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Increased behavioral morbidity in school-aged children with sleep-disordered breathing.

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OBJECTIVE: To assess whether sleep-disordered breathing (SDB), ranging from primary snoring to obstructive sleep apnea (OSA), is associated with increased behavioral morbidity. METHODS: A cross-sectional study was conducted of school-aged children in an urban, community-based cohort, stratified for term or preterm (<37 weeks' gestation) birth status. A total of 829 children, 8 to 11 years old (50% female, 46% black, 46% former preterm birth) were recruited from a cohort study. All children had unattended in-home overnight cardiorespiratory recordings of airflow, respiratory effort, oximetry, and heart rate for measurement of the apnea hypopnea index (number of obstructive apneas and hypopneas per hour). SDB was defined by either parent-reported habitual snoring or objectively measured OSA. Functional outcomes were assessed with 2 well-validated parent ratings of behavior problems: the Child Behavioral Checklist and the Conners Parent Rating Scale-Revised:Long. RESULTS: Forty (5%) children were classified as having OSA (median apnea hypopnea index: 7.1 per hour: interguartile range: 3.1-10.5), 122 (15%) had primary snoring without OSA, and the remaining 667 (80%) had neither snoring nor OSA. Children with SDB had significantly higher odds of elevated problem scores in the following domains: externalizing, hyperactive, emotional lability, oppositional, aggressive, internalizing, somatic complaints, and social problems. CONCLUSIONS: Children with relatively mild SDB, ranging from primary snoring to OSA, have a higher prevalence of problem behaviors, with the strongest, most consistent associations for externalizing, hyperactive-type behaviors.

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