





December 2020

EMPOWERING TIMES





THINKING ALOUD

Nature's Soft Nurse

Jay

PODIUM

Dr. Swami Subramaniam

Author - Mastering Sleep





WE RECOMMEND

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Dear Reader,

March 2020 was a month which was a turbulent one across the globe. However, this did not deter the committee of the World Sleep Society to pull back their plans to organise their annual World Sleep Day event on 13th March. The event was initiated by a group of dedicated healthcare providers and members of the medical community in the US, and is now running for the 13th year. This year's theme was 'Better Sleep, Better Life, Better Planet'. The theme highlighted the importance of sleep as part of maintaining good health. A night of good sleep allows better decision making and helps in improving cognitive understanding.

As the coronavirus pandemic continues to disrupt daily living, researchers are taking a closer look at the importance of sleep, which many of us take for granted. Elevated stress and an overload of information can trigger insomnia and weaken the immune system. Ample sleep supports the immune system, indicating that improving our

We need a cartoon on "Importance of Sleep" by tomorrow morning

sleep schedule and quality is an important part of coping with these stressful times and defending against the virus.

More often than not, sleep is the answer to that cranky co-worker or a friend who is always lost in thought! So go to sleep & dream big!

ET this month looks at 'Sleep: A Neglected Dimension'. On the Podium, Dr. Swami Subramaniam, a physician and neuropharmacologist explains the importance of a good night's rest and the link between dreams and entrepreneurship.

In the **Thinking Aloud** segment, Jay shares his thoughts on the various causes of lack of sleep and the rise of Coronasomnia. In the **We Recommend** section, we review '**The Man Beyond the Billions**' by Sundeep Khanna & Varun Sood which is an account of Wipro's Azim Premji and his philanthropic endeavours.

In Figures of Speech, Vikram's toon is certainly sleep deprived from all the work load!

As we come to the end of a challenging year, team ELS would like to wish our readers a safe & happy New Year 2021!

As always, we value your opinion, so do let us know how you liked this issue. To read our previous issues, do visit the Resources section on the website or simply <u>Click Here</u>. You can also follow us on <u>Facebook</u>, <u>Twitter</u> & <u>LinkedIn</u> - where you can join our community to continue the dialogue with us!

THINKING ALOUD

Nature's Soft Nurse

Jay

After a long day's labour, most of us look forward to the welcome rest that a bed offers with the assurance of peaceful sleep. Yet, what was taken for granted in previous decades is now the focus of increasing research.

While some may argue that classifying sleep deprivation as a 'public health epidemic' is extreme, there is general acceptance that the urban world has contributed significantly to this malaise. Do we all need 7 to 9 hours of sleep as adults – as is often recommended by experts – or does quality of sleep matter more than quantity? The debate may rage but clearly evidence is piling up that both medical and mental issues are at stake when there is consistent lack of good quality and sufficient quantity of sleep. The belief of 'catching up' with lost sleep over the weekend has also been negated medically as sleep is not something you can 'top up' when the reserves are down.

The causes for this malady are many, experts tell us, ranging from food and life style choices to the pressure of modern life. However, this is one case where technology has been labelled as a major culprit for the problem. The ubiquitous cell phone and the bedroom television are now regular companions to many of us and compete with our need to sleep. While 'the curse of the blue light' is growing rapidly the antidote is also at hand: change your habits. Also, using the myriad functions of your smartphone (including automatic cut-offs of messages, notifications, etc.) can regulate and be effective in limiting usage before the addiction (and affliction) grows.

The current pandemic has created an additional challenge, now labelled as Coronasomnia. The stress is real as we all know but for many who were victims of insomnia even earlier, the current environment has created further challenges. The financial ruin that is staring many in the face due to job loss or salary cut-backs has added to the

pre-existing issues of lack of hours of quality and undisturbed rest at night. Even when the financial trials are overcome, the medical toll on the body could be permanent in many cases.

Is there a solution available for this ailment? While medication can address the extreme cases, the generic answer lies in a holistic appraisal of how we lead our life. At the risk of sounding quirky, I would add that examining one's life goals and an honest assessment of one's capabilities can be the first step in addressing the issue. While the quest for growth is necessary and laudable it should not be a substitute to the need for wholesome existence which is fundamental. Good practices and routines coupled with a clarity of purpose can be created by joining communities that support these goals as against getting swept away in the mindless rat race that is the unfortunate landmark of the present world.

