



Senate Inquiry into Assessment and Support Services for People with ADHD

Submission from the Australasian Sleep Association and the Sleep Health Foundation

9 June 2023

Overview

ADHD is the most common mental health developmental condition in childhood affecting around [6-10% of children](#). Around 2-6% of adults also have ADHD with over 800,000 Australians affected with ADHD.

ADHD is a lifelong condition, and without evidence-based treatment, it can have significant impacts on a person's functioning. This includes negative impacts on interpersonal relationships, [academic and occupational functioning](#). There are also psychological impacts, including high levels of [substance use disorders](#) and suicidal behaviours, which can result in poor long-term outcomes. The social and economic burden of ADHD in Australia is enormous and estimated to be [AUD\\$20 billion per year](#).

There are currently many barriers to the identification of ADHD, subsequent formal diagnosis and access to evidence-based treatments. This includes a lack of public services to diagnose and treat ADHD which means most sufferers must pay privately for diagnosis and treatment. Furthermore, within both private and public practice there are few clinicians qualified to diagnose and provide treatment for ADHD which further impacts accessibility for this debilitating condition.

ADHD also has a high level of comorbidities. Around two thirds of children and up to 80% of adults with ADHD will have at least one other comorbidity. These include anxiety, depression and autism spectrum disorder as well as sleep problems. Bi-directional relationships between sleep problems and ADHD frequently worsen symptoms and outcomes. Sleep problems are independently associated with increased risk of adverse health conditions, including depression, anxiety and other mental health conditions, attention and cognitive impairments and cardiovascular and metabolic disorders.

ADHD and sleep problems commonly co-occur

Children and adults with ADHD commonly have significant sleep problems. There is a large variability in reported prevalence across [studies](#), with [25-70% of children with ADHD](#) experiencing a sleep disorder. Furthermore, adults with ADHD have a significantly higher lifetime experience of sleep problems (82.6%) compared to those without ADHD (36.5%).

The types of sleep problems seen with greater frequency in people with ADHD are [wide ranging](#). They include bedtime resistance, frequent night-time awakening, and clinical sleep disorders such as chronic insomnia, [restless legs syndrome](#), [obstructive sleep apnoea](#) and a body clock (circadian) disturbance known as delayed sleep-wake phase disorder. These sleep disorders worsen ADHD symptoms, but it also can be difficult to distinguish between these sleep disorders and the ADHD itself, as they share many common features such as poor attention and difficulty concentrating.

Mental health, sleep and ADHD

Sleep, ADHD, and mental health are closely related. Sleep problems such as insomnia can increase the risk of developing [depression](#), while treating sleep problems reduces depression [symptoms](#).

Many paediatricians, psychiatrists and psychologists diagnose ADHD, but not all are trained to address behavioural sleep issues. In order to improve the number of clinicians with knowledge and training in the delivery of evidence-based behavioural sleep interventions, the Australasian Sleep Association already collaborates closely with professional societies for psychologists, general practitioners, nurses and pharmacists (primarily through a Health Peak and Advisory Bodies program grant from the Commonwealth Department of Health). The association is developing and deploying clinician education programs on the delivery of behavioural sleep interventions, such as the recommended 'first line' treatment for insomnia, Cognitive Behavioural Therapy for insomnia (CBT-i). This network of professional organisations with an interest in sleep health education can be leveraged to develop and deliver similar education on the behavioural management of sleep problems in people with ADHD to important clinician groups, particularly those in primary healthcare.

Treatment of sleep disorders and poor sleep habits in people with ADHD

Some stimulants used in the management of ADHD may cause sleep disturbance. However, these medicines can also ‘paradoxically’ calm some patients with ADHD for sleep by alleviating their symptoms. For these reasons, it [has been recommended](#) that primary sleep disorders should be ruled out [before initiating ADHD medication](#).

Behavioural interventions targeted at improving sleep [may benefit some patients](#) and should form part of the multidisciplinary ADHD management plan [recommended](#) for patients receiving pharmacotherapy.

There is currently limited evidence-based information available on effective pharmacological interventions for sleep disorders in people with ADHD. For example, there is anecdotal evidence that immediate release melatonin helps improve sleep in people with ADHD, but there is very little scientific evidence to support this practice. Melatonin and bright light therapy have been proven to be effective in treating delayed sleep wake phase disorder among the general population, but there is limited evidence of efficacy in people with ADHD. Further research on effective interventions is essential to improve the management of sleep disorders in people with ADHD.

