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# Obstructive *sleep apnoea*

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If you aren't getting enough rest daily, chances are you might need to undergo a medical check-up to see if your airways are blocked during sleep.

**D**uring sleep, the brain and body goes through various stages of rest and recovery. As sleep deepens and our muscles relax, the soft tissues of the airway also progressively lose tone over time as we grow older.

Sometimes, this relaxation of the upper airway muscles can cause the airway to narrow significantly or even obstruct it completely.

This can happen many times during sleep and even cut off the supply of oxygen to our lungs periodically.

To ensure we are able to continue breathing, our brain would then interrupt the sleep cycle and 'wake' us up so that the airflow is restored. As such, our sleep isn't as restful as it should be and people who suffer from this ailment could wake up still feeling tired.



Medically described as apnoea, it is defined as the absence of airflow through the nose or mouth for more than 10 seconds at a time. When one experiences more than 30 episodes of apnoea in seven hours of sleep, that constitutes sleep apnoea syndrome.

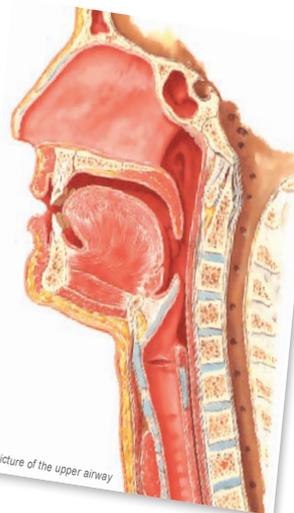
#### VARIOUS CAUSES

Obstructive sleep apnoea (OSA) is a syndrome caused by the obstruction of the upper airway tract – made up of the nose, throat (pharynx and larynx) and windpipe (trachea) – that carries crucial oxygen-rich air into our lungs for respiration.

Any narrowing of these passages can contribute to OSA, which is associated with a number of conditions. Chief among them is obesity. It affects 65% of people who are overweight and is present in 80% of those with a body mass index of more than 30.

Mechanical obstruction from the nose, throat, tongue and jaw are usually found in those with OSA. Alcohol, use of barbiturates and sedatives also worsen the condition by causing over-relaxation of the upper airway muscles.

“OSA can lead to hypertension, heart failure, heart rhythm abnormalities and ischemic heart disease. It is also known to affect mood, libido and compromise work performance.”



OSA is commonest in children and middle-aged adults. It is found more in men than women and has been found in 4% of middle-aged men.

#### HEALTH DANGER

Because of the lack of oxygen during sleep, a few harmful changes occur in our bodies. Firstly, our hearts have to pump harder, and more adrenaline is released, causing a rise in blood pressure. Secondly, inflammation occurs and this causes plaque formation in the coronary arteries.

Thirdly and most importantly, we cannot get restful sleep due to interruptions to our sleep cycle and deprivation of oxygen to the brain.

OSA is a dangerous condition because it can lead to hypertension, heart failure, heart rhythm abnormalities, ischemic heart disease and even cause road accidents and industrial injuries. It is also known to affect mood, libido and compromise work performance.