

Comparative effectiveness and safety of pharmacological and non-pharmacological interventions for insomnia: an overview of reviews

Summary

The rate of prescription sleep aid use has risen despite clinical guidelines endorsing non-pharmacological treatment over pharmacological treatment for insomnia. This review found consistent evidence of effectiveness for both pharmacological and non-pharmacological interventions based on data from moderate to high quality systematic reviews with meta-analysis (SR + MA). Evidence is needed to support the development of guidelines that encourage both the appropriate use of pharmacological interventions to treat insomnia and increasing access to and uptake of non-pharmacological approaches.

Implications

Cognitive behavioural therapy (CBT) is an effective first-line therapy for adults with insomnia followed by other behavioral interventions, and either can be supplemented with short courses of pharmacological interventions. However, there is no available evidence on the appropriate duration of pharmacological therapy in these reviews. The current results should be interpreted with caution, as many of the included studies that were included in the SRs were low quality, and improvements in the methods used to synthesize knowledge in this field are needed.

Reference: Rios P, Cardoso R, Morra D, et al. Comparative effectiveness and safety of pharmacological and non-pharmacological interventions for insomnia: an overview of reviews. *Syst Rev.* 2019 Nov 15;8(1):281.

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What is the current situation?

- Insomnia is a common disorder and can contribute to functional impairments, reduced quality of life, cognitive problems and mood disturbances, and may be a risk factor for the onset of mental health disorders
- Clinical practice guidelines published in the USA, Canada, and Europe recommend non-pharmacological approaches for chronic insomnia (symptoms > 3 months) and pharmacological treatment in acute cases (< 3 months) or as a short-term supplement to non-pharmacological approaches
- Despite this, the rate of pharmacological use for insomnia has risen over the last 20 years

What is the objective?

- To assess the clinical effectiveness and safety of pharmacological and non-pharmacological interventions in adults with insomnia and identify areas where further research or policy development is needed

How was the review conducted?

- MEDLINE, Embase, PsycINFO, The Cochrane Library, PubMed, and relevant grey literature sites were searched from inception until June 14, 2017
- Two reviewers independently screened titles/abstracts and full-text articles, and a single reviewer with an independent verifier completed charting, data abstraction, and quality appraisal (AMSTAR 2)
- No formal statistical analysis was performed as substantial heterogeneity was expected

What did the review find?

- Zolpidem, suvorexant, doxepin, and CBT all demonstrated consistent evidence of effectiveness across multiple outcomes reported in more than one high or moderate quality SR+MA
- Temazepam, triazolam, zopiclone, trazodone, and behavioural interventions all demonstrated consistent evidence of effectiveness across multiple outcomes reported in at least one moderate or high quality SR+MA
- Evidence gaps in insomnia research include the lack of studies examining potential harms of pharmacological interventions, head-to-head comparisons of pharmacological and non-pharmacological interventions, effects of different doses, and effects of sequencing or combining drug and non-drug interventions
- Standards that allow researchers to interpret whether a statistically significant change in common measures for insomnia symptoms translates to a clinically significant one are needed

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