Children's Hospital of Philadelphia PolicyLab

Targeting Sleep Duration and Timing for Prevention of Adolescent Obesity

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Adolescent obesity is highly prevalent, but there is mounting evidence that this public health problem can be partly addressed by targeting improvements in sleep patterns. Currently, 58% of middle school–aged children and 78% of high school–aged adolescents sleep insufficiently. Meta-analyses of cross-sectional studies indicate that shorter sleep duration is associated with up to an 80% increased likelihood of childhood obesity. Longitudinal studies, providing evidence of temporality, report that adolescents with shorter sleep durations are more likely to have higher body mass index growth trajectories, and a meta-analysis reported that shorter sleep duration was associated with a 2-fold increased risk of developing obesity in childhood. These data support the need for the experimental evaluation of sleep extension interventions for the prevention and treatment of adolescent obesity. However, sleep is multidimensional and few studies have examined whether sleep traits other than duration also contribute to adolescent obesity and related cardiometabolic risk. Sleep timing traits are of particular interest, given that circadian rhythms have been linked to metabolism and weight regulation.

Journal:

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