

Sleep and the Modern Society

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Editorial

Sleep is an activity that occupies approximately one third of our lives and is fundamental to our physical well-being, good mental and emotional health. Sleep need and preferential sleep time varies throughout life but the impairments of insufficient sleep reach all ages. In general, children sleep 12 hours per day and adults need about 8 hours sleep per night [1]. However, in the modern world this is often unattainable.

A document presented by National Institute of Health estimated that 50 to 70 million Americans are affected by chronic sleep disorders and intermittent sleep problems. In Brazil, in an effort to maintain improved living standards, large parts of the population work long hours. This is compounded by the fact that they also have to endure longer travel times because of the increasingly crowded roads and poor public transport system. Compared to the pre-industrial world, the modern population is subject to ever-increasing pressure on sleep time that leads to the development of a constant sleep debt.

Chronic reduction of sleep is frequently associated with the impositions of modern life, such as pressure from employers, domestic responsibilities and educational demands. Globalization, the internet, and an explosion in information have added to the stimulus for competition coming from a worldwide capitalist vision to promote a process of acceleration in a majority of societies, increasing working hours and reducing even more the time for rest and sleep among all human beings.

Epidemiological research shows decrease in habitual sleep time in full-time workers over the past 31 years (1975-2006) and the long work hours was the main cofactor for short sleep [2]. Work schedule that take place during night contribute to chronic shortening of sleep time and health problems associated with circadian rhythm disorders [3]. Furthermore, social activities in which individuals may engage voluntarily also lead to sleep deprivation. The concept of 24/7 society represents the social demand for constant activities 24 hours per day and 7 days of week. Although research clearly points to the many health risks and behavioral deficits inflicted by insufficient sleep and inversion of individuals' biological rhythms, it seems that society begins to accept these behaviors as normal.

Sleep problems also occur among children and teenagers. Access to television, internet, and computer games are common practices that could influence sleep and health. In fact, Sijtsma et al. [4] showed that television in bedroom was associated with shorter sleep duration and higher body mass index. Experimental studies demonstrated that negative changes in sleep habits, as nap deprivation in young children, induced cognitive and emotional impairment [5]. The rhythm of modern society and the routine before sleep could worsen children sleep and impair daytime functions.

Sleep disturbances may also contribute to chronic sleep restriction in population. Our group conducted a large epidemiological study of 1042 adults in São Paulo, Brazil, released its third update since initiation in 2007. Estimates derived from this study indicate that half of the investigated population had apnea-hypopnea indexes (AHI) above 10 indicating mild condition and that 32.9% of the population presented obstructive sleep apnea syndrome, particularly among male individuals [6]. Moreover, 45% of subjects complain of insomnia symptoms [7]. It is reasonable to agree that sleep disturbance could be considered a public health concern.

Chronic sleep restriction is becoming an important societal issue due to its serious implications on individual performance and health and the burdens for society, e.g. lost productivity, increased health care costs, among others negative consequences. It is clear that in the modern world there is growing pressure on sleep, and that many people do not get enough. As sleep scientists, we cannot just accept this situation.

The challenge for researchers and clinicians in Sleep Medicine is not only understand the costs of sleep deprivation but awareness the society about the importance of sleep quality. It is the responsibility of researchers to inform the population about the importance of sleep and help individuals find ways to reconcile their daily activities and the modern 24/7 lifestyle with good sleeping practices, such that there is enough quality time for rest, recovery, and sleep or, in other words, enough time for good health. It is time to (re)think in strategies to reduce the gap between scientific knowledge and social information. We believe that education in sleep is an essential approach to improve sleep and human health.

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