Insomnia in hospitalised adult patients

N.N.

Identifying the Problem

Insomnia	Definition: difficutly of falling and staying asleep, resp.
	Common in elderly patients
	Hospital setting: medical, environmental, patient factors
	Consequence: poor patient outcomes, risk of fall ⇧
Therapy	Community setting: CBT + BSH
	Hospital: ≈37% BSH initiation within 24 h of admission
	side effects: daytime sedation, cognitive impairment, risk of fall ⇧, risk of drug related problems (10%)

CBT – cognitive behavioural therapy   BSH – benzodiazipenes and sedative hypnotics

PICO(S)-Question

Can non-pharmacological interventions help to improve sleep in elderly hospitalised patients?

Population	adult patients with insomnia
Intervention	Non pharmacological interventions
Comparison	-- (no treatment)
Outcome	Improved sleep
(Setting)	Hospitalised

Selection criteria

Inclusion	Adults
	Meta-analyses, umbrella & systematic reviews, RCTs
	Peer-reviewed articles, referenced
	Language: German, English
Exclusion	mental health disorders
	particular conditions e.g. cancer patients, heart failure
	ICU patients, primary care, children, younger adults
	pharmacological interventions
Filter	5 years

Suggested Wordlist

P	• Insomnia, (poor) sleep, sleep disturbances, sleep disorders, sleeplessness, circadian rhythm • Adults (older adults, Elderly, older patients, geriatric)
I	Nursing interventions, sleep promotion, non-pharmacological interventions, sleep hygiene
C	--
O	Sleep pattern, sleep, improved sleep, sleep quality
(Setting)	Inpatients, hospitalized / hospitalised

Grey words: secondary search terms

Databases

- AWMF database: S3-guideline "insomnia in adults"
- CINAHL: 51
- PubMed / Medline: 13
- Cochrane Library: 30 reviews, 2311 trials

Results: CRAAP-Criteria

Currency: 5 year filter

Relevance: sampling and setting, inclusion and exclusion criteria

Accuracy: peer-reviewed, referenced

Authority: affiliation

Purpose: bias, conflict of interest

Level of evidence: Filtered information over unfiltered information

Availability: access to full text, language

Selected article

JBI: 6/11 YES
Moderate evidence

Journal of **Clinical Nursing** WILEY

SPECIAL ISSUE REVIEW

Effects of nursing interventions to improve inpatients' sleep in intensive and non-intensive care units: Findings from an umbrella review

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# Assessment

| Strengths 👍	Limitations 👎
Filtered information	Poor evidence in evaluated reviews, many inconsistencies
Performed according to JBI guidelines	Poor quality of underlying studies
Peer-reviewed	Unclear and inconsistent comparisons in underlying studies
Results transferable	Missing results and analyes
	heterogenous target population (ICU, non-ICU)

