

GET ENOUGH SLEEP, EVERY DAY

Sleep is something many of us take for granted, but there is no denying the importance of getting enough sleep every day.



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Our bodies are designed to be able to keep functioning for long hours, performing many functions at the same time to keep us going, but they also need a break. That is where sleep comes in. “It is during this time that the body and mind have a chance to restore and refresh their functions,” says consultant urologist Dr Han Pei Kwong.

WHAT HAPPENS WHEN WE SLEEP?

Dr Han explains that our bodies cycle through two main modes of sleep.

The non-rapid eye movement (NREM) mode makes up about 75% of our sleep.^{1,2} During this stage, we go through four different stages.

- *Stage 1.* We are hovering between wakefulness and sleep.^{1,2}
- *Stage 2.* Light sleep.^{1,2}
- *Stages 3 and 4* are also known as the **slow wave sleep (SWS)** stage. During SWS, we are deeply asleep, and our body experiences the restorative benefits of sleep.^{1,2}

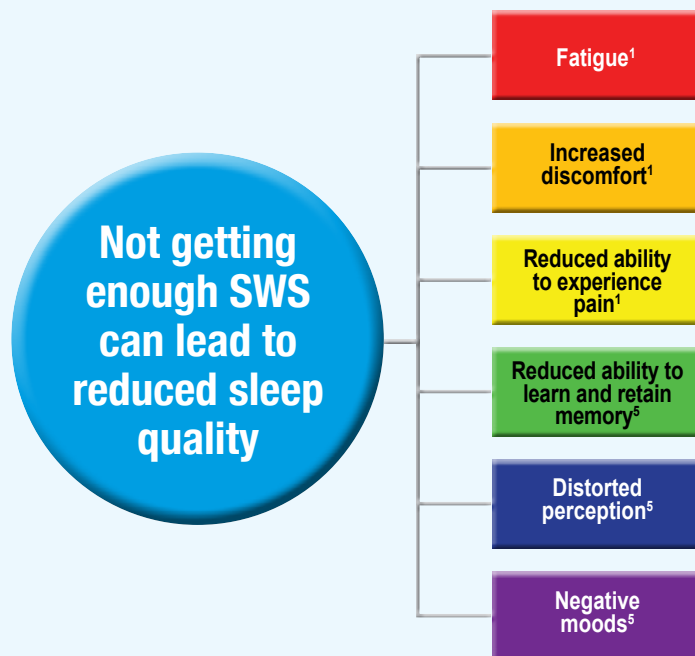
The rapid-eye movement (REM) mode.^{1,2} The eyes are noted to move rapidly under the eyelids during this stage, hence the name.

Some studies found that the early sleep (usually the first 4 hours of sleep) is characterized by high amounts of SWS, while REM is more prominent during late sleep. Our ability to attain SWS decreases as the sleep cycle progresses into late sleep.²

WHY IS THIS WORTH NOTING? IS SWS IMPORTANT?

Yes! Dr Han notes that it is during SWS that the body performs restorative functions related to the strengthening of our memories.⁴ He adds that SWS is also linked to physical healing.

Figure 1. The many bothersome effects of reduced sleep quality.



The consequences of reduced quality of sleep can lead to reduced performance at work or school, and increased risks of accidents (especially when we drive or operate machinery). Also, the resulting negative moods can affect our relationships with the people around us. Dr Han adds that it is possible for the affected person to also gain weight or develop high blood pressure.

HOW DO WE GET ENOUGH SWS?

Some studies found that restorative benefits to our body are optimised if we have at least 3-4 hours of uninterrupted sleep.¹ Dr Han adds that however, the actual sleep hours requirement can greatly vary from person to person.

Note the word ‘uninterrupted’ – sleep interruptions during the SWS phase have been linked to the consequences of reduced sleep quality mentioned earlier.¹

Therefore, we should ensure that our sleep is not interrupted in order to maintain its quality and receive its restorative benefits.

SLEEP INTERRUPTED

There are many possible causes that can disrupt our sleep. Let's take a look at one common sleep interruption for many people: getting up at night to pee.

Dr Han Pei Kwong explains that the urge to get up to pee, after we have fallen asleep, at least once a night is called **nocturia**.

"The prevalence of nocturia increases with age," Dr Han says, adding that over 70% of people aged 70 and above are affected, while the prevalence among younger people is around 30% or less.⁶ Indeed, it has been reported that nocturia is the main cause of sleep interruption among men over 50.¹

NOCTURIA CAN DISRUPT SWS

As we've seen, the restorative benefits to our body are optimized if we have about 3-4 hours of uninterrupted sleep.

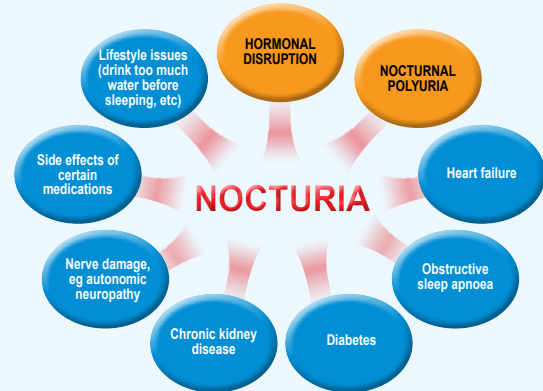
A study on people affected by nocturia, however, revealed that these people on average have their sleep interrupted during the first 2-3 hours.⁷ Therefore, their quality of sleep will be affected in the long run if the situation is left unchecked.

The good news is that nocturia can be treated. Before we get into that, though, let's first take a look at its possible causes.

WHAT CAUSES NOCTURIA?

There are many possible reasons that can lead to the urge to wake up at night to pee, and Dr Han shares some of these reasons, as shown in Figure 2,

Figure 2. Some of the many possible causes of nocturia.⁸



TOO MUCH & TOO LITTLE

- **Too little urine-production controlling hormone?** Dr Han explains that normally, we will produce **anti-diuretic hormone (ADH)** during our sleep. ADH helps to reduce urine production at night. When ADH production is disrupted, our body retains water at a lower rate at night, resulting in increased urine production (see nocturnal polyuria, below) and hence, the increased urge to wake up and pee.⁸
- **Too much night-time urine production?** Not to be confused with nocturia, **nocturnal polyuria** is a condition in which the amount of urine produced by our body at night exceeds 20-33% of our total daily urine volume.⁹ It is one of the most common causes of nocturia.

GETTING TREATMENT TO MANAGE NOCTURIA

We shouldn't let the number of possible causes for nocturia deter us from seeking help when our night-time urge becomes bothersome and starts to affect our daily routines.

When we first visit a urologist for treatment, they will conduct a full medical check-up, take our detailed medical history and advise us on how to fill in a bladder diary. These are to confirm that we have nocturia and to determine its possible cause(s).

Management may include some adjustments to our lifestyle (such as your habits when it comes to consuming beverages). If necessary, the urologist may also prescribe medications that can behave similarly to ADH (see "Too Much & Too Little"), so that our body will reduce its urine production at night.

Don't suffer in silence! If your night-time urge to pee is bothersome, visit a urologist for advice and treatment. Visit www.waketopee.ie for more information.

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