

SLEEP DEPRIVATION

Sleep deprivation is a condition where someone is not getting enough sleep; it can be either chronic or acute.

The absolute number of hours of sleep necessary for someone to function properly is variable. Some people can function with full effectiveness with only three to five hours of sleep per night, while others need at least eight hours or more of sleep per night. However, it is recommended that adults sleep seven to nine hours a night.

A chronically sleep-deprived state can cause tiredness, excessive daytime sleepiness, clumsiness and weight gain. It impairs the normal functioning of the brain. It is impossible for humans to go completely without sleep for long periods of time – brief microsleeps cannot be avoided. Total sleep deprivation has been shown to cause death in lab animals.

WHAT ARE MICROSLEEPS?

Microsleeps occur when someone is significantly sleep-deprived. The brain can automatically shut down, falling into a sleep state that can last from a second to half a minute.

You can fall asleep no matter what you are doing. Microsleeps are similar to blackouts and you will not be aware that they are occurring when you are experiencing them.

EFFECTS OF SLEEP DEPRIVATION

Individuals who are sleep-deprived may not recognise the effects of being so. Small amounts of sleep loss over many nights may result in subtle cognitive loss, which appears to go unrecognised by the individual.

More severe sleep deprivation for a week can lead to profound cognitive dysfunction similar to that seen in some stroke patients, which may also appear to go unrecognised by the individual.

Sleep Deprivation Can Cause:

- 1 Confusion, memory lapses
- 2 Depression, irritability, headaches
- 3 Eye bags and bloodshot eyes
- 4 Increased blood pressure, increased stress hormone level
- 5 Increased risk of diabetes, obesity
- 6 Decreased immunity
- 7 Decreased growth hormones
- 8 Increased risk of road traffic accidents
- 9 Poor work productivity
- 10 Poor quality of life
- 11 Sleeping less than four hours a night is associated with higher risk of premature death

PREVENTION

Maintain proper sleep hygiene. Seek medical help if you feel that you are not sleeping well.

CAUSES

1. Lifestyle

You may choose not to sleep to watch a midnight show, talk to friends, play computer or video games.

Heavy work commitment and stress may hinder sleep and lead to sleep deprivation.

Shift workers may be affected by sleep deprivation.

2. Medical Disorders

Many medical conditions can lead to sleeplessness, and hence sleep deprivation.

Chronic pains and aches can lead to disturbed sleep and sleep deprivation.

Sleep disorders like obstructive sleep apnoea, narcolepsy and restless leg syndrome can lead to disruption of normal sleeping pattern and sleep deprivation.

Nasal obstruction can result in someone not being able to sleep, therefore being sleep-deprived.

The effects of sleep loss are often unrecognised.

For enquiries, contact SingHealth Duke-NUS Sleep Centre at:

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