

Nonpharmacological treatments of insomnia for long-term painful conditions A systematic review & meta-analysis of patient-reported outcomes in RCTs

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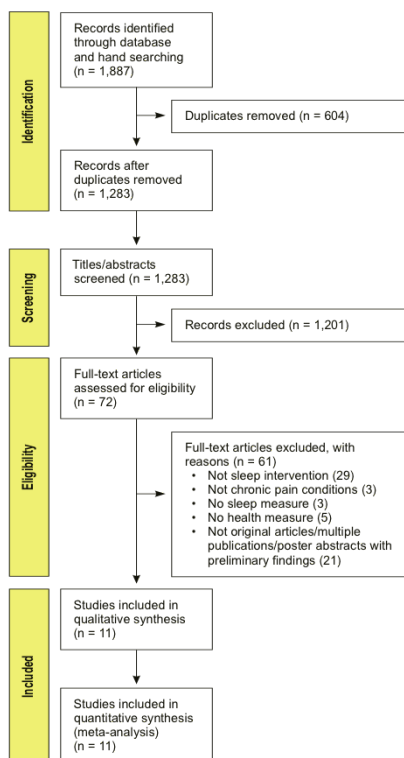
INTRODUCTION

Insomnia is a debilitating comorbidity of chronic pain. This study evaluated the effect of nonpharmacological sleep treatments on patient-reported sleep quality, pain, and well-being in people with long-term cancer and non-cancer (e.g., back pain, arthritis, fibromyalgia) pain conditions.

METHOD

We systematically searched Cochrane CENTRAL, MEDLINE, Embase & PsychINFO for relevant studies.

Studies included were: original randomized controlled trials (RCT); testing a nonpharmacological intervention; that targets sleep; in adults; with painful health conditions; that has a control group; includes a measure of sleep quality; and at least 1 other health and wellbeing outcome.



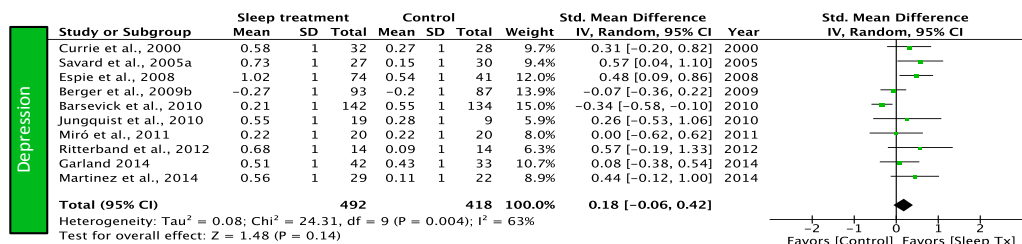
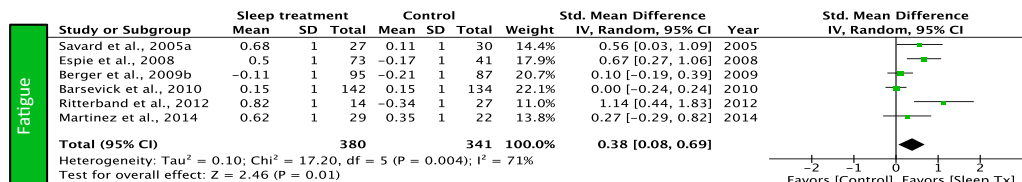
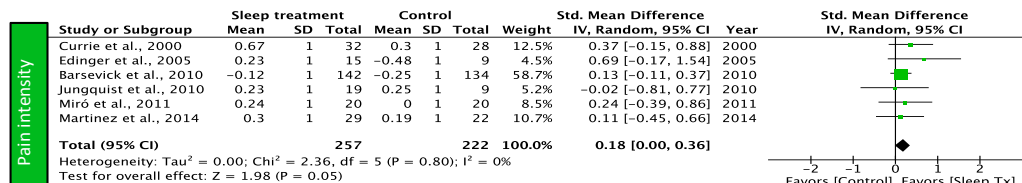
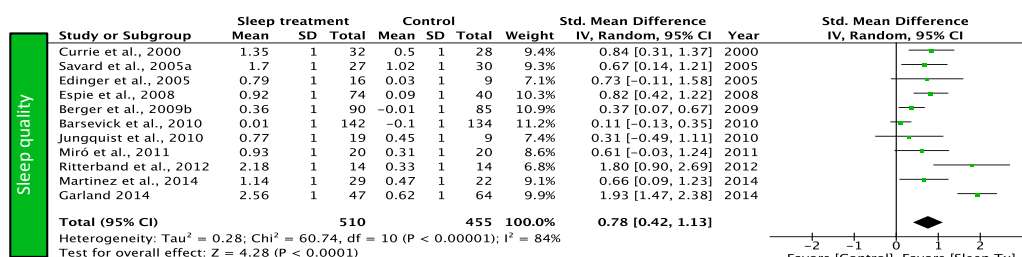
RESULTS

Eleven RCTs involving 1,066 participants (M age 45-61) from the US, UK, Canada, and Spain provided data for the meta-analysis.

- Cancer pain = 6 (mixed types of cancer = 4; breast cancer only = 2)
- Non-cancer pain = 5 (mixed types of pain = 2; fibromyalgia only = 3)

Interventions: most popular CBT-I components were psycho-education, sleep hygiene, stimulus control, sleep restriction, and cognitive therapy.

- Face-to-face = 9; Phone or internet = 2



At post-treatment: a large improvement in sleep quality (SMD = 0.78), small reduction in pain (0.18), and moderate improvement in fatigue (0.38).

At follow-up: effects on sleep quality and fatigue were maintained (up to 1 year) when a moderate reduction in depression (0.31) was also observed.

Both cancer and non-cancer pain patients benefited from nonpharmacological sleep treatments. Face-to-face treatments achieved better outcomes than those delivered over the phone or internet.

CONCLUSION

Nonpharmacological sleep intervention may represent a fruitful avenue for optimizing treatment outcomes in patient with chronic pain.