

## Systematic review

# Sleep problems in adults with learning disabilities: the compelling need for objective and methodologically consistent studies

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**Commentary on:** Shanahan P, Ahmad S, Smith K, *et al.* The prevalence of sleep disorders in adults with learning disabilities: a systematic review. *Br J Learn Disabil* 2022, 1–24. doi: 10.1111/bld.12480

## Implications for practice and research

- ▶ An in-depth understanding of sleep disturbances or sleep alterations in adults with learning disabilities allows for planning appropriate and timely intervention programmes.
- ▶ Future studies should systematically explore the relationship between sleep disorders and learning disabilities in adults.

## Context

Literature has consistently reported a high frequency of sleep disorders or sleep alterations in adults with learning disabilities (8.5%–34.1%),<sup>1</sup> ranging from difficulties in falling asleep to sleep loss, daytime sleepiness or altered sleep behaviours. A few studies clearly stated the criteria for defining the presence of sleep problems in this population. Further, there is substantial methodological heterogeneity in the current research. The systematic review by Shanahan *et al* has a twofold purpose. On the one hand, it aims to describe studies investigating sleep disturbance in adults with learning disabilities. On the other hand, it provides the actual prevalence of disordered sleep and sleep disorders in this population.

## Methods

Shanahan *et al* searched literature by using five databases (EMBASE, MEDLINE, PsycARTICLES, PsycINFO, PubMed) and considering publication in peer-reviewed journals from 1900 to October 2021. Non-English language and duplicate articles were excluded. The study was initially registered as a meta-analysis on PROSPERO (ID: CRD42019134550) and then changed to a systematic review due to the characteristics of the included studies. The Joanna Briggs Institute critical appraisal checklist for prevalence studies was used to assess study quality and risk of bias.<sup>2</sup>

## Findings

Shanahan *et al* started from a total of 2311 studies and then selected 27 studies for review. Of included studies, 5 were rated as good quality, 3 were rated as fair quality and 19 were rated as poor quality. Most studies (n=19) examined the prevalence of sleep problems among participants, ranging from 6.1% to 74.2% (pooled mean prevalence: 30.9%). Other studies (n=12) focused on sleep-related breathing disorders in adults with learning

disabilities, with a prevalence ranging from 0.5% to 100% (pooled mean prevalence: 20.3%).

The most common sleep difficulties across studies were daytime napping/sleepiness, short sleep duration, night walking and difficulties falling asleep.

Participant characteristics, study sampling and design, assessment of sleep, and definition of sleep disorders and learning disabilities were extremely variable across studies that met the inclusion criteria.

## Commentary

The existing literature consistently shows that sleep disorders are commonly experienced by adults living with learning disabilities.<sup>3</sup> Further, the extent of sleep alterations seems to be related to the severity of learning disability.<sup>4</sup> Despite the higher prevalence compared with the general population and the additional impairment in daily functioning, an in-depth understanding of the conceptualisation and treatment of sleep difficulties among this population is still lacking.<sup>5</sup>

Shanahan *et al* examined the methodology of the current studies about sleep disorders in adults with learning disabilities and reported the main results on the prevalence rates.

This review has the advantage of showing for the first time the prevalence of sleep problems among community-dwelling participants, taking into account different types of sleep alterations and different causes of learning disabilities. The authors confirmed the spread of sleep problems in this population and highlighted the large variability in study methodologies of included studies.

Indeed, the scarce availability of well-designed research with a clear definition of the study object and the heterogeneity in measurement and diagnosis prevent a correct framing of the phenomenon.

Learning disabilities include a multitude of symptom manifestations. Similarly, sleep disturbances can relate to a wide range of alterations, from transient sleep difficulties to specific diagnoses. Appropriately, the authors suggest that future studies should keep all possible confounding factors under control (eg, comorbidities) to better characterise the phenomenology of disturbed sleep among adults with learning disabilities. Furthermore, using objective measures of sleep (eg, actigraphy) or sleepiness (eg, behavioural vigilance task) may help fill these methodological gaps.

Given the social and clinical relevance of this issue, more rigorous studies are needed to enable the development of adequate guidelines for the diagnosis and the management of the common sleep problems among this population.

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