

Is Your Electronic Device Keeping You Awake?

by *Kentin Waits, Contributor*

When I was a kid in the 1970's, the blue glow that lit up random houses on my street was coming from old picture-tube televisions. Isn't it amazing what a difference 40 years can make?

Today our homes radiate with dozens of electronic devices that were the stuff of science fiction just a few decades ago. Our evenings are lit by the digital fireflies of smart phones, book-readers, MP3 players, laptops, and plasma TVs. Such gadgets are always on, and our ability to connect, work and play through our personal electronics is ever-present. But how does the ubiquity of these devices affect our own ability to turn off, unplug and get some rest?

To learn more about how the prevalence of electronics changes our sleep patterns and the quality of our sleep, I turned to Dr. Josh Ramseyer, Director of the Legacy Good Samaritan Sleep Disorders Center (<http://www.legacyhealth.org/body.cfm?id=182&fr=true>) in Portland, Ore. Ramseyer says there's a crisis of sleep in modern life and that our hyper-connected digital lives are partly to blame. In other words, our phones, laptops, MP3 players and gaming systems all conspire to intrude on our rest. There are two reasons for this.

First, the 24/7 nature of these devices creates a perfect excuse to not sleep. Dr. Ramseyer calls this volitional sleep deprivation--a willingness to lose sleep in favor of checking email, texting, interacting with social networking sites, or working remotely. "We have an almost Pavlovian response to the stimuli that our electronics provide, and we've created a very clear reward system around them," he