The good news is that this subject is now out in the open. With the growing acceptance of the principles of sustainability, forward-looking corporations too are willing to invest in healthy employment practices, including the well-being of employees who face sleep deprivation due to their work demands. Then perhaps, Shakespeare's soft nurse can do her bidding well.

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Podium

Dr. Swami Subramaniam Author – Mastering Sleep



Dr. Swami Subramaniam is the author of Mastering Sleep, published in December 2018 by Pan Macmillan. His aim in writing the book was to present the stories behind the science of sleep in an entertaining and deeply engaging manner. Sleep, according to him is not just a vitally important driver of good health but also a key enabler for optimal performance, both at work and play. By unpacking the mysteries of sleep, Dr. Swami Subramaniam provides the basis that will convince the reader about the importance of sleep. He then goes on to provide readers with the tools and techniques they need to manage their sleep effectively - whether sleep deprivation is due to jet lag, late night work, or simply difficulty in getting good sleep.

Dr. Swami Subramaniam is a physician and neuropharmacologist. He was trained at the Postgraduate Institute of Medical Education and Research (Chandigarh), the University of Pennsylvania (Philadelphia) and the National Institutes of Neurological

Disorders and Stroke (Bethesda). He has over two decades of experience in research in neuroscience, and as a corporate executive in drug discovery. He currently consults innovative start-up companies in healthcare and drug discovery. His second book, Healing Hands - the biography of a plastic surgeon, was published in 2019 and he is presently working on his third book, Hospital 5.0, to be published in 2021.

ET: What is the importance of sleep and what are the main causes of lack of proper rest?

SS: Sleep is a complex behaviour with many purposes. A common myth is that the brain goes into a state of rest during sleep. This is not the case. During sleep, the brain goes through a well-orchestrated sequence of sleep stages (deep sleep and REM (Rapid Eye Movement Sleep)) that have distinct functions.

When we are awake, our brain is bombarded with stimuli. When we sleep these stimuli are cut off and our brain uses this period of isolation from the external environment to make sense of and organize the information it has acquired during the day. If you can think of the brain as a filing system for memories, sleep is when the files that are created when we are awake are put away in the appropriate filing cabinets. Of course, every single file is not stored – some are simply discarded since they are not important enough to store in the memory. Deep sleep is when the transfer of memories from short term storage to long term storage occurs. REM sleep, the stage when our dreams are vivid and have a narrative structure, is when related memories are associatively linked. This is why recalling a memory of a distant event often triggers memories of other related events that are associated with it.

The brain is a metabolically super active organ - it accounts for 20% of the energy consumed by our bodies although by weight it is only 2% of our body weight. All this activity leads to a build-up of by-products of metabolism (waste). Sleep is when much of this waste is cleared away. This allows our brain to refresh itself for the activities of the following day - no wonder you feel you are in a fog after you have spent a sleepless night. Importantly, this clearing away of accumulated waste may play a role in preventing dementia (a disease in which metabolic toxins accumulate in the brain). People who are sleep deprived have a greater accumulation of wastes in the brain, increasing their risk for dementia.

Finally, sleep also has a function that is almost as old as life on Earth. Every cell in the body has a clock-like mechanism that allows it to adjust its metabolic state. The master clock that drives all the slave clocks in the body (particularly in the liver and the gut) is in the brain in an organ called the pineal that secretes the hormone melatonin. This master clock synchronizes the metabolic state of the cells in the body (the circadian rhythm). Thus, our digestive capacity and the ability to process food is maximal in the daytime (when we eat) and subdued at night (when we sleep). In people who keep late hours or work night shifts, there is a mismatch between when they eat and the readiness of the body to handle the ingested calories. This leads to obesity and type 2 diabetes. I

started by saying that the circadian rhythm is as old as when life originated. How do we know this? Both bacteria and plants (and, of course, all animals) show cycles in their activity that run parallel to the cyclical behaviour we experience as a result of the body clock. At least in this narrow sense, plants can also be said to sleep.

ET: Due to the pandemic and the stress, more people than ever are fighting a serious loss of sleep. How does one combat "coronasomnia"?

