

Regularly getting a good night's sleep could cut asthma risk

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Regularly enjoying a good night's sleep could significantly reduce your risk of developing asthma, a decade-long study suggests.



Asthma affects about 300 million people worldwide. Scientists do not know why some people develop the condition while others do not.

Now a large study has found that poor sleep patterns may bolster genetic susceptibility to asthma, potentially doubling the risk of being diagnosed with the condition.

A healthy sleep pattern appears to be linked to a lower risk of asthma, prompting the researchers to suggest that detecting and treating sleep disorders early on may lessen the risks, irrespective of genetic predisposition. The findings were published in the journal *BMJ Open Respiratory Research*.

A team from Shandong University in China used data from the UK Biobank study to examine 455,405 people aged 38 to 73. They developed a model of risk and sleep traits and followed participants for more than a decade.

At the start of the study, people were asked about their sleeping patterns, including whether they were a morning person or a night owl, how long they slept for, whether they snored, had insomnia and whether they experienced excessive sleepiness during the day-time.

A healthy sleep pattern was defined as being more of a morning person, sleeping for seven to nine hours a night, never having insomnia or experiencing it rarely, no snoring and no frequent sleepiness during the day.

The genetic makeup of all those in the study was mapped, and an asthma risk score drawn up.

About one in three were found to have a high genetic risk of developing asthma, a third had an intermediate risk and another third had a low risk.

Over the decade of follow-up, 17,836 people were diagnosed with asthma. Compared with those at low genetic risk, those with the highest genetic risk were 47% more likely to be diagnosed with asthma, while those with a poor sleep pattern were 55% more likely.

People at high genetic risk who also reported poor sleep patterns were more than twice as likely to be diagnosed with asthma as those with a healthy sleep pattern and a low genetic risk.

Meanwhile, a healthy sleep pattern decreased the risk of asthma by 44% in those at low genetic risk, by 41% in those at intermediate risk and by 37% in those with high genetic risk.

“These results showed that a healthy sleep pattern could significantly decrease asthma risk in any genetic subgroup,” the researchers wrote. At the population level, they suggested, a low genetic risk combined with a healthy sleep may indicate that about a fifth of asthma cases could be prevented.

“Unhealthy sleep patterns and sleep traits ... were significantly associated with the risk of asthma in adults,” they concluded. “The combination of poor sleep pattern and high susceptibility could lead to additive asthma risk.

“A healthier sleep pattern could be beneficial in asthma prevention regardless of genetic conditions.”

This was an observational study, so could not establish cause, and the researchers acknowledged several limitations to their findings. But they suggested poor sleep may cause an inflammatory response in the body, which increases the risk of asthma.

Urging caution, Dr Erika Kennington, the head of research and innovation at the charity Asthma and Lung UK said: “This research suggests there is a link between asthma and not getting enough sleep, although it is too early to say that treating poor sleep could reduce someone’s risk of developing asthma.”