Waking up to the health implications of poor sleep habits

Intake of alcohol, caffeine, and sugar are heavily scrutinised by both the public and health-care professionals. Only more recently are good sleep habits being treated with the same scrutiny by health-care professionals as pathology causing factors. On the eve of World Sleep Day (March 15), we highlight how a lack of sombre focus on the topic could lead to a public health crisis.

Most people are beginning to realise that serious attention must be paid to sleep habits. Today the first question asked of mental health patients by clinicians is often “What are your sleep habits?” CEOs and high-ranking officials occasionally still brag about how their lack of sleep is a hallmark of a productive lifestyle; however, these outlooks are becoming outdated. Much of the population is facing societal impediments to good sleeping habits. Indeed, a recent poll suggested that the average UK citizen sleeps 6 h 18 mins per night. This is concerningly less than the 8 h recommended by the NHS.

Late night electronic screen use looms as a major potential disruptor to high-quality sleeping patterns. These devices, producing intense blue light, affect melatonin production, release and subsequently sleep patterns. The links between screen time use, sleep deprivation, and depressive and mental health issues are complex, and current understanding is not conclusive. Findings from several population studies have shown a link between screen use and depressive symptoms for both children and adults. However, a causal relationship between the two is yet to be captured; therefore, guidelines on screen use for children vary. The Royal College of Paediatrics and Child Health have declined to provide guidelines for screen time, whereas The American Academy of Paediatrics provides more specific suggestions for three age groups of children.

Sleep loss affects our susceptibility to infections, metabolism, and mental health. Poor sleep habits are also a significant risk factor for type 2 diabetes. Sleep interruption modulates hormones such as cortisone and melatonin, subsequently affecting glucose metabolism. Meanwhile, better sleep can aid fat versus muscle loss in individuals who are dieting. Men who sleep fewer than 4 h per night have a significant decrease in testosterone after just 1 week, potentially affecting libido and reproductive ability. Aside from the short-term effects on performance, memory consolidation, and mental wellbeing, studies are beginning to show links between β-amyloid presence and sleep deprivation in both the mouse and human brain. Accumulation of amyloid plaques in the brain is associated with Alzheimer’s disease. Poor sleep habits look to compound the already sizeable effect of multimodal disorders.

So, what can be done in response? On an individual level, we can be more mindful of prioritising sleep and removing obstacles to it. Blue screen light can be avoided with orange light filters, and several apps are available to address this issue. Major technology companies are also testing sleep tracking implementation in their latest wearables. Where possible, strict sleeping schedules should be enforced for children and adolescents. Late night high-calorie and stimulant intake should be restricted. Anxiety can often be a hidden cause of sleepless nights and as such better attention to mental health and mindfulness is essential. On a societal level, public health organisations should approach sleeplessness as the serious causative factor that it is. Employers must be mindful of shift work sleep disorder for all employees, which has been linked with several negative health outcomes. The US Centre for Disease Control (CDC) has begun to take steps towards this in recognising sleep deprivation as a public health concern. With a mission to “raise awareness about the problem of sleep insufficiency and sleep disorders and the importance of sleep health for the nation’s overall health”, other nations should take notice of this initiative. Education will be important in the long term, and it is positive to hear that the importance of sleep may be added to the UK education curriculum.

Although more research is required on the topic, ignoring the dangers of poor sleep habits significantly increases societies’ health burden. The yearly occurrence of World Sleep Day allows us a moment to reflect on this essential part of our daily cycle. Much like tobacco, alcohol, and other negative lifestyle choices, poor sleep habits must continue to be recognised as serious health issue and addressed at individual and societal level to head off crisis.