SS: The first thing is to break out of the habit of regressive thinking. Calm reflection and meditation can help. Think about the long-term: this pandemic too shall inevitably pass. The danger of prolonged bouts of sleep loss is that the brain then goes into an insomnia loop. In such people, even after the immediate stress of the pandemic goes away, they continue to experience insomnia. Such people should seek expert help. Start with some counselling sessions. One of the things that can be very helpful is a technique called Cognitive Behavioural Therapy (CBT).

ET: Work from home has disrupted sleep schedules. What is your advice to readers to ensure that a balance between work & sleep in maintained? Also, does not night shift disrupt the natural balance in a person?

SS: Do not carry work into the bedroom. The moment you lie down in bed it should be lights out and eyes closed. Find a comfortable space outside the bedroom for work. Maintain regular sleeping hours. Allow for at least seven hours of sleep.

A single night of work will not have long-term consequences for the circadian cycle. If you constantly work the night shift your circadian cycle will adapt somewhat to the new circumstance as long as you get enough sleep in the daytime. How well this adjustment happens is a function of your genes. The problem is especially for those who work intermittent night shifts or those who do not get sleep in the day after a night awake. In their case, they are always off-kilter with respect to the circadian rhythm and this can become, over some time, the cause of a variety of problems including obesity and type 2 diabetes.

ET: In some cultures, siesta or an afternoon nap has been a traditional practice. What is your opinion about it? Should companies provide 'nap time'?

SS: If you feel sleepy through the day, it could be a signal from your brain that you are not well-rested, and the cause should be determined - you may not be getting good quality sleep at night. It is not just how long you sleep at night but also how deep and restorative that sleep has been. If insufficient sleep or poor quality sleep is the problem, then that should be fixed first. On the other hand, many people are habituated into taking a nap in the afternoon. This is mostly a physiological response to the fact that the circadian drive to be alert is weakest in the early afternoon. Depending on our genetic makeup, some us feel this pressure to sleep strongly and need an afternoon nap. If you feel sleepy in the afternoon, do take a nap. Just make sure that the nap is no longer than 30 minutes. If you took a long nap you may enter deep sleep. When you awaken from deep sleep you may have a prolonged (up to 1 hour) period of brain fog that is known as sleep inertia. This period of sleep inertia can hamper your ability to quickly resume work. Should companies promote napping? Absolutely. It has been proven scientifically that a short nap in the afternoon can improve productivity and creativity in employees.

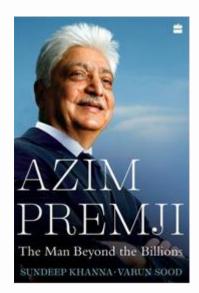
ET: Dreams foster creativity & entrepreneurship. After several senior-level positions in Pharmaceutical R&D in India, you are currently engaged with start-ups. Can you tell us about these ventures and some of the strides achieved so far?

SS: I am glad you brought up the topic of dreams and creativity. There is a link between the two and people who work in creative disciplines should give serious thought to how they can leverage dreams to improve creativity. I gave a TEDx talk on this subject and people who are interested can see it here: https://youtu.be/8eG2PfHte5g.

I am an investor in two start-ups and a mentor/consultant with several more. The two start-ups I have invested in are both in the logistics space - so not directly connected to health. Both were seed-stage funded and are very promising. One is based in Bangalore and uses AI/ML to solve delivery scheduling and routing problems, apart from operating small last-mile delivery vehicles. They optimize subscale last-mile deliveries using their algorithmic approach. The other company uses eutectic technology to support last-mile cold-chain applications. In the pharma space, I engage with a company that is developing innovative marketing approaches by building physician communities.

We Recommend

Azim Premji – The Man Beyond the Billions Sundeep Khanna & Varun Sood



Picture a serial entrepreneur, a philanthropist extraordinaire and a simple person by heart who conducts business in the most ethical manner as possible. And there is more: he has built one of India's most successful software companies. His business achievements are overshadowed by the sheer scale of his generosity and continues to redefine the roadmap for the emerging rich through his philanthropic vision.