The Australian evidence-based clinical practice guideline acknowledged that sleep disorders are common in people with ADHD and that those with sleep disorders are at a higher risk of also having ADHD (recommendation 1.1.1). However, no specific guidance on the differential or comorbid diagnosis of sleep disorders in people with ADHD or at risk of ADHD was provided. This means there is no standardised way of assessing sleep disorders in people with or at risk of ADHD. It is likely that there will be a wide range of clinical approaches, with the end result being under-recognition of co-existing sleep problems in ADHD or the misdiagnosis of sleep problems as ADHD.

Similarly, although sleep was recognised as a lifestyle factor that may require intervention, there was no detail given in the Australian clinical practice guideline on what interventions for sleep disorders might be appropriate for people with ADHD, or for improving poor sleep habits in people with ADHD. Some literature on sleep interventions for children and adolescents was reviewed but was determined not to be sufficient to make evidence-based recommendations. There is an urgent need for public health and clinical guidelines (based on evidence review and expert clinician consensus) for prevention, early detection and diagnosis and support of poor sleep health in children, adolescents and adults with ADHD.

Given the complexities of diagnosing and treating sleep disorders in people with ADHD as well as the overlapping symptoms these conditions share, multidisciplinary team management of sleep and ADHD is essential. The benefits to sleep and ADHD management are bidirectional, so a psychiatrist and a psychologist should be included in the multidisciplinary teams of sleep services, and a sleep physician should be included in the multidisciplinary team managing ADHD. Furthermore, this gives the opportunity to embed research into clinical service delivery and will help fill the current knowledge gaps that exist.

Finally, there is a significant need for public health programs providing education and prompting behaviour change for improving sleep health. Improving factors such as the duration, timing, regularity and quality of sleep health should be a focus area for these public health programs, given the significant associations between these aspects of sleep health and ADHD symptoms and severity.

Recommendations

Poor sleep health and sleep disorders are recognised as key features of ADHD in adults and children. The Sleep Health Foundation and Australasian Sleep Association make the following recommendations.

- (1) Guidelines are developed that provide a standardised way to assess for sleep disorders in people presenting for an ADHD diagnosis, and to assess for the presence of sleep disorders in people already diagnosed with ADHD.
- (2) Guidelines are developed for specific interventions for sleep problems in people with ADHD.
- (3) Resources are allocated for sleep health education and behaviour change programs for people with ADHD (children, adolescents and adults), aiming to improve multiple dimensions including duration, timing, regularity and quality of sleep. These programs should be co-developed by key stakeholders from the community (especially those with lived experience of ADHD) and healthcare professionals
- (4) Resources are allocated to allow for fully-funded multidisciplinary teams in the management of ADHD and sleep disorders.
- (5) Resources are allocated for specific research questions targeting the identification and management of poor sleep health and sleep disorders in ADHD. This should be done through established mechanisms such as the Medical Research Future Fund.
- (6) Education programs and resources should be provided to assist primary care clinicians in the recognition and ongoing management of ADHD and sleep problems.
- (7) Non-pharmacological interventions should be the first line of treatment for sleeping difficulties in children and adults with ADHD.

About us

The **Sleep Health Foundation** is Australia's leading advocate for healthy sleep. It aims to improve people's lives by promoting sleep health, raising awareness of sleep disorders and building partnerships with organisations with complementary objectives. It includes the Australian Sleep and Alertness Consortium (ASAC), the transition (legacy) structure for the Alertness Cooperative Research Centre, comprised of stakeholders involved in the development and deployment of innovative solutions to improve workplace productivity and safety.

The **Australasian Sleep Association** is the peak scientific body in Australia and New Zealand representing clinicians, scientists and researchers working in sleep health and sleep medicine. The Association is experienced in developing clinical guidelines, professional

education and other services aimed at improving the quality of sleep health. The association is a current recipient of Commonwealth grant funding under the Health Peak and Advisory Bodies program to provide evidence-based sleep health and sleep medicine information to assist with informing Australian Government policy, as well as informing the Government about emerging issues in relation to sleep health and sleep medicine. The program also has a focus on supporting the goals of the National Preventive Health Strategy 2021-2030.

Contact

Dr Moira Junge
CEO
Sleep Health Foundation
ceo@sleephealthfoundation.org.au
0402 583 341

Ms Marcia Balzer
CEO
Australasian Sleep Association
ceo@sleep.org.au
0430 175 310