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**Short Communication** 

# Sleep Tonight for a Better Tomorrow

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Today, complaints associated with sleep disturbances is a global phenomenon [1]. Chronic sleep restriction is endemic in modern society [2]. Sleep timing and duration affects all body functions, be it endocrine, metabolic, and neurological functions that are critical for the maintenance of individual health [3]. The pattern of sleep one experiences in a 24-hour period directly correlates with physical health, mood, and mental functioning. Suboptimal sleep is a global problem, with many not obtaining the recommended 7 hours or more of sleep each night. Creating awareness to sleep hygiene to improve health, wellness, productivity, quality of life, and public safety should be the prime concern of global healthcare system [4]. Peoples involved with health care system too have been found to be vulnerable to the sleep related health issues pertaining to poor sleep hygiene as a result of their schedule and nature of work, disturbed biological cycle and performance pressure especially among the students and residents associated with tertiary care centres [5-7]. Survey and laboratory studies suggest that several factors, such as social and academic demands, part-time jobs or irregular work schedules especially one which involves lot of travelling etc. affect the sleep-wake cycle of in a predictable way.

A fact of bigger concern is the prevalence of sleep deprivation among children and adolescents [8]. Children are known to have more biological need of sleep in terms of number of hours. The unhygienic sleeping habits of parents and poorly framed school timings are few of the important factors responsible for such potential sleep related health hazards among them which needs urgent attention of the society.

Sleep deprivation or poor sleep quality is well known to affect several dimensions of human health. This includes the systemic

involvements including cardio-vascular, gastro-intestinal and autonomic involvement as well as various cognitive domains like attention, working & long term memory, visuo-spatial cognition and perceptual-motor performance etc [8].

Sleep and memory: Sleep is essential for all the domains of the memory functions. Slow wave sleep (NREM sleep) is essential for Hippocampus dependent memory formation and consolidation whereas Rapid eye movement sleep (REM sleep) is believed to be important for stabilization of consolidated memory. For reflexive and non-neural memory (immunological memory), both rem and NREM are equally essential. REM sleep has been documented to be responsible for NMDA (N Methyl D Aspartate) dependent plasticity of neurons in the brain, a mechanism essential for memory consolidation [9].

#### Screens: the dreaded sleep destroyers!

With the advancement of modern science, screens of all types has taken its toll in our life. Addiction to all kinds of screens including mobile screen, television screen and various other handy gadgets for so called convenience working, is becoming a pandemic now a days. They are one of the biggest enemy to our sleep hygiene. Most people are habitual to screen use during bed time resulting in the altered sleep latency and deep sleep latency besides many other altered parameters [10].

### For a better tomorrow!

Sleep hygiene needs urgent attention not only in the field of Medicare but also at social and cultural platform. The joint consensus statement of American Academy of sleep medicine and American sleep society recommends a minimum of 7 hours of quality sleep daily for a healthy living [11]. Besides number of hours, few other

facts concerning sleep that is needed to be kept in mind for a happy and healthy life include

- Stick to a sleep schedule of the same bedtime and wake up time, even on the weekends
- Let your child have enough sleep.
- Practice a relaxing bedtime ritual
- Don't share your bed with screens!
- Exercise daily
- Design your sleep environment!
- Manage your circadian rhythms: bright Vs dim light!
- Avoid stimulants
- Avoid day time naps to avoid troubled sleep
- Excessive day time sleepiness should be taken seriously.
- Altered sleep architecture may be harbinger of many apparently unrelated systemic ailments.
- Most of the sleep disorders are treatable

The need of the hour is to create awareness for the importance of sleep in health and disease and the concept of sleep hygiene. The Indian Society for Sleep research, which is the pioneer organization for sleep science in India works hand in hand with world sleep federation and Asian Sleep Research Society is working on all the facets of sleep science including educative, health promotive and research related activities in India [12]. The essence of the latest slogan by World Sleep Society for World Sleep Day "Healthy Sleep, Healthy Aging" lies in the fact that a good sleeping habit for tonight will result in a glorious healthy tomorrow.

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