Conclusion
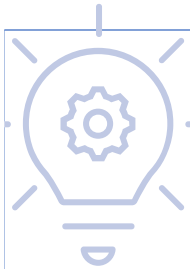
Practical conclusion: earplugs, eye masks and music could be applied in the local setting (moderate evidence)
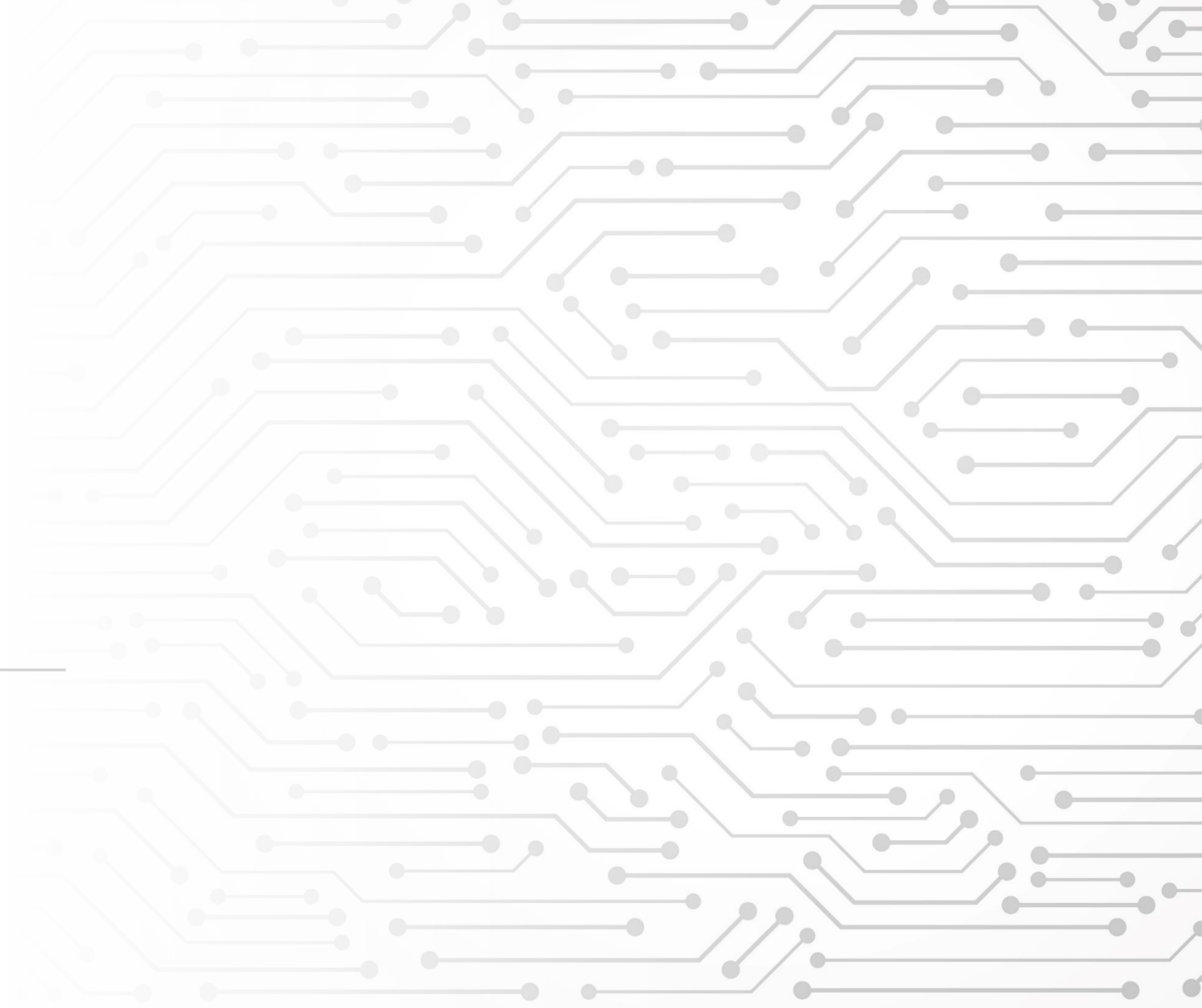
Most reviews complained about poor quality of underlying studies
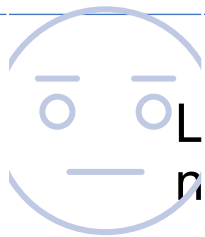
Limitations: only 3 studies included non-ICU patients

Publication bias for complementary and non-pharmacological interventions?

Appendix

References

Additional Information

References

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Search History – PubMed using MeSH

Search	Actions	Details	Query	Results	Time
#10	•••	>	Search: **#1 AND #7** Filters: **in the last 5 years**	13	04:04:27
#9	•••	>	Search: **#1 AND #7**	50	04:04:16
#8	•••	>	Search: **#6 AND #7**	8,770	04:03:50
#7	•••	>	Search: **Older adults OR elderly**	6,122,719	04:03:26
#6	•••	>	Search: **"Sleep Initiation and Maintenance Disorders"[MeSH Terms]**	18,519	04:02:47
#5	•••	>	Search: **#1 AND #4**	0	04:01:50
#4	•••	>	Search: **complementary**	262,302	04:01:35
#3	•••	>	Search: **#1 AND #2**	0	04:01:13
#2	•••	>	Search: **(nursing interventions) AND (non-pharmacological)**	1,731	04:00:53
#1	•••	>	Search: **("Sleep Initiation and Maintenance Disorders"[Mesh]) AND "Inpatients"[Mesh]** Sort by: **Most Recent**	72	04:00:24

History and Search Details   ↓ Download   🗑 Delete

14 Feb 2024

Search History – CINAHL

#	Query	Limiters/Expanders	Last Run Via	Results
S8	(insomnia or sleep disorders or sleep disturbance or sleeplessness) AND (nursing interventions OR non-pharmacological) AND (hospitalized patients or inpatient or patients)	Limiters - Publication Date: 20150101-20241231 Expanders - Apply equivalent subjects Narrow by SubjectAge: - aged: 65+ years Narrow by Language: - english Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	51

14 Feb 2024

CASP Tool

Screenshot des Bewertungstools

CASP
Critical Appraisal
Skills Programme

7. How precise are the results? HINT: Look at the confidence intervals, if given

Comments: not very precise and partially inconclusive. No statistics applied only as given in the original review

Section C: Will the results help locally?

