Sleep: The Stress Buster

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Dear Madam,

Through your esteemed journal, I want to emphasise on the importance of good sleep which is extremely neglected nowadays. Good sleep is one of the pillars of good health. Sleep is a condition in which the eyes are closed and the nervous system is inactive. Infact, the brain is less active and not inactive. It is the cerebral cortex which shows alpha, theta and delta waves on electroencephalogram (EEG). Normally with eyes open, only the beta brain waves are seen. Sleep disorders are very common; 30% of people in the United States are affected[1].

It is important to understand the sleep cycle which consists of two recurring phases; rapid eye movement sleep (REM sleep) and non-rapid eye movement sleep (NREM sleep). Both phases are important for proper functioning of our body. NREM phase (75-80%) of our sleep is important for growth and repair of body tissues and restoration of energy and hormones essential for growth. REM phase (20-25%) of our sleep is the time when dreaming occurs and it is essential for our minds to process and consolidate emotions, stress and memories. It also stimulates the brain for learning and new skill development. If these phases of sleep are disturbed, important body processes are affected, thus affecting our health and well-being the very next day and also has long term effects[2].

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A good night's sleep is incredibly important for health. In fact, it is as important as eating healthy food and exercising, but the importance of sleep is underestimated. Insomnia and hypersomnia are leading factors for many of the organic diseases and also indicate behaviour and mood disorders. Many studies have reported a significant positive correlation between perceived sleep insufficiency and reported poor general health[3].

Sleep disorders, like dyssomnias, may be of time, quality and amount of sleep. Narcolepsy (i.e. sleep attack), sleep apnoea in obesity and sleeping at an inappropriate time are well-documented. Parasomnias i.e. abnormalities in physiology or in behaviour associated with sleep are poorly understood.

Lack of sleep in students, especially of medical colleges, leads to loss of memory, lack of concentration, poor performance in exams, irritable bowel syndrome and gastritis. It may even lead to hypertension, diabetes and skin disorders. Even a small loss of sleep is associated with impaired immune function and these individuals are more prone to inflammations[4].

About 90% of patients with depressive disorders complain of poor quality sleep; studies have shown that sleep-deprived individuals have a bigger appetite and gain more weight due to poor regulation of appetite hormones. Although the mechanism of this effect is unknown, a short sleep has been reported to be associated with altered metabolic hormones leptin and ghrelin, energy balance, and timing of meals[5,6]. Questions about sleep, weight and appetite should be a routine in assessing the

healthy state of mind. Treatment, however, is not easy. Counselling of the students and their parents especially about a stressful family situation is very important; caffeine, stimulant drugs, television, cell-phones, computers and stressful situations should be avoided at night. Control of weight and development of fixed sleep and wake schedule is advised while some individuals may need psychiatric treatment with sleeping agents and also for underlying depression. Sleep labs and research in sleep would be undoubtedly an eye-opener for everyone.

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