

Hemophilia and Sleep

By Dr. Anthony K.C. Chan

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Are you getting enough sleep?

- Do you have trouble staying awake during boring or repetitive activities?
- Do you sometimes find yourself being overly irritable with co-workers, family, and friends?
- Do you often have a hard time concentrating or remembering things?



According to the National Sleep Foundation, if you answered “Yes” to any of these questions, you could probably benefit from more sleep.

Why is sleep important?

- A good night's sleep allows you to wake up feeling refreshed, alert, and ready for daily activities.
- If you don't sleep well, it can affect every part of your life, including work life, relationships, productivity, health, and safety. Even occasional sleep issues impact daily life.

Pain and poor sleep – a vicious cycle

Hemophilia causes recurrent bleeding into joints, joint disease (arthropathy), and joint contracture. One of the crucial consequences of hemophilia is pain, which has a significant impact on health-related quality of life in both children and adults with hemophilia.

About 50% of hemophilia patients experience chronic pain.

- Most pain in people with hemophilia is chronic, debilitating, and distracting – affecting all dimensions of life, including physical, psychological, and social well-being.

The relationship between chronic pain and sleep is bidirectional.

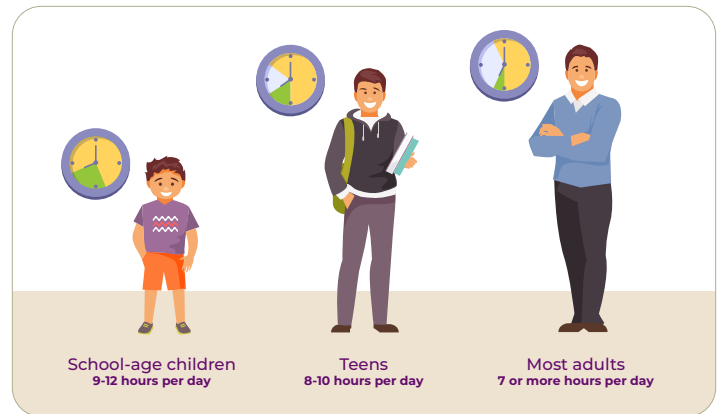
- Pain is associated with poor sleep quality, awakening, and shorter sleep time.
 - The risk of sleep disturbance after experiencing pain is significantly enhanced compared to being free of pain.
- Sleep deprivation increases pain sensitivity.
 - Sleep disturbances may impair key processes that contribute to chronic pain, including joint pain.

Both chronic pain and sleep disturbances share an array of physical and mental health comorbidities, such as obesity, type 2 diabetes, and depression. Moreover, excessive daytime sleepiness resulting from sleep loss may put hemophilia patients at risk of accidents and injury.

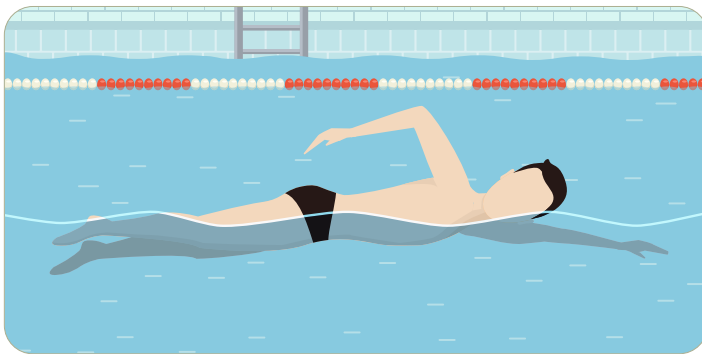
People with hemophilia are equally or even more prone to obesity compared to the general population. Obesity contributes to conditions such as obstructive sleep apnea, which in turn leads to further health issues. It is therefore of paramount importance for hemophilia patients to adopt a healthy lifestyle and maintain adequate and good quality sleep.

How much sleep do I need?

- The Centre for Disease Control and Prevention (CDC) provides recommendations on the range of sleep duration for different age groups. The optimal duration varies with individuals, however, in general:
 - School-age children (6-12 years of age) require 9-12 hours of sleep per day.
 - Teens (13-18 years of age) require 8-10 hours per day.
 - Most adults (18-60 years of age) require at least 7 or more hours of sleep per day.



