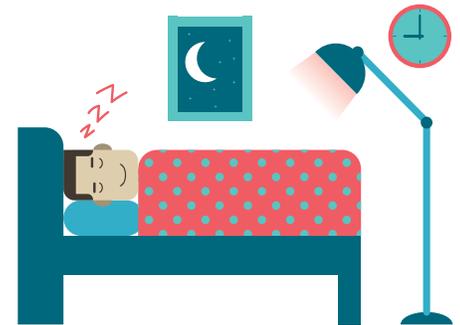


Sleep Struggles Are a Wake-Up Call to Seek Guidance and Make Lifestyle Changes



By Sylvie Hébert, PhD

How Well Do You Sleep?

Do you experience sleep difficulties because of your tinnitus? If so, you are not alone. Sleep difficulties are the most frequent complaints among adults with tinnitus. Depending on the type of study conducted (e.g., population study vs. clinical sample), from 32 percent to 80 percent of individuals with tinnitus report sleep problems.^{1,2} This is not surprising since even the mildest tinnitus can be heard in quiet environments. Therefore, difficulty falling asleep in a quiet bedroom is a very common challenge among tinnitus patients, as are disrupted sleep (awakening during midsleep and early morning) and daily fatigue.

32%–80%
OF INDIVIDUALS WITH
TINNITUS REPORT
SLEEP PROBLEMS

Of particular concern is that nearly half of tinnitus patients report sleep disturbances as a persistent problem five years after their first visit to the clinic.³ Moreover, more severe sleep complaints are correlated with greater tinnitus severity, especially at night.

In turn, poor sleep quality before the onset of tinnitus may increase the perceived severity of tinnitus at onset. In sum, poor sleep remains an important problem long after tinnitus onset and beyond the period of care by healthcare professionals.

What Is Healthy Sleep?

Healthy sleep is generally defined as sleep of adequate duration, quality, timing, and regularity.⁴ Adults ages 18 to 64 years should get seven to nine hours and those 65 years and older should get seven to eight hours of good quality sleep on a regular basis, with consistent bedtimes and wake-up times.

7–9 HOURS
ADULT AVERAGE
SLEEP NEEDS

There is a large body of scientific data on the fundamental role of healthy sleep on physical, cognitive, and mental health. Chronic insufficient—or too much—sleep is associated with a wide range of adverse health outcomes: altered mental health such as anxiety, depression, and cognitive impairments regarding memory and learning; and physical health, including metabolic syndrome, diabetes/impaired glucose

metabolism, hypertension, and coronary heart diseases.

Older adults in general have more fragile sleep, and poorer sleep quality than younger adults. Because tinnitus prevalence increases with age, is it reasonable to attribute sleep problems solely to age? The answer is no. In a study in which sleep complaints of older adults with tinnitus were compared with those of age-matched adults without tinnitus, those with tinnitus had more complaints than their age-matched controls.⁵ Therefore, individuals with tinnitus are at increased risk of developing deleterious health problems in the long term, over and beyond their age and tinnitus severity.

Improving sleep, therefore, should be a priority for tinnitus patients and their clinicians to prevent development of more serious health problems. Unfortunately, sleep problems remain largely undocumented or mismanaged by hearing healthcare professionals.

Interventions for Tinnitus: Do They Improve Sleep?

Can the sleep problems of tinnitus patients be alleviated by tinnitus interventions? In other words, if we “treat” tinnitus, or more precisely

manage it, do we reduce both tinnitus severity and sleep complaints? Surprisingly, very little data are available to answer this question.

We can think about daytime or nighttime interventions. Regarding daytime interventions, counseling with and without sound therapy and being fitted with hearing aids have been reported to improve both tinnitus severity and sleep complaints.⁶⁻⁸ Regarding nighttime interventions, bedside sound generators or in-ear devices delivering noise seem to improve tinnitus severity (although sleep parameters or complaints were not assessed).^{9,10}

In a nutshell, there is some low-level evidence that managing tinnitus or sleep in general might improve sleep and/or tinnitus. However, exactly which aspect of sleep (falling asleep, staying asleep, or overall sleep quality) is improved, or by what mechanisms, remains unknown.

Basic Advice About Getting a Good Night's Sleep

Sleep disruptions can happen for many reasons other than tinnitus, so it is useful to remind ourselves of some basic advice about good sleep hygiene, especially as we get older and our sleep becomes more vulnerable to lifestyle and external factors. For instance, sleeping on a bad mattress in a warm bedroom may explain why your sleep is not optimal. Likewise, having a heavy dinner shortly before going to bed will interfere with sleep.

So, before considering any pharmacological treatment or more specialized sleep disorder diagnosis,

make sure you have addressed basic sleep hygiene principles:

- Create a consistent bedtime routine.
- Make your bedroom a haven for sleep (e.g., sleep on a comfortable mattress, maintain a cool and dark bedroom)
- Establish a positive association between your bed and sleep.
- Avoid bright light exposure in the evening and throughout the night.
- Watch your caffeine, nicotine, and alcohol intake.
- Be mindful of what you eat before sleep.
- Exercise regularly.
- Stay awake during the day
- Make time to relax.

