Background

Sleep disorders affect 50-70 million people in the United States per year.

70% of adults report insufficient sleep at least one night per month.

11% report insufficient sleep every night.

The reported concomitant sleep and chronic pain disorders ranges from 40-80%.

Purpose

To provide a comprehensive overview of the measurement properties of patient-reported outcome measures (PROMs) used to assess sleep quality in adult patients with prevalent pain-related conditions.

Methods

Data sources: PubMed, Scopus, and Embase from their inception to Jan 2020, without language restrictions.

Inclusion criteria:
- Any study design exploring at least one measurement property of PROMs used to assess sleep quality.
- Adults presenting prevalent pain-related conditions.


Measurement Properties

- Validity
  - Content Validity
  - Construct Validity
  - Criterion Validity
- Reliability
  - Internal Consistency
  - Reliability
  - Measurement Error
- Responsiveness
  - Responsiveness

Conclusions

Studies reporting the most measurement properties:
- Jenkins Sleep Scale
- Medical Outcomes Study – Sleep Scale
- Pittsburgh Sleep Quality Index

Recommendations based off of COSMIN GRADE per Pain Condition

- Chronic Pain: Chronic Pain Sleep Inventory
- Rheumatoid Arthritis: Jenkins Sleep Scale
- Psoriatic Arthritis: Jenkins Sleep Scale
- Ankylosing Spondylitis: Jenkins Sleep Scale
- Fibromyalgia: Pittsburgh Sleep Quality Index

Clinical Relevance

With an emerging emphasis on the effect of sleep disorders on prevalent chronic pain conditions, the need for reliable and valid sleep questionnaires is paramount for clinical research and practice.

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- References available upon request.

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