

ADOLESCENCE

ADOLESCENT SLEEP PROBLEMS

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Abstract: *Sleep is a universal process in all species. In adolescents due to heightened activity and fulfilling academic needs, the quantity and quality of sleep is getting affected. Chronic lack of sleep is causing deleterious effect on holistic health of adolescents. Pediatricians should advise all adolescents on sleep hygiene during routine health visits and screen for sleep related problems so that appropriate management can be initiated before it manifests into a sleep disorder. Sleep disorders require detailed evaluation and treatment.*

Keywords: *Adolescent sleep hygiene, Sleep quality, Adolescent sleep disorders.*

Points to Remember

- *Good quality and quantity of sleep forms the core for optimal functioning of an adolescent.*
- *Pediatricians should advise about sleep hygiene.*
- *BEARS sleep screening tool can be used in office practice.*
- *Adolescents with serious sleeping disorder need tailored therapy.*
- *Parents should be educated about instilling sleep hygiene from early childhood which needs to continue into adolescent life and thereafter.*

References

1. Paruthi S, Brooks LJ, Ambrosio CD, Hall WA, Kotagal S, Lloyd RM, Malow BA, Maski K, Nichols C, Quan SF, Rosen CL, Troester MM, Wise MS. Consensus statement of the American Academy of sleep medicine on the recommended amount of sleep for healthy children: Methodology and discussion. *J Clin Sleep Med* 2016; 12(11):1549-1561.
2. Galland BC, Short MA, Terrill P, Rigney G, Haszard JJ, Coussens S, Foster-Owens M, Biggs SN. Establishing normal values for pediatric night-time sleep measured by actigraphy: A systematic review and meta-analysis. *Sleep* 2018; Apr 1; 41(4) doi:10.1093/sleep/zsy017.
3. Ohayon MM, Carskadon MA, Guilleminault C, Vitiello MV. Meta-analysis of quantitative sleep parameters from childhood to old age in healthy individuals: developing normative sleep values across the human lifespan. *Sleep* 2004; 27:1255-1273.
4. Mathew G, Varghese AD, Benjamin AI. A Comparative Study Assessing Sleep Duration and Associated Factors among Adolescents Studying in Different Types of Schools in an Urban Area of Kerala, India. *Indian J Community Med* 2019 Oct; 44(Suppl 1): S10-S13.
5. Singh R, Suri, JC, Sharma R, Suri T, Adhikari, T. (2018). Sleep Pattern of Adolescents in a School in Delhi, India: Impact on their Mood and Academic Performance. *Indian J Pediatr* 85. 1-8. 10.1007/s12098-018-2647-7.
6. Murugesan G, Karthigeyan L, Selvagandhi PK, Gopichandran V. Sleep patterns, hygiene, and daytime sleepiness among adolescent school-goers in three districts of Tamil Nadu: A descriptive study. *Natl Med J India* 2018; 31:196-200.

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7. Ramos Socarras L, Potvin J, Forest G. COVID-19 and sleep patterns in adolescents and young adults. *Sleep Med* 2021 Jul; 83:26-33. doi: 10.1016/j.sleep.2021.04.010. Epub 2021 Apr 15.
8. Carskadon MA, Acebo C, Jenni OG. Regulation of adolescent sleep: implications for behavior. *Ann N Y Acad Sci* 2004; 1021:276-291.
9. Tarokh L, Saletin JM, Carskadon MA. Sleep in adolescence: Physiology, cognition, and mental health. *Neurosci Biobehav Rev* 2016; 70:182-188.
10. Hale L, Guan S. Screen time and sleep among school-aged children and adolescents: A systematic literature review. *Sleep Med Rev* 2015; 21:50-58.
11. Wheaton AG, Chapman DP, Croft JB. School start times, sleep, behavioural, health and academic outcomes: A review of the literature. *J Sch Health* 2016; 86:363-381.
12. Bartel K, Gradisar M, Williamson P. Protective and risk factors for adolescent sleep: A meta analytic review. *Sleep Med Rev* 2015; 21:72-85.
13. Owens J. Adolescent Sleep Working Group; Committee on Adolescence. Insufficient sleep-in adolescents and young adults: an update on causes and consequences. *Pediatrics* 2014 Sep;134(3): e9'edw21-32.
14. Buchmann A, Ringli M, Kurth S, Schaerer M, Geiger A, Jenni OG, Huber R. EEG sleep slow-wave activity as a mirror of cortical maturation. *Cereb Cortex* 2011; 21(3):607-615.
15. Fatima Y, Doi SA, Mamun AA. Longitudinal impact of sleep on overweight and obesity in children and adolescents: a systematic review and bias-adjusted meta-analysis. *Obes Rev* 2015; 16(2):137-149.
16. Navarro-Solera M, Carrasco-Luna J, Pin-Arboledas G, González-Carrascosa R, Soriano JM, Codoñer-Franch P. Short Sleep Duration Is Related to Emerging Cardiovascular Risk Factors in Obese Children. *J Pediatr Gastroenterol Nutr* 2015; 61(5):571-576.
17. Kuciene R, Dulskiene V. Associations of short sleep duration with prehypertension and hypertension among Lithuanian children and adolescents: a cross-sectional study. *BMC Public Health* 2014; 15:14:255.
18. Moitra P, Madan J, Verma P. Independent and combined influences of physical activity, screen time and sleep quality on adiposity indicators in Indian adolescents *BMC Public Health* (2021) 21:2093 <https://doi.org/10.1186/s12889-021-12183-9>.
19. Willis TA, Gregory AM. Anxiety Disorders and Sleep in Children and Adolescents. *Sleep Med Clin* 2015 Jun; 10(2):125-131.
20. Tashjian SM, Mullins JL, Galvan A. (2018). Bedtime Autonomy and Cellphone Use Influence Sleep Duration in Adolescents. *Journal of Adolescent Health*. 64. 10.1016/j.jadohealth 2018.07.018.
21. Lovato N, Gradisar M, Short M, Dohnt H, Micic G. Delayed sleep phase disorder in an Australian school-based sample of adolescents. *J Clin Sleep Med* 2013; 9(9): 939-994.
22. Owens JA, Dalzell V. Use of the "BEARS" sleep screening tool in a pediatric residents' continuity clinic: a pilot study. *Sleep Med* 2005; 6(1):63-69.
23. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders* : 5th ed. Arlington, 2013.