

Getting better overall sleep might be the key to better health

By Thor Christensen, American Heart Association News



Improving your overall sleep health could help lower your risk for high blood pressure, diabetes, obesity and other cardiovascular threats, according to new research.

Experts already knew a lack of sleep and having sleep disorders can put health at risk. But the new study looked into whether the multiple factors that go into a good night's sleep are collectively associated with health risks.

To measure overall sleep health, the researchers created a multi-dimensional score based on the average amount of sleep each night, the consistency of bedtime and wake-up times, and how long it takes to fall asleep. They also factored in excessive daytime sleepiness and symptoms of sleep disorders such as snoring and difficulty breathing during sleep.

Then, they calculated an overall sleep health score of "poor," "moderate" or "ideal" for 4,559 adults who took part in the 2017-18 National Health and Nutrition Examination Survey. The NHANES is ongoing research consisting of household interviews and physical exams conducted as part of the Centers for Disease Control and Prevention's work to gather health statistics.

The new study found that compared to people with poor sleep scores, those with ideal sleep health had 66% lower odds of high blood pressure, 58% reduced odds of Type 2 diabetes, 73% lower odds of obesity, and 69% lower odds of central adiposity, or waist-line fat.

The research was presented this month at the American Heart Association's virtual Scientific Sessions. The findings are considered preliminary until published in a peer-reviewed journal.

"Multidimensional sleep health is important because our sleep habits are not isolated, they're interrelated. Sleep health as a whole may be stronger than the sum of its parts," said the study's lead researcher Dr. Nour Makarem, a cardiovascular epidemiologist and assistant professor at Columbia University in New York City.

She compared evaluating sleep health to determining what makes up a healthy diet. "We don't consume different foods and nutrients in isolation of each other. It's the same with the different aspects of sleep."

In addition to looking at overall sleep health, researchers zeroed in on the separate sleep factors.

For example, people who didn't have trouble falling asleep and never or rarely snored or experienced daytime sleepiness had lower odds of high blood pressure (up to 46%), Type 2 diabetes (up to 51%), obesity (up to 58%) and waist-line fat (up to 54%) than those who did.

The study also found that compared with people who got too little or too much sleep, those who got the recommended seven to nine hours of sleep had a 29% lower chance of having high blood pressure.

Makarem said doctors need to be more vigilant about diagnosing and treating sleep disorders, such as sleep apnea, and screening for sleep problems. But she also pointed out people need to pay more attention to their sleep habits, what time they go to bed and wake up each day, and how much sleep they get.

"One of the most important things is to have a fixed, consistent sleep schedule, getting seven to eight hours on both weekdays and weekends."

It's also important to limit alcohol, caffeine and large meals before bedtime, she said. Being physically active during the day and making sure your bedroom is quiet, dark and at a comfortable temperature can help you fall asleep more easily at night and improve your overall sleep health.

Future clinical studies are needed to figure out how improving multidimensional sleep might lower cardiovascular risks, Makarem said.

Marie-Pierre St-Onge, a sleep researcher who was not involved in the research, said the study "provides more support for the role sleep has in association with cardiovascular disease risk."

But the research was limited in that it only looked at data from one specific point in time. And it's unknown if sleep is impacting risk for these conditions or if the conditions are impacting sleep, said St-Onge, associate professor of nutritional medicine at Columbia University in New York City.

St-Onge, who led the writing of a 2016 AHA scientific statement about the health implications of sleep duration and quality, said people need to remove all screens and stressors long before bedtime and think about sleep rituals the same way parents do with their children.

"We don't excite kids before we put them to bed. We have a calming routine, like a bath and bedtime story, so they fall asleep easily," she said. "You need to maintain calming rituals throughout your whole life and not give them up just because you reach 21."