



ORIGINAL RESEARCH PAPER

Economics

IN-SO-MANY-YEAH!

KEY WORDS:

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Ravi and Chandra, two old college friends have met after long and were discussing about their work and college. Ravi asked Chandra why he looked so stressed and tired. Chandra answered that he had been working at nights as well to complete the monthly goal and did not have a sound sleep from a really long time. After hearing Chandra, Ravi who was studying neurology, exclaimed concerns and said that those were the traits of insomnia, which needed consultation from the doctor.

**WHAT IS INSOMNIA?**

Insomnia can be characterised by the difficulty in falling asleep and/or having a poor quality of sleep. It is associated with different primary and secondary disorders and changes like fatigue, tiredness, jet lag, anxiety, depression, etc. It has been observed that insomnia is mostly common in women and socioeconomically backward groups. Changing lifestyles, internet and technology addiction, unhealthy food and drinking habits, smoking and unhealthy work environment have been reported as concern for the increased number of insomniacs all over the world. Insomnia has also led to direct and indirect costs borne by an economy.

**Types of insomnia:**

With the increasing cases of the sleeping disorder, consultants have classified insomnia in the following types.

- **Acute Insomnia:** This occurs when there is a sudden change in the person's lifestyle, this creates stress and an imbalanced routine for some time.
- **Chronic Insomnia:** Insomnia is usually considered chronic if a person has trouble falling asleep or staying asleep at least three nights per week for three months or longer.
- **Comorbid Insomnia:** This is a due to psychiatric symptoms like depression, anxiety and stress. This stays for a longer period of time and is common in the working adults.
- **Onset Insomnia:** It is when the person finds it difficult to fall asleep at the beginning of the night. It has been observed among teens and young adults mainly due to excessive use of mobile phones and TV.

**DO INDIANS SLEEP ENOUGH?**

There have been various studies on the lifestyle and sleeping patterns of Indians. According to a study conducted by Philips Study by Nielson, there are a few shocking facts about Indians and sleep which have been mentioned in table 1.

TABLE 1:

FACTS ABOUT INDIANS AND SLEEP	AFFECTED
Sleep deprived with less than eight hours sleep	More than 92%
Lack of sleep affecting work	More than 58%
Fallen asleep at work due to poor night sleep	Around 11%
Lack of sleep affecting health	More than 85%
Disturbance in family relationship due to lack of sleep	Around 19%
Woke up 1 to 3 times per night	Around 72%
Snore regularly	Around 33%
Openly spoken about insomnia	Only 2%

Insomnia has been associated with vivid economic factors such as unemployment, wage rates, work environment, etc. The relation between insomnia and economics can be understood with few empirical examples.

**Mr. Qais Bhat, a 24 year old young adult from Kashmir,** was the only earning member of his family and looked after his widow mother and younger sister. Being burdened with family

responsibilities and earning his living amidst the socio-political scenario in Kashmir had left Bhat under a lot of pressure forcing him to work for extra hours to save his job and earn more to suffice needs. He also took up smoking and excess caffeine intake which helped him stay awake. Bhat now worked for 12 hours a day and slept for 5 hours a night. Recalling and laughing at his good old days Bhat says, "When I was unemployed, I used to sleep for 12 hours a day, irony is this that now those are the number of hours I work!"

According to Biddle-Hamermesh, the time spent sleeping is inversely related to both the wages and the amount of time spent in the labour market. In cases such as Bhat's, sleep is considered as an expenditure of time. BH demonstrates socio-economic factors that influence the quantity of time an individual spends working, namely wage rate, non-labour income and level of educational attainment, also affect the quantity of time the individual spends sleeping, these results highlight the importance of recognizing the implied joint decision determining an individual's work, leisure and sleep.

However, the BH model suggests that sleep is in the control of most people, this may not be true for everyone; those who struggle getting to sleep or staying asleep may not be able to adjust sleep duration in response to economic incentives.

