

Study links long sleep duration to an increased risk of metabolic syndrome in older adults

June 8 2010

Long sleep duration is associated with an elevated prevalence of metabolic syndrome in older adults, according to a research abstract that will be presented Tuesday, June 8, 2010, in San Antonio, Texas, at SLEEP 2010, the 24th annual meeting of the Associated Professional Sleep Societies.

Results indicate that participants who reported a habitual daily [sleep duration](#) of eight hours or more including naps were 15 percent more likely to have [metabolic syndrome](#) (odds ratio = 1.15). This relationship remained unchanged after full adjustment for potential confounders such as demographics, lifestyle and [sleep](#) habits, and metabolic markers. Removing participants with potential ill health from the analysis slightly attenuated the observed association (OR = 1.13). Although participants who reported a [short sleep](#) duration of less than six hours were 14 percent more likely to have metabolic syndrome in the initial analysis (OR = 1.14), this association disappeared after controlling for potential confounders (OR = 0.98).

"The most surprising aspect of our study was that [long sleep](#) - and not [short sleep](#) - was related to the presence of the metabolic syndrome," said lead author Teresa Arora, research scientist at the University of Birmingham School of Medicine in Birmingham, U.K.

The study involved 29,310 people in Guangzhou, China, making it the

largest study to assess the relationship between [sleep duration](#) and the presence of metabolic syndrome. Participants were 50 years of age or older. Total sleep duration was reported by questionnaire.

The authors cautioned that the cross-sectional nature of the study did not allow for a determination of causality. However, Arora pointed out that the secondary analysis of healthy elders makes the results particularly intriguing.

"[Long sleep](#) duration is unlikely to be the consequence of ill health in our population sample as we re-ran the analysis in a smaller subset of 'healthy' elders, and the findings remained," she said. "Our follow-up data will allow us to make causal inferences."

Confirming that long sleep duration causes an increased risk of metabolic syndrome would have important public health implications, Arora added.

"We can recommend that long sleepers reduce the amount of overall sleep they achieve, which may in turn have beneficial effects on their health," she said. "Programs can be developed to modify sleep in an attempt to reduce the health burden on elderly populations, who are already at higher risk of disease."

According to the National Heart, Lung, and Blood Institute, metabolic syndrome is a group of obesity-related risk factors that increases your risk of heart disease, diabetes and stroke. A person with at least three of these five risk factors is considered to have [metabolic syndrome](#): excess abdominal fat, high triglycerides, low HDL cholesterol, high blood pressure and high blood sugar.

A U.K. study published in the February issue of the journal *Sleep* suggested that healthy older adults without sleep disorders can expect to

have a reduced "sleep need" and to be less sleepy during the day than healthy young adults. In the May issue of *Sleep* a study of 15,638 older Chinese adults reported that their weighted average daily [sleep](#) time was about 7.5 hours including naps.

Provided by American Academy of Sleep Medicine

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