5 CBT-I Sleeping Tips

- 1 Go to bed only when tired at night.
- 2 Use the bed and bedroom only for sleep and sex (i.e., no reading, TV watching, or worrying in bed).
- 3 Get out of bed and go to another room if you're unable to fall asleep or return to sleep within 20–30 minutes. Return to bed only when you're tired. Repeat as necessary during the night.
- 4 Arise at the same time every morning, regardless of how much you slept.
- 5 Avoid daytime naps.



LIMIT OR AVOID
CAFFEINE, NICOTINE,
AND ALCOHOL

Some of this advice pertains to lifestyle factors that can be easily modified, such as caffeine consumption, drinking alcohol in the evening, eating a light dinner, and so on. If such adjustments don't improve sleep, there are more advanced sleep hygiene instructions derived from cognitive behavioral therapy for insomnia (CBT-I) that can be utilized. Cognitive behavioral therapy is a recognized therapeutic option for insomnia as well as tinnitus.^{11,12} These recommendations, noted in the box, are aimed at reassociating the bed, bedroom, and bedtime stimuli with sleep rather than with the frustration and anxiety associated with sleeplessness.

The recently published Canadian 24-Hour Movement Guidelines for Adults offers useful information about physical activity, sedentary behavior, and sleep.¹³ For instance, in addition to getting good sleep, it is recommended adults perform at least 150 minutes of moderate to vigorous aerobic physical activities per week, muscle strengthening activities using major muscle groups at least twice a week, and several hours of light physical activities. In addition, adults 65 years old and older are recommended to undertake activities that improve balance (e.g., dance, tai chi, yoga, or simple leg raising with a chair). This is quite a program!



150 MINUTES/WEEK
MODERATE TO VIGOROUS
AEROBIC PHYSICAL ACTIVITIES

Valuable resources for patients who wish to know more about sleep can be found on websites such as those of the American Academy of Sleep Medicine (<https://aasm.org/clinical-resources/patient-info/>), the Canadian Sleep Network (<https://www.cscnweb.ca/material-for-patients-and-the-public>), and the Sleep On It Campaign (<https://sleeponitcanada.ca/>).

Management of sleep complaints in tinnitus remains an unmet therapeutic challenge. Yet sleep problems are one important factor that will prompt individuals with tinnitus to seek help for their tinnitus in comparison to those who will not,¹⁴ and lack of sleep is among the factors clearly identified as aggravating among tinnitus patients.

Poor sleep can entail important consequences on both overall health and tinnitus severity. In turn, lack of sleep may increase tinnitus severity and in the long term give rise on its own to many additional serious health issues. This is the reason why tinnitus patients should be aware of how they can improve their sleep and improve

their quality of life. If these tips are not sufficient to help, then it would be useful to seek professional help. 



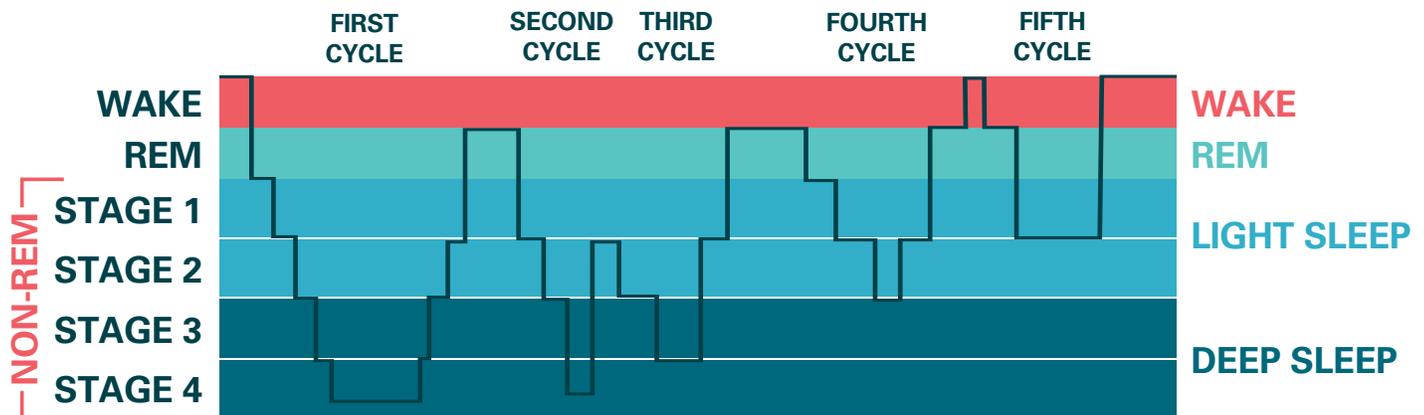
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particularly well known in the area of tinnitus stress and sleep disturbances.

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SLEEP CYCLE



While sleeping, the brain cycles through four stages of sleep, divided into two phases: Non-REM sleep and REM sleep. REM stands for rapid eye movement. Non-REM sleep occurs first and has three stages, including deep sleep. Dreams occur during REM sleep. Depending on the stage, it takes 70 to 120 minutes to complete a full cycle, after which it begins again at stage 1.