Another example of is of **Mrs. Sonia Das, a 45 year old bank employee.** Mrs. Das was leading a good lifestyle but underwent serious issues for few months at the time of demonitisation in 2016. She was the bank manager and was burdened with responsibilities, her day at the bank started at 8am and did not end before 8pm. She then returned home to manage all the household chores. She, who was a gym freak earlier, now doesn't get time to have her meals on time, hitting the gym is not even an option for her. She has started overeating and is not very far from obesity and blames her stress for the same. Severe migraine and high blood pressure are her major concerns. Her health is taking a toll and can be reflected by the quality of her work, because of severe headaches, here is a decrease in productivity and an increase in absenteeism.

Sleep deprivation causes increased sleepiness and decreased alertness in all subjects. Females show decreased inequity aversion after sleep deprivation. As for the relationship between cognitive ability and economic decisions, sleep deprived individuals with higher cognitive reflection show lower risk aversion and more altruistic behaviour. Females' reaction to sleep deprivation, characterized by reduced risky choices and increased egoism compared to males, may be related to intrinsic psychological gender differences, such as in the way men and women weigh up probabilities in their decision-making, and/or to the different neurofunctional substrate of their decision-making.

There is another example which can be observed in millennials. **Guddu Saldanha is a class 10 student of Blossom High School,** he is a tech enthusiast and loves coding. He is an absolute Xbox and play station addict and is always glued to his gadgets after his school hours. He never completes his homework as playing games and texting friends are his priorities. Every night Mrs. Saldanha, his mother, tells him "Guddu, Early to bed, Early to rise, makes a man healthy, wealthy and wise." But Guddu is an adamant teen who replies "Maa, all this isn't applicable today, let me play PUBG with friends for sometime and I will sleep after that." And sleeps around 2am. He surely is the 'Winner Winner, Chicken dinner' but because of his everyday routine, he

sleeps in the class and fails in almost every subject in school with no participation in sports and other extra curricular activity.

Using of a device is supposed to be associated with statically significant increased use of multiple forms of technology at bedtime and use in the middle of the night, reducing sleep quantity and quality. Fuller-Lehman proved that using technology is associated with a lot of health issues like overweight, elevated BMI and fatigue. Frustration has also been associated with technology. Technology which should be used as a boon for the students, is now turning out to be a curse because of its over usage and has also led to a decline in the critical thinking.

#### **To sleep or not to sleep?**

**It is seen that sleep deprivation is linked to lower productivity at work, which results in a significant amount of working days being lost each year.** On an annual basis, the U.S. loses an equivalent of around 1.2 million working days due to insufficient sleep. This is followed by Japan, which loses on average 600,000 working days per year. The UK and Germany both lose just over 200,000 working days. Canada loses around 80,000 working days. But one cannot forget that sleeping less gives more productive hours and higher time for learning just like Bhat utilizes his time. Insomnia has also been observed to be more severe in females than males. Working extra hours and stress has led to all the different types of insomnia. Use of technology has increased on a larger scale, most importantly among the teens. Even though the current lifestyle has forced us to sleep less, it is extremely important to strike a balance between work and sleep to work efficiently and for a healthier lifestyle. It is necessary to openly talk about the disorder and if needed proper medical treatment should also be considered. Ravi being well aware, gave supreme importance to sleep as well as work. Ravi is a smart Indian!

#### **REFERENCES**

1. Ronald J. Ozminowski, Shaohung Wang, James K. Walsh (2007), "The Direct and Indirect Costs of Untreated Insomnia in Adults in the United States",
2. Shaloo Tiwari, "World sleep day 2018: Facts about Indians and sleep that will shock you!", The health site, March 15, 2018
3. Jeff E. Biddle, Daniel S. Hamermesh (May 1989), "Sleep and the allocation of time", National Bureau of Economic Research
4. Reports of National Sleep Foundation
5. <https://www.ncbi.nlm.nih.gov/pubmed/18753000>
6. Caitlyn Fuller, Eric Lehman, Marsha B Novick, 2017. "Bedtime use of technology and associated sleep problems in children." Oct 27, <https://www.ncbi.nlm.nih.gov>