

## Late bedtime and lack of sleep lead to overweight children in China

September 6 2017

Researchers at the University of Birmingham have found that Chinese children who go to bed later and sleep less are more likely to be more overweight.

The study also indicates that later bedtimes may place children at increased risk of obesity - even if they are getting 'enough' sleep over the course of the night.

Birmingham's research into the sleeping habits of 2,795 youngsters, aged 9 to 12, from the city of Guangzhou, in southern China, showed a link between sleep duration and the amount of body fat.

Research indicated that the Chinese children were sleeping less than youngsters in the United States and Europe, who had participated in similar studies - differences which may be a result of a focus on studying and <u>academic achievement</u> in China.

In the study funded by Guangzhou Medical Foundation, Birmingham scientists worked with Chinese counterparts at Sun Yat-Sen University and Guangzhou Center for Disease Control and Prevention.

Their findings show that children sleeping longer have lower Body Mass Index (BMI) scores than those sleeping less. For every hour later that a child goes to bed, their BMI score increases by a small amount.

Although the differences in BMI scores seem insignificant, there is



evidence that even a small change in BMI score is clinically important and associated with significant change in health outcomes.

There is increasing evidence showing that high-quality, adequate sleep is important for an overall healthy body, whilst sleep duration has been decreasing over time among children and adolescents.

Professor KK Cheng, Miranda Pallan, Bai Li and Peymane Adab, from the University of Birmingham; Professor Yajun Chen and Jiao Wang, from Sun Yat-Sen University and Dr. Weijia Liu, Wei Liu and Rong Lin of Guangzhou Centre for Disease Control and prevention published the results of their research in the *Journal of Epidemiology*.

Professor Peymané Adab, Professor of Chronic Disease Epidemiology & Public Health, said: "This study contributes to existing evidence for sleep duration as a risk factor for obesity in childhood, and later bedtime as an additional risk factor - regardless of sleep duration.

"Children in this study were getting less sleep than reported for children of similar ages in Western countries, plus their usual bedtime was relatively later than expected. These differences are likely to be cultural and due to the overemphasis on studying and academic achievement in China."

She added that behaviours which can contribute to obesity, such as TV watching and snacking, were more common in the later evening. Abnormalities in children's sleep-wake patterns might also contribute to the problem

Professor Yajun Chen, from the School of Public Health at Sun Yat-Sen University, in Guangzhou said: "The prevalence of obesity in China is alarming as the country undergoes rapid economic transition, leading to changes to traditional diet, increased sedentary lifestyles and reduced



physical activity.

"There are complex factors contributing to childhood obesity including biological and lifestyle factors, but increasing observational research reports that shorter <u>sleep duration</u> may be an additional risk factor associated with higher <u>body mass index</u> (BMI) among <u>children</u>."

**More information:** Jiao Wang et al, Prevalence of adiposity and its association with sleep duration, quality, and timing among 9–12-year-old children in Guangzhou, China, *Journal of Epidemiology* (2017). DOI: 10.1016/j.je.2016.11.003

Provided by University of Birmingham

Citation: Late bedtime and lack of sleep lead to overweight children in China (2017, September 6) retrieved 28 April 2024 from https://medicalxpress.com/news/2017-09-late-bedtime-lack-overweight-children.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.