

The data were obtained from searches of MEDLINE, EMBASE, PsycINFO, CINAHL, the Cochrane Library and PubMed Clinical Queries from inception to 31 March 2015, supplemented with manual screening. Study selection criteria were randomised controlled trials assessing the efficacy of face-to-face, multimodal CBT-I compared with inactive comparators in adults with chronic insomnia. Studies of insomnia comorbid with medical, sleep or psychiatric disorders were excluded. Data extraction included study characteristics, quality and outcome data assessed by two independent reviewers. Main outcomes were sleep onset latency, wake after sleep onset, total sleep time and sleep efficiency. Meta analyses were conducted using random-effects models, with heterogeneity assessed using the  $I^2$  statistics and publication bias assessed with funnel plots and the Egger test.

## WHAT DOES THIS PAPER ADD

- ▶ There is robust meta-analytic evidence that CBT-I is an efficacious treatment for uncomplicated chronic insomnia with both immediate post-treatment and long-term benefits.
- ▶ The effects observed in the meta-analytic outcome measures indicate that CBT-I provides clinically meaningful short-term benefits; sleep onset latency improved by 19 min, wake after sleep onset improved by 26 min, and sleep efficiency improved by 10%, with observed long-term benefits to be of comparable magnitude.

## LIMITATIONS

- ▶ The study's findings are limited by their narrow inclusion criteria such that they addressed CBT-I effects only in uncomplicated chronic insomnia. However chronic insomnia typically presents in the context of comorbid medical or psychiatric conditions, patient populations the current study excluded. Fortunately two other recent meta-analytic studies addressed this limitation. Gieger-Brown *et al*<sup>2</sup> have demonstrated that CBT-I is equally efficacious for sleep in the short and long term in individuals who have chronic insomnia and comorbid conditions, such as pain, depression, etc. In a similar study, Wu *et al*<sup>3</sup> found that CBT-I not only improved sleep in such

comorbid populations but also noted that, “a small to medium positive effect was found across comorbid outcomes, with larger effects on psychiatric conditions compared with medical conditions”.

- ▶ The study is also limited by the choice to only examine studies which employed face-to-face CBT-I, despite the movement towards conducting well-controlled trials of CBT-I delivered via other formats (telephone and the internet).<sup>4,5</sup>

## WHAT NEXT IN RESEARCH

Trauer and colleagues and other recent meta-analyses examining the efficacy of CBT-I<sup>2,3</sup> all point in the same future research direction—larger scale, rigorously controlled studies with both sleep and daytime function and comorbid illness-based outcome measures that will reduce detection and performance bias and provide better estimates of the effect of CBT-I on both insomnia and comorbid conditions.

## DO THESE RESULTS CHANGE YOUR PRACTICES AND WHY?

Yes, they do. Trauer and colleagues provide very strong evidence for the efficacy of CBT-I in uncomplicated chronic insomnia. Other comparable meta-analyses suggest this efficacy extends to comorbid insomnia and may even extend to the comorbid illnesses. Trauer and colleagues and related studies clearly demonstrate that CBT-I should, whenever feasible, be considered as a front-line therapy for chronic insomnia. Practitioners should seek out qualified CBT-I providers in their area and be prepared to refer patients as appropriate.

**Competing interests** None declared.

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