

Sleep Patterns and Dysfunctions in Children with Learning Problems

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Abstract

Introduction: This study aimed to determine the sleep patterns and dysfunctions in children with learning problems in comparison against a local population-based sample. **Materials and Methods:** Parents of 200 children with learning problems and 372 parents of a local population-based sample of typically developing (TD) children were recruited to complete a questionnaire on their child's sleep patterns and sleep problems. The Children's Sleep Habits Questionnaire (CSHQ) is a validated parent-reported sleep screening questionnaire that contains 54 items identifying sleep behaviours in children. **Results:** The mean age of the sample was 4.2 years (SD: 1.4; range, 2 to 6 years). Sleep duration was similar between the 2 groups. The difference in mean CSHQ subscale scores between children with learning problems and TD children was significant for sleep-disordered breathing (1.3 vs 1.2, $P = 0.001$). Among children with learning problems, 36.5% snored (vs 26.6% of TD children), 30.5% had noisy breathing (vs 18.8%), and 9.0% (vs 4.6%) experienced difficulty breathing 2 or more times a week. Children with learning problems woke up in a more irritable mood ($P = 0.01$), had more difficulty in getting out of bed ($P < 0.001$), and took a longer time to be alert ($P < 0.001$). They exhibited fewer behaviours of daytime drowsiness ($P = 0.009$). Among this group of children, 15.0% of parents reported that their child had a sleep problem compared to 9.0% in the TD group. **Conclusion:** Sleep breathing disorders and symptoms of morning sleepiness are more prevalent in children with learning problems. Symptoms of daytime lethargy are similar between the 2 groups. We suggest that a simple outpatient screening targeted at these problems be instituted in the initial workup of any child with learning difficulties.

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