

Struggles with sleep may affect heart disease risk

September 10 2015



Are you getting enough quality sleep? Are you sleeping longer than you should? Poor sleep habits may put you at higher risk for early signs of heart disease when compared to those who get adequate, good quality sleep, according to a study published in the American Heart Association journal *Arteriosclerosis, Thrombosis and Vascular Biology*.

"Inadequate [sleep](#) is a common problem and a likely source of poor health, including visible signs of disease, such as heart attack," said Chan-Won Kim, M.D., study co-lead author and clinical associate professor in the Center for Cohort Studies at Kangbuk Samsun Hospital, Sungkyunkwan University School of Medicine in Seoul, South Korea.

Researchers studied more than 47,000 young and middle-aged adults who completed a sleep questionnaire and had advanced tests to detect early [coronary artery](#) lesions and measure arterial stiffness. Early coronary lesions were detected as the presence of calcium in the coronary arteries and arterial stiffness was assessed by measuring the velocity, or speed, of the pulse wave between the arteries in the upper arm and ankle.

After measuring coronary calcium, researchers found:

- Adults who sleep five or fewer hours a day have 50 percent more calcium in their coronary arteries than those who sleep seven hours a day.
- Those who sleep nine or more hours a day have more than 70 percent more coronary calcium compared to those who sleep seven hours.
- Adults who reported poor sleep quality had more than 20 percent more coronary calcium than those who reported good sleep quality.

"We also observed a similar pattern when we measured [arterial stiffness](#)," said Yoosoo Chang, M.D., Ph.D., study co-lead author and associate professor in the Center for Cohort Studies at Kangbuk Samsun Hospital. "Adults with [poor sleep](#) quality have stiffer arteries than those who sleep seven hours a day or had good sleep quality. Overall, we saw the lowest levels of vascular disease in adults sleeping seven hours a day and reporting good sleep quality."

The study's findings highlight the importance of adequate sleep quantity and quality to maintain cardiovascular health.

"For doctors, it might be necessary to assess patients' [sleep quality](#) when they evaluate the cardiovascular risk and the health status of men and women," Kim said.

The self-reported assessments of [sleep duration](#) and quality in the study may underestimate the cardiovascular risk, researchers said.

Provided by American Heart Association

Citation: Struggles with sleep may affect heart disease risk (2015, September 10) retrieved 1 July 2024 from <https://medicalxpress.com/news/2015-09-struggles-affect-heart-disease.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.