Top Executives Must Take Sleeplessness Seriously

By Bronwyn Fryer

Sleep is a stranger to many managers. But research by leading scientists shows just how dangerous that problem is.

While corporations have all kinds of policies designed to prevent employee endangerment—rules against workplace smoking, drinking, drugs, sexual harassment, and so on—they sometimes push employees to the brink of self destruction. Being "on" pretty much around the clock induces a level of impairment every bit as risky as intoxication.

As one of the world's leading authorities on human sleep cycles and the biology of sleep and wakefulness, Harvard Medical School Professor Charles A. Czeisler understands the physiological bases of the sleep imperative better than almost anyone. His message to corporate leaders is simple: If you want to raise performance— both your own and your organization's—you need to pay attention to this fundamental biological issue.

Top executives now have a critical responsibility to take sleeplessness seriously.

Most top executives are over 40. When we're past the age of 40, sleep is much more fragmented than when we're younger. We are more easily awakened by disturbances such as noise from the external environment and from our own increasing aches and pains. Another thing that increases with age is the risk of sleep disorders such as restless legs syndrome, insomnia, and sleep apnea—the cessation of breathing during sleep, which can occur when the airway collapses many times per hour and shuts off the flow of oxygen to the heart and brain, leading to many brief awakenings.

Many people gain weight as they age, too. Interestingly, chronic sleep restriction increases levels of appetite and stress hormones; it also reduces one's ability to metabolize glucose and increases the production of the hormone ghrelin, which makes people crave carbohydrates and sugars, so they get heavier, which in turn raises the risk of sleep apnea, creating a vicious cycle.

Some researchers speculate that the epidemic of obesity in the U.S. and elsewhere may be related to chronic sleep loss. Moreover, sleep-disordered breathing increases the risk of high blood pressure and heart disease due to the strain of starving the heart of oxygen many times per hour throughout the night.

As we age, the circadian window during which we maintain consolidated sleep also narrows. That's why airline travel across time zones can be so brutal as we get older. Attempting to sleep at an adverse circadian phase—that is, during our biological daytime—becomes much more difficult. Thus, if you take a 7 PM flight from New York to London, you typically land about midnight in your home time zone, when the homeostatic drive for sleep is very strong, but the local time is 5 AM.

Exposure to daylight—the principal circadian synchronizer—at this time shifts you toward Hawaiian time rather than toward London time. In this circumstance, the worst possible thing you can do is rent a car and drive to a meeting where you have to impress

people with your mental acuity at the equivalent of 3 or 4 in the morning. You might not even make the meeting, because you very easily could wrap your car around a tree. Fourteen or 15 hours later, if you're trying to go to bed at 11PM in the local time zone, you'll have a more difficult time maintaining a consolidated night's sleep.

Sleep deprivation is a far more serious issue than most executives think it is. Putting yourself or others at risk while driving or working at an impaired level is bad enough; expecting your employees to do the same is just irresponsible. It amazes me that contemporary work and social culture glorifies sleeplessness in the way we once glorified people who could hold their liquor. We now know that 24 hours without sleep or a week of sleeping four or five hours a night induces an impairment equivalent to a blood alcohol level of .1%.

We would never say, "This person is a great worker! He's drunk all the time!" yet we continue to celebrate people who sacrifice sleep.

The analogy to drunkenness is real because, like a drunk, a person who is sleep deprived has no idea how functionally impaired he or she truly is. Moreover, their efficiency at work will suffer substantially, contributing to the phenomenon of "presenteeism," which exacts a large economic toll on business.

Sleep deprivation is not just an individual health hazard; it's a public one. Consider the risk of occupational injury and driver fatigue. In a study our research team conducted of hospital interns who had been scheduled to work for at least 24 consecutive hours, we found that their odds of stabbing themselves with a needle or scalpel increased 61%, their risk of crashing a motor vehicle increased 168%, and their risk of a near miss increased 460%. In the U.S., drowsy drivers are responsible for a fifth of all motor vehicle accidents and some 8,000 deaths annually.

In the United States, it is estimated that 80,000 drivers fall asleep at the wheel every day, 10% of them run off the road, and every two minutes, one of them crashes. Countless innocent people are hurt. There's a man in Florida who's serving a 15-year prison term for vehicular homicide—he'd been awake for 30-some hours when he crashed his company's truck into a group of cars waiting for a light to change, killing three people.

I would not want to be the CEO of the company bearing responsibility for those preventable deaths. Sleep deprivation among employees poses other kinds of risks to companies as well. With too little sleep, people do things that no CEO in his or her right mind would allow.

All over the world, people are running heavy and dangerous machinery or guarding secure sites and buildings while they're exhausted. Otherwise intelligent, well-mannered managers do all kinds of things they'd never do if they were rested—they may get angry at employees make unsound decisions that affect the future of their companies, and give muddled presentations before their colleagues, customers, the press, or shareholders.

Dr. Czeisler is the incumbent of an endowed professorship donated to Harvard by Cephalon and consults for a number of companies, including Actelion, Cephalon, Coca-Cola, Hypnion, Pfizer, Respironics, Sanofi-Aventis, Takeda, and Vanda.