TIPS FOR BETTER SLEEP



Exercise and diet

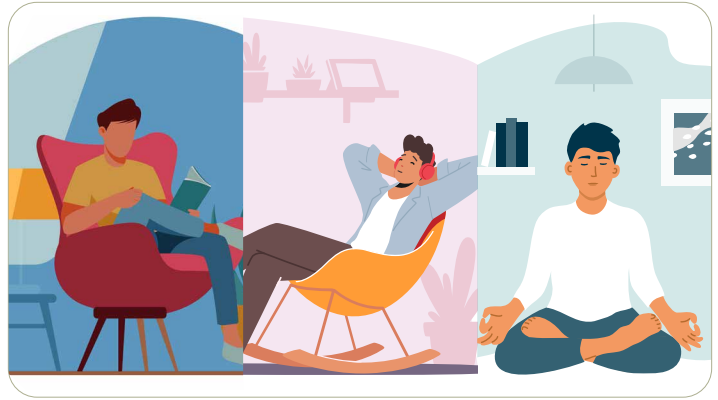
- Exercise regularly. A low-impact fitness program, like walking, swimming, or yoga, is helpful for managing pain and stiffness and improving sleep.
- Participate in cardiovascular exercise 3-6 hours before going to bed.
 - **IMPORTANT:** Exercise regularly according to your physical condition. Take appropriate precautions and wear protective gear to avoid injury during exercise, if needed. Seek advice from your healthcare team on the type and intensities of physical exercises that are safe and suitable for you.
- Finish eating meals 2-3 hours before bedtime.
- Try to limit how many caffeinated products you consume in the afternoon.
- Alcohol and nicotine in your body can disrupt sleep and can cause nighttime waking. For optimal sleep, skip them close to bedtime or altogether.

Pain control and disease coping skills

- If pain is causing sleep disturbances, discuss management strategies to control pain with your healthcare team.
 - Prolonged use of pain medications may have risks of dependence or addiction, as well as organ damage, and must be carefully monitored.
 - People with persistent pain should be referred to a specialized pain management team.
- Complementary techniques for pain management (e.g., meditation, distraction, mindfulness, or music therapy) may be helpful.
- If you are experiencing persistent symptoms of low mood, anxiety, and insomnia, seek advice from your healthcare team.

Build a sleep routine

- Go to bed at the same time every night and wake up at the same time each day, including weekends.
- Prepare yourself for bed about an hour before by dimming the lights and “creating your own sunset.”
- Set a relaxing bedtime routine, such as listening to calming music, reading a book, or taking a warm bath.
- Gentle stretching or meditation can also remind your mind that it’s time to fall asleep.



Create an environment conducive to sleep

- Make sure your bedroom is cool. Your body temperature naturally decreases to initiate sleep. A bedroom temperature between 15.5-19.5 degrees Celsius (60-67 degrees Fahrenheit) helps promote sleep.
- Make sure your bedroom is dark. Use a blackout shade to block out unwanted light and dim the lights on your digital clock.
- Use your bedroom only for sleeping. Electronic devices such as computers, televisions, and radios are stimulus. They encourage the body to continue using its senses and stimulate the brain to keep working.
 - If that’s not possible, pledge to stop using electronics an hour before you go to bed, and enable “Night Mode” to reduce the amount of blue light your device emits.
- Invest in comfortable bedding, including your mattress, pillows, and sheets. Look for a mattress and pillows that support your spine and use bedding that helps you maintain your ideal temperature at night.
- Eliminate nearby sources of noise or subdue them with a white noise machine or a simple fan. This will help you avoid waking up or becoming startled by unexpected sounds.



Remember, sleep is an important part of your overall health and well-being.
Make an effort to prioritize good quality sleep into your daily life.

Thank you for the editorial and content input from Dr. T Leung.

About the Author



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Dr. Chan is a renowned pediatric hematologist at McMaster Children’s Hospital and a professor of pediatrics at McMaster University. He is the Foundation Chair in Pediatric Thrombosis and Hemostasis and Director (Pediatrics) of the Hemophilia Treatment Centre and Thrombosis Program at McMaster Children’s Hospital. Among his many professional affiliations, he is an elected member of the American Pediatric Society and the Society for Pediatric Research. Reflecting his special interest in hematology, Dr. Chan has over 25 years of experience conducting clinical trials, following the guiding principles of ensuring the safety of patients and the integrity of the trial. He has been a member of the Ontario Hemophilia Provincial Steering Committee since 2004. For over 20 years, Dr. Chan has donated his time providing consultations to healthcare professionals treating children with thromboembolic disease through the toll-free service 1-800-NO-CLOTS. As a testament to his passion for the welfare of children, in 2017, Dr. Chan was awarded the Order of Ontario for his care of children with thrombosis and stroke, including the development of clot-resistant catheters which may prevent childhood thrombosis worldwide.