Sleep and Self-Regulation from Birth to 7 Years: A Retrospective Study of Children with and Without Attention-Deficit Hyperactivity Disorder at 8 to 9 Years.

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Abstract

OBJECTIVE:
To examine mean level differences and longitudinal and reciprocal relations among behavioral sleep problems, emotional dysregulation, and attentional regulation across early childhood for children with and without attention-deficit hyperactivity disorder (ADHD) at 8 to 9 years.

METHOD:
This study used data from Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC)-Infant Cohort (n = 4,109 analyzed). Children with and without ADHD were identified at age 8 to 9 years via parent report of ADHD diagnosis and the 5-item Inattention-Hyperactivity subscale from the Strengths and Difficulties Questionnaire. Maternal report of child sleep problems and self-regulation was collected at 0 to 1, 2 to 3, 4 to 5, and 6 to 7 years of age. Analysis of variance was used to compare mean level differences in sleep problems and emotional and attentional regulation by ADHD group. Longitudinal structural equation modeling examined the relations among sleep and self-regulation across time in children with and without ADHD.

RESULTS:
Children with ADHD had persistently elevated levels of sleep problems (from infancy) and emotional and attentional dysregulation compared to controls (from 2 to 3 years of age). Sleep problems, emotional dysregulation, and attentional regulation were stable over time for both groups. Sleep problems were associated with greater emotional dysregulation 2 years later from 2 to 3 years of age for both groups, which in turn was associated with poorer attentional regulation. There was no direct relationship between sleep problems and later attentional regulation.

CONCLUSION:
Sleep problems in children with and without ADHD are associated with emotional dysregulation, which in turn contributes to poorer attentional functioning. This study highlights the importance of assessing and managing sleep problems in young children.