8. Can the results be applied to the local population?
- Yes
- Can't Tell ✓
- No

HINT: Consider whether
- the patients covered by the review could be sufficiently different to your population to cause concern
- your local setting is likely to differ much from that of the review

Comments: limited: some recommendations may be useful e.g. guided imagery, earplugs

9. Were all important outcomes considered?
- Yes
- Can't Tell ✓
- No

HINT: Consider whether
- there is other information you would like to have seen

Comments: search string / history partially unclear

10. Are the benefits worth the harms and costs?
- Yes
- Can't Tell ✓
- No

HINT: Consider
- even if this is not addressed by the review, what do you think?

Comments: some are low cost interventions with little harm and so may be worth the costs

CASP
Critical Appraisal
Skills Programme

Paper for appraisal and reference:

Section A: Are the results of the review valid?

1. Did the review address a clearly focused question?
- Yes ✓
- Can't Tell
- No

HINT: An issue can be 'focused' In terms of
- the population studied
- the intervention given
- the outcome considered

Comments: Which nursing interventions can improve the sleep quality of patients admitted in intensive and non-intensive care units?

2. Did the authors look for the right type of papers?
- Yes ✓
- Can't Tell
- No

HINT: 'The best sort of studies' would
- address the review's question
- have an appropriate study design (usually RCTs for papers evaluating interventions)

Comments: umbrella review, only included reviews

Is it worth continuing?

3. Do you think all the important, relevant studies were included?
- Yes
- Can't Tell ✓
- No

HINT: Look for
- which bibliographic databases were used
- follow up from reference lists
- personal contact with experts
- unpublished as well as published studies
- non-English language studies

Comments: JBI recommendations, PRISMA flowchart, PROSPERO registration; English language articles in PubMed, CINAHL Plus, Scopus, Institute for Scientific Information Web of Science, Joanna Briggs Database of Systematic Reviews and Cochrane Central Register of Controlled Trials databases
search string: not clearly defined

CASP
Critical Appraisal
Skills Programme

4. Did the review's authors do enough to assess quality of the included studies?
- Yes ✓
- Can't Tell
- No

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

Comments:

5. If the results of the review have been combined, was it reasonable to do so?
- Yes
- Can't Tell ✓
- No

HINT: Consider whether
- results were similar from study to study
- results of all the included studies are clearly displayed
- results of different studies are similar
- reasons for any variations in results are discussed

Comments:

Section B: What are the results?

6. What are the overall results of the review?

HINT: Consider
- If you are clear about the review's 'bottom line' results
- what these are (numerically if appropriate)
- how were the results expressed (NNT, odds ratio etc.)

Comments: there was no particular bottom line. Most evidence was not very robust. There was no stistical analysis. There was a weak recommendation for earplugs, masks and music therapy. different scales were used to assess sleep.

JBI Tool

Entfällt, da Sie nur 1 Tool haben

JBI CRITICAL APPRAISAL CHECKLIST FOR SYSTEMATIC REVIEWS AND RESEARCH SYNTHESES

Reviewer_____ Date_____

Author_____Bellon_____Year_2022_____Record Number_____

		Yes	No	Unclear	Not applicable
1.	Is the review question clearly and explicitly stated?	☑	☐	☐	☐
2.	Were the inclusion criteria appropriate for the review question?	☐	☑	☐	☐
3.	Was the search strategy appropriate?	☐	☑	☐	☐
4.	Were the sources and resources used to search for studies adequate?	☑	☐	☐	☐
5.	Were the criteria for appraising studies appropriate?	☑	☐	☐	☐
6.	Was critical appraisal conducted by two or more reviewers independently?	☑		☐	
7.	Were there methods to minimize errors in data extraction?	☑	☐	☐	☐
8.	Were the methods used to combine studies appropriate?	☐	☐	☐	☑
9.	Was the likelihood of publication bias assessed?	☐	☑	☐	☐
10.	Were recommendations for policy and/or practice supported by the reported data?	☑	☐	☐	☐
11.	Were the specific directives for new research appropriate?	☐	☐	☑	☐

Overall appraisal: Include_____ ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

5YES, 1 N/A → 50%