



Extended Research Article

Effects of pharmacological and non-pharmacological interventions for the management of sleep problems in people with fibromyalgia: a multi-methods evidence synthesis

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Plain language summary

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Plain language summary

It is common for people with fibromyalgia to experience sleep problems. However, it is unclear which treatments work best.

We brought together results from studies that have looked at the effects of medical and non-medical treatments for sleep problems experienced by people with fibromyalgia. We compared treatments using a technique called network meta-analysis, which allows three or more treatments to be compared to each other. We also collected information about the experiences of people with fibromyalgia in coping with their sleep problems and the tools (questionnaires and rating scales) that are currently used to gather information on sleep quality from people with fibromyalgia.

We found 168 studies evaluating a wide range of treatments. Of these, 65 studies (8247 patients) investigated 35 different treatments. Some types of exercise performed on land or in water may improve sleep in the short term. However, most studies were small and poorly conducted (e.g. the choice of alternative treatments used for comparisons was often not appropriate). People with fibromyalgia described poor sleep quality as a major problem that had negative consequences on their symptoms (especially pain), health and well-being. We found that the questionnaires that are currently used to assess sleep quality in people with fibromyalgia are similar enough to allow us to sensibly compare findings from different studies that have used different questionnaires.

Overall, the current evidence is patchy and difficult to trust; we cannot know for sure which treatments should be recommended for fibromyalgia-related sleep problems. We need more well-conducted studies to inform clinical practice and aid patients' self-management. It is crucial to involve patients in the design of future studies, especially during the development of questionnaires used to assess sleep to make sure they contain questions that matter to patients and reflect the experiences of the diverse fibromyalgia community.

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This article

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