

SLEEPING PILLS IN CHILDREN AND ADOLESCENTS: WHEN IS IT APPROPRIATE?

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ABSTRACT

The use of sleeping pills in children and adolescents is a rare and carefully considered intervention aimed at managing severe sleep disturbances that are resistant to behavioral and nonpharmacological approaches. This abstract explores the appropriateness of prescribing sedativehypnotic medications in younger populations, with a focus on safety, effectiveness, and long-term implications. Sleep disorders in children, including insomnia, are often influenced by developmental, environmental, or medical factors. While pharmacological treatments, such as melatonin, antihistamines, or benzodiazepine receptor agonists, are sometimes recommended, they must be prescribed with caution due to the risks of dependency, adverse effects, and unproven long-term efficacy. A thorough assessment, including underlying etiology, risk factors, and psychological comorbidities, is essential before initiating treatment. Management emphasizes behavioral therapies as the first-line approach, with medication considered only in severe cases. The abstract concludes by emphasizing the need for ongoing research, education, and stringent guidelines to ensure safe and effective use of sleeping pills in pediatric populations.

Keywords: Sleeping Pills, Children, Adolescents



INTRODUCTION

Sleep disturbances in children and adolescents are common, with up to 30% experiencing some form of insomnia or related issue during development [1]. While behavioral and environmental interventions are the primary treatments, the use of sleeping pills in this population is considered in rare, severe, or refractory cases [2]. This article examines the cautious application of sleeping pills, focusing on safety, effectiveness, and long-term effects.

DEFINITION

Sleeping pills, also known as hypnotics, are pharmacological agents used to promote sleep or improve sleep quality. They act through various mechanisms, such as enhancing GABAergic activity, mimicking natural melatonin, or blocking histamine receptors [3].

INCIDENCE

The use of sleeping pills in children and adolescents is rare, with reports estimating prescriptions for only 1-2% of pediatric patients. This is primarily reserved for chronic or severe sleep disorders unresponsive to non-pharmacological treatments [4].

CLASSIFICATION

Sleeping pills are classified as follows:

- 1. Benzodiazepines: e.g., lorazepam, which enhances GABA activity [3].
- 2. Non-benzodiazepines: e.g., zolpidem, which acts selectively on GABA-A receptors [5].
- 3. Melatonin receptor agonists: e.g., melatonin, a safer option for circadian rhythm disorders [2].
- 4. Antihistamines: e.g., diphenhydramine, used occasionally but with sedation-related risks [6].
- 5. Antidepressants: e.g., trazodone, which is used off-label for its sedative properties [7].

ETIOLOGY

Common causes of sleep disorders in children and adolescents include:

- Physiological: Delayed circadian rhythm during puberty, growth-related changes ^[4].
- Psychological: Anxiety, depression, or ADHD [8].
- Environmental: Poor sleep hygiene, excessive screen time, inconsistent schedules ^[6].
- •Medical Conditions: Chronic illnesses such as asthma or epilepsy [5].

RISK FACTORS

• Genetics: Family history of sleep disorders [9].



- Mental Health Disorders: Comorbid anxiety, depression, or behavioural issues ^[8].
- Lifestyle: High caffeine intake, irregular sleep patterns, or late-night technology use ^[3].
- Chronic Illnesses: Asthma, obesity, or other medical conditions [5].

PATHOPHYSIOLOGY

The sleep-wake cycle is regulated by the hypothalamic suprachiasmatic nucleus, which synchronizes with environmental cues. Disruptions in melatonin secretion, GABAergic signalling, or serotonin pathways contribute to sleep disorders in children [10].

CLINICAL MANIFESTATIONS

Signs and symptoms of sleep disturbances include:

- Difficulty falling or staying asleep.
- Excessive daytime fatigue.
- Behavioural problems such as irritability, aggression, or hyperactivity.
- Impaired cognitive functioning, memory issues, or academic struggles [8].

COMPLICATIONS

Untreated sleep disorders can result in:

- Short-term Effects: Emotional instability, academic challenges, and reduced social functioning [6].
- Long-term Effects: Increased risks of depression, anxiety, obesity, and cardiovascular diseases [2].

DIAGNOSTIC EVALUATION

- History-taking: Exploring the child's sleep patterns, environment, and potential triggers [5].
- Sleep Diaries: Maintaining records of sleep and wake times over several weeks.
- Polysomnography: Overnight testing to assess for apnea or periodic limb movements [10].
- Actigraphy: Wearable devices tracking sleep-wake cycles and movement patterns [9].

MANAGEMENT

Medical Management

• Melatonin: Effective for circadian rhythm disturbances; considered safe for short-term use

[1].

• Non-benzodiazepines: Occasionally prescribed in severe insomnia but require close



monitoring [3].

- Antihistamines: Used for sedation but associated with risks such as tolerance and drowsiness [6].
- Adjunctive Medications: Antidepressants for insomnia related to mood disorders [7].

Surgical Management

Surgery is rarely indicated for sleep disorders but may be necessary for anatomical causes, such as:

• Tonsillectomy and Adenoidectomy: Effective in treating obstructive sleep apnea [8].

Nursing Management

- 1. Educating families about proper sleep hygiene practices.
- 2. Encouraging non-pharmacological interventions such as relaxation techniques.
- 3. Monitoring for side effects of prescribed medications.
- 4. Collaborating with a multidisciplinary team for holistic care.

PREVENTION

Prevention strategies focus on improving sleep hygiene and lifestyle habits:

- 1. Regular Bedtimes: Maintaining consistent sleep schedules [6].
- 2. Technology Limits: Avoiding screens at least one hour before bedtime [3].
- 3. Dietary Adjustments: Reducing caffeine and sugar intake in the evening [4].
- 4. Stress Reduction: Practicing mindfulness and relaxation exercises [10].

CONCLUSION

The use of sleeping pills in children and adolescents should be reserved for severe cases unresponsive to behavioural interventions. Melatonin remains the safest option, but careful monitoring is necessary for any pharmacological intervention. A multidisciplinary approach focusing on non-drug strategies is essential for ensuring long-term health and well-being.



REFERENCES

- 1. Meltzer LJ, Mindell JA. Behavioral sleep disorders in children and adolescents. Pediatric Clinics of North America. 2011;58(3):605-20.
- 2. Owens JA, Mindell JA. Pediatric insomnia. Journal of Clinical Sleep Medicine. 2011;7(5):500-10.
- 3. Gradisar M, et al. Sleep hygiene and sleep disorders in adolescents. Journal of Sleep Research. 2011;20(1):4-12.
- 4. American Academy of Pediatrics. Policy Statement: Use of melatonin in children. Pediatrics. 2016;138(6):e20162394.
- 5. Cortese S, et al. Pharmacological management of sleep disorders in ADHD. Child and Adolescent Psychiatry Clinics of North America. 2017;26(3):457-74.
- 6. Mindell JA, et al. Behavioral treatments for pediatric sleep disorders. Sleep Medicine Clinics. 2018;13(4):443-56.
- 7. Ivanenko A, et al. Psychiatric and medical management of insomnia in children. Child and Adolescent Psychiatric Clinics of North America. 2006;15(4):817-41.
- 8. CDC. Sleep disorders in children: Prevalence and impact. Centers for Disease Control and Prevention. 2020.
- Paterson JL, Reynolds AC. Sleep disorders and their management in pediatric populations. Sleep Medicine Reviews. 2021;58:101470.
- 10. Carskadon MA, Acebo C. Regulation of sleep timing in adolescence. Sleep. 2002;25(6):606-14.