The Man Beyond the Billions is an attempt by authors Sundeep Khanna, a regular columnist for Money Context & Varun Sood, the deputy business editor at the Morning Context, that gives readers an account of Azim Premji's philanthropic side. The read might change your mind about the characteristics of billionaires and the hype surrounding spending sprees (Case in point: Azim Premji's son's wedding had been quite low-key with barely 100 guests!).

What comes through is the story of a young man who shouldered responsibilities after the death of his father, battling to save the family's fledging vegetable oil

company while being two quarter's short of completing his graduate course at Stanford. At the age of 21, he became the chairman of Wipro which was then called, Western Indian vegetable product. The enterprise's product portfolio expanded to include hydraulic cylinders, soaps and lighting products. It was in 1977 that the company was renamed as Wipro and in 1980, it entered the IT sector. Some of the company's expansion plans included other lines of business like medicines and lamps.

Under the able hands of Azim Premji, Wipro grew from a US\$ 2 million cooking fat business into a multinational organization worth US\$ 7 billion! This was the result of his vision and working with the right people that really highlighted Azim Premji's true mettle. He also marshalled a global expansion making the Wipro brand unassailable in the competitive IT landscape. And yet in between his busy schedules, Premji finds time to unwind in Shevaroy Hills, which is a four-hour drive from Bengaluru. Close friends such as Biocon's chairperson, Kiran Mazumdar-Shaw quotes that this is one of his few indulgences (apart from his love for chocolates) that he goes to whenever he needs to mull over tricky issues at hand.

Azim Premji was largely inspired by the philanthropic efforts of his mother, Gulbanoo Premji, a trained paediatrician who devoted her life to building and developing the Children's Orthopaedic Hospital in Bombay. In 2013, Premji became the first Indian to sign the Giving Pledge, a campaign spearheaded by Bill Gates and Warren Buffet to persuade the rich in the US and across the world to give back a share of the fortunes to philanthropic causes. The signing of the pledge by Azim Premji saw the billionaire commit more than other signatories and tycoons such as Richard Branson, Michael Bloomberg, Mark Zuckerberg and Elon Musk! It was quite a heartwarming gesture that even competitor and India's legend, Nandan Nilekani of Infosys Ltd. called Premji 'truly great'.

There was always less drama and fanfare surrounding Premji's demeanour. A man of few words that he is, a simple 550 word article was released in March 2019 stating that he had gifted another 34% of his shares to the Azim Premji Foundation which was set up in 2000. Premji Invest, an asset management firm which derived its corpus from the dividends of the shares held by Azim Premji continues to commit the wealth to the Azim Premji Foundation.

In a significant departure from Indian business family norms, Premji's announcement to retire as the chairman in July 2019 and give away his wealth to noble causes also meant that his sons Rishad and Tariq would hardly receive any of their father's billions from the IT business. In fact, what is even more enlightening is that his sons would inherit the reputation and goodwill that few business scions can hope for. Much of Azim Premji's private life is not known to the public and he continues to keep it this way.

Premji is in his seventies now and is the non-executive chairman of Wipro Enterprises Ltd. (WEL). According to analysts, the privately held WEL could herald a bigger move should it decide on a new chairman while listing its shares. Even as the young Rishad works in tandem with the new CEO of Wipro - Thierry Delaporte - his heart is exactly in the place as his father's was. It was clear that with the ongoing pandemic, India would be among the worst hit. It was here that Rishad decided that Wipro, WEL and the Azim Premji Foundation would spend Rs. 1,125 crore, the largest amount committed by any Indian company to fight against the pandemic. Premji Invest has also made investments in the US markets including Moderna, a company which is one of the front-runners to launch a vaccine against the virus.

Premji's generosity remains unparalleled in the country's corporate world. Azim Premji's own words, "if people are not laughing at your goals, your goals are too small" urges the company to let its ambitions soar while the best is yet to come!

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THROUGH THE LENS



In-house nature photographer, **Rupesh Balsara**, spots the Laggar Falcon which is found at dry open woodlands of the Indian Subcontinent (from the Himalayan foothills to northern Kerala and northern Tamil Nadu), south-east Iran, south-east Afghanistan, Nepal, Bhutan, Bangladesh and north-west Myanmar. These falcon species feed mostly on birds, especially game birds and passerines. According to naturalists, an on-going population decline is suspected due to habitat degradation, pesticide use and capture.

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