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INDIA IS SLEEPING LESS

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Indians are least active and second-most sleep deprived, says FitBit study!

INTRODUCTION

SLEEP is one of the most important refueling processes of our body essential for life and optimal health. After working hard throughout the day, the body needs good sleep to rejuvenate itself for the next day. In the current edition of the Journal of Human Hypertension, Lin et al. add importantly to the body literature relating the presence of sleep disorders to risk of CV disease, in this case, specifically, risk of incident hypertension.

SLEEP STATISTICS

According to the recent statistics presented at an international conference organized by the South East Asian Academy of SleepMedicine (SEAASM) and Getwell Hospital in Nagpur, the average sleeping hours per day has decreased globally. What's worse is that with an average of 6.55 sleeping hours, India stands second to last on the list.

With an of average 7.16 sleeping hours per day, UK tops the list, followed by Australia (7.15) and New Zealand (7.15 hours). Most of us know the importance of eight hours of sleep for our body and mind, but how many of us manage to sleep for that long every night?

Unfortunately, the less sleep you get, the greater your risk of developing high blood pressure. "Blood pressure is one of the best predictors of cardiovascular health," said lead study author Caroline Doyle, a graduate student in the UA Department of Psychology. "There is a lot of literature out there that shows sleep has some kind of impact on mortality and on cardiovascular disease, which is the No. 1 killer of people in the country.

In the Sleep Heart Health Study, subjects sleeping ≤5 h/night had a higher frequency of prevalent hypertension, after adjusting for multiple confounders.

THE INTERCONNECTION B/W SLEEPLESS NIGHTS AND HIGHBLOOD PRESSURE

- Activation of the hypothalmic-pituitary-adrenal axis and the sympathetic nervous system as seen in insomnia may predispose to hypertension development.
- In part, sleep deprivations effects on the mental and emotional state shed light onto the forces at work. Without enough sleep, the brain becomes more sensitive to negative thoughts and feelings, which cause an increase in stress hormones like cortisol that naturally, cause a rise in blood pressure
- If you suffer from sleep apnea, having hypertension can be an added headache. Sleep apnea is caused, most commonly, by the back of the throat relaxing and restricting airflow into the body. Those suffering from sleep apnea are more at risk of having high blood pressure. When suffering from hypertension and sleep apneatogether, oxygen flowing through the body is greatly reduced. Sleep apnea can increase blood pressure by reducing oxygen that you are in taking. The higher your blood pressure climbs, the more At risk you are for serious health problems like congestive heart failure and stroke. Snoring, a symptom of obstructive sleep apnea(OSA) is identified as an independent risk factor for hypertension.

Sleep depreviation can cause much more than expected

CONFUSION, IRRITABILITY-The fluid-filled glymphatic system eliminates unwanted toxins in the brain and rejuvenates it for next day. The brain forms new pathways between neurons while we sleep so that we can remember the new information that we have gathered during that day.

WEAKER IMMUNITY- during sleep our body produces cytokines help the body fight harmful foreign agents like bacteria and viruses.

Disturbed digestive system

Sleep deprivation disturbs brain function which in turn reduces the levels of leptin and increases ghrelin levels When you don't get enough sleep, your body releases higher levels of insulin after your meals and this promotes fat storage and increases your risk of developing type 2

Sleep is required for muscle repair and so inadequate sleep results in lethargy and low energy levels.

CALCULATE SLEEP QUALITY AND SLEEP QUANTITY

Sleep quality is achieved by sustained rest, with sufficient time spentin each of the four sleep stages — Stages 1-3 and REM sleep — to maintain physical and mental health and function. Let's say you spent a total of 7 hours, or 420 minutes, in bed last night. It took you 25 minutes to fall asleep. You spent another 25 minutes awake throughout the night, a result of three separate periods of wakefulness.

Here's how to calculate your sleep efficiency for this night: Total sleep time: 420 minutes

· Minus time to fall asleep: 25 minutes

· Minus total time spent awake: 25 minutes

· Actual time spent sleeping: 370 minutes (6 hours, 10 minutes)

Divide 370 minutes by 420 minutes = 88%. This number represents yoursleep efficiency for that night.

In sleep science, we consider 85% or higher a healthy sleep efficiency and a reasonable goal. Ninety percent is considered very good sleep efficiency.

OR

Pittsburgh sleep quality index self-rated questionnaire which assesses sleep quality and disturbances over a 1-month time interval. It gives a combined Pittsburgh sleep quality index (PSQI) score that ranges from 0 to 21, and a higher score is indicative of poorer sleep quality. Scores ≤ 5

were associated with good sleep quality and score >5 were considered as poor sleep quality.

SLEEP QUANTITY

Age	Hours Needed	May be appropriate
Newborn to 3 months old	14 – 17 hrs	11 – 19 hrs
4 to 11 months old	12 – 15 hrs	10 – 18 hrs
1 to 2 years old	11 – 14 hrs	9 – 16 hrs
3 to 5 years old	10 – 13 hrs	8-14 hrs
6 to 13 years old	9 – 11 hrs	7 – 12 hrs
14 to 17 years old	8 – 10 hrs	7 – 11 hrs
Young adults (18 to 25 years old)	7 – 9 hrs	6-11 hrs
Adults (26 to 64 years old)	7 – 9 hrs	6-10 hrs
Older adults (65+)	7 – 8 hrs	5 – 9 hrs

How to Manage It

- Start by treating your body well and making sleep a priority to help fight the risk of hypertension. Using breathable, cotton sheets will also give you an oxygen boost and increased blood flow to help keep you healthy as you sleep. This will allow your body to relax at night and focus solely on the act of sleeping.
- For those with chronic sleep troubles, cognitive behavioral therapy for insomnia, or CBTI, which focuses on making behavioral changes to improve sleep health? CBTI is slowly gaining traction in the medical field and is recommended by both the American College of Physiciansand the American Academy of Sleep Medicine as the first line of treatment for insomnia.
- ✓ Rule out medical causes for your sleep problems. A sleep disturbance may be a symptom of a physical or mental health issue, or a side-effect of certain medications.
- ✓ Increasing the amount of exercise or doing more activities that challenge cognition may also improve slow-wave sleep "Walking is a great way to improve the amount of slow-wave sleep and is a very cheap way to do it, too,.
- Stick to a regular sleep schedule. Support your biological clock by going to bed and getting up at the same time every day, including weekends.
- ✓ Be smart about what you eat and drink. Caffeine, alcohol, and sugary foods can all disrupt your sleep, as can eating heavy meals or drinking lots of fluids too close to bedtime.
- ✓ Get help with stress management. If the stress of managing work, family, or school is keeping you awake at night, learning how to handle stress in a productive way can help you sleep better at night.
- ✓ Improve your sleep environment. Keep your bedroom dark, quiet, and cool, and reserve your bed for just sleeping and sex.

Develop a relaxing bedtime routine. Avoid screens, work, and stressful conversations late at night. Instead, wind down and calm your mindby taking a warm bath, reading by a dim light, or practicing a relaxation technique to prepare for sleep.

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