

# Can sleeping too much lead to an early death?

August 15 2018, by Stephanie Centofanti And Siobhan Banks



Don't worry, it's still OK to have that sleep in or afternoon nap. Credit: <u>Kinga</u> <u>Cichewicz</u>

A recent <u>study</u> in the *Journal of the American Heart Association* has led to headlines that will make you rethink your Saturday morning sleep in.



Don't set the alarm just yet. Yes, the researchers found a link between people who usually slept for longer than eight hours a night and their chances of having heart disease or dying prematurely.

But they didn't show that sleeping longer *caused* these health problems. It might be that people with health, psychological or social problems are more likely to sleep for longer.

#### How was the research conducted?

The research article investigated links between <u>sleep duration</u> and cardiovascular disease and death. Cardiovascular diseases affect the heart and blood vessels, and include heart attacks and strokes. They're a <u>leading cause of death</u> but many of the risk factors are modifiable health behaviours, such as not getting enough exercise.

The authors investigated the cardiovascular risk associated with each hour below seven hours – and each hour above eight hours – of sleep per night. They also looked at the link between sleep quality, cardiovascular disease and death.

The authors pooled together 74 existing studies from 1970 to 2017, covering 3.3 million participants.

In this case, the existing studies used population registries, death certificates, questionnaires, interviews and medical records to gain information about cardiovascular disease and health. To gain information on sleep duration, they used questionnaires or interviews.

## What did they find?

The researchers found getting more than eight hours of sleep was



associated with an increased risk of cardiovascular disease – a 17% increase for nine hours and a 23% increase for ten hours of sleep.

They also found a link between longer sleep times and an increased risk of premature death – a 23% increase for nine hours, a 52% increase for ten hours and a 66% increase for 11 hours of sleep.

Sleep durations of *less* than seven hours were also associated with strokes, although to a lesser extent than longer sleep durations. Five hours of sleep was associated with a 29% increased risk of strokes, compared to a 41% increase with ten hours of sleep.

Poor sleep quality wasn't associated with increases in premature death, but it was associated with a 44% increased risk of coronary heart disease.

The authors conclude that sleeping longer than seven to eight hours a night may be associated with a moderate degree of harm compared to sleeping for shorter than recommended. Sleep duration and quality, they say, may therefore be helpful markers for increased cardiovascular risk.

Based on this, they suggest clinicians:

be aware people who report sleeping too much or waking up feeling unrefreshed warrant further clinical assessment

promote good sleep practices and discuss sleep with patients.

### What does it all mean?

Don't make any rash changes to your sleeping patterns just yet. We can't conclude from this study that longer sleep causes cardiovascular disease or a greater risk of early death. There appears to be a *correlation*, but



given the design of the study, we can't establish *causation*.

Before we even go as far as saying there's a *correlation* between longer sleep duration and cardiovascular disease, there are a few things to take into account.

The included studies used subjective measures of sleep, and the length of time in which the participants were asked about their sleep duration (in the past week, month or year) may have varied.

<u>Lab-based sleep studies show</u> it's really hard to remember how long it took you to fall asleep, how many times you woke up during the night, and how much sleep you got in total. Quite often the amount of time a person spends in bed as opposed to the amount of time a person is *asleep* in bed can affect these subjective ratings of sleep duration and quality.

So, at best, we can say people who *feel* like they sleep more and have poorer sleep quality may be at higher risk of developing cardiovascular disease.

Because this is a meta-analysis (which pooled 74 studies), the authors also acknowledge we can't look at individual patient-level data. Therefore, assumptions can't be made about the links between cardiovascular disease, sleep and other risk factors that might have been at play.

In other words, a whole range of other underlying issues probably contributed to these findings. <u>Health issues</u> that can lead to increased subjective sleep duration or reduced <u>sleep quality</u> include depression, obstructive sleep apnoea, anaemia, inflammatory disorders and other sleep disorders.

There are also many psychological and social factors that might



influence how much a person sleeps. Unemployment, low socioeconomic status, low levels of physical activity and poor nutrition can all lead to increases in sleep duration and feelings of being unrefreshed during the day.

A lot of these health issues and psychological factors happen to be well-known <u>risk factors</u> for cardiovascular disease. So, it's probable these factors are the underlying mechanisms leading to an increased risk of <u>cardiovascular disease</u> *and* increased sleep duration, rather than too much sleep *directly* affecting cardiovascular risk.

The question of how sleeping too much affects health is interesting and important to investigate further using different research designs. Cohort studies, where large groups of people are studied over a long period, would allow us to investigate and draw more solid conclusions about the causal links between sleep duration and health.

## Is it better to sleep less?

If you're tempted to stay up late to squeeze in a few more episodes of your favourite TV show, think again. Many <u>studies</u> conducted in controlled, experimental conditions show *not* getting enough sleep affects physical and psychological functioning and can contribute to the development of chronic health issues such as type 2 diabetes.

"Most adults need <u>around seven to nine hours of sleep a night</u>, but individual sleep needs can vary greatly. Make sure you get enough sleep so you feel refreshed and be sure to share any concerns about your sleep with your doctor." – Stephanie Centofanti and Siobhan Banks

## Blind peer review



This is a fair and accurate assessment of the study and its findings. Self-reports of sleep are not always reflective of true sleep duration or quality. And it's likely other health conditions are the underlying reason for the increased risk.

"People should listen to their own body when determining how much sleep is the right amount for them, as sleep duration can vary greatly between individuals." – Gemma Paech

**More information:** Self-Reported Sleep Duration and Quality and Cardiovascular Disease and Mortality: A Dose-Response Meta-Analysis, 10.1161/JAHA.118.008552,

www.ahajournals.org/doi/10.1161/JAHA.118.008552

This article was originally published on <u>The Conversation</u>. Read the <u>original article</u>.

## Provided by The Conversation

Citation: Can sleeping too much lead to an early death? (2018, August 15) retrieved 20 March 2024 from <a href="https://medicalxpress.com/news/2018-08-early-death.html">https://medicalxpress.com/news/2018-08-early-death.html</a>

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.