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LETTERS TO THE EDITOR

Pediatric Sleep Duration Consensus Statement: A Step Forward

Response to Lewin et al. Duration isn't everything. Healthy sleep in children and teens: duration, individual need and timing. *J Clin Sleep Med* 2016;12(11):1439–1441.

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We appreciate the interest shown by Lewin et al.[1] in our recently published consensus statement[2] and methodology and discussion paper.[3]

We would like to reemphasize major points that were stated in these papers. Most importantly, we recognized this as a first step to formally evaluate the published literature on sleep durations in children. Through a well-recognized modified RAND Appropriateness Method, we arrived at consensus recommendations on children's sleep durations based on the available literature. We hope that by identification of gaps in knowledge, sleep researchers around the world will continue to study and share more about children's sleep requirements.

As clearly stated in the Methods section of our paper,[3] the American Academy of Sleep Medicine (AASM) Board of Directors charged the panel with developing a recommendation for sleep duration in healthy children. Funding for this project was provided by the AASM and supported by the Centers for Disease Control and Prevention (Cooperative Agreement Number 1U50DP004930-03). The AASM Board of Directors presented the question to be answered by the panel members. The scope of the consensus statement was to answer: How much sleep is needed for optimal health in children?

In the Discussion section of our paper,[3] we stated that the panel focused solely on the dimension of sleep duration (the question at hand), while recognizing the importance of other factors such as timing, regularity, and quality. There is significant variability both within and between children as they develop, and development may not map precisely onto chronological age. Different aspects of development are often inconsistent within an individual child (e.g., a child may be early on psychomotor development yet be late on verbal development). This highlights the concern expressed by Lewin et al., that some of the age groups were too broad. Most published studies did not report data divided by each year of chronological age and the age ranges were not consistent between studies. Given the enormous amount of data we evaluated in children aged 0–18 years, separating out each year of childhood was not feasible during this project. We agree that circadian rhythm timing and napping are important components for healthy sleep, but an integrated review of circadian rhythm development was outside the scope of this project. We encourage further research in these areas.

Given the cross-sectional nature of most published studies in the area of pediatric sleep duration, we reported observed associations and provided guidance for parents and health care professionals. Regularly sleeping fewer than the number of recommended hours is associated with attention, behavior, and learning problems.[2] Insufficient sleep is also associated with increased risk of accidents, injuries, hypertension, obesity, diabetes, and depression.[2] Insufficient sleep in teenagers is associated with increased risk of self-harm, suicidal thoughts, and suicide attempts.[2] Regularly sleeping more than the recommended hours may be associated with adverse health outcomes such as hypertension, diabetes, obesity, and mental health problems.[2] Parents who are concerned that their child is sleeping too little or too much should consult their healthcare provider for evaluation of a possible sleep disorder.[2]

Finally, because the panel identified multiple gaps in published literature specifically on sleep duration, we strongly advocate for continued and increased funding from national agencies. We believe this work is an important step forward in providing evidence-based recommendations on sleep duration for children and adolescents but further refinement will depend on research that studies more specific age ranges, measures actual sleep duration (in addition to perceptions), and integrates measures of other sleep factors (e.g., weekend and weekday sleep duration variances, quantity and duration of naps, habitual bedtime, etc.) in data analyses. We also encourage sleep researchers to present new information through future publications and conferences, such as special sessions or a panel discussion at SLEEP 2017 and other appropriate venues.

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SUBMISSION & CORRESPONDENCE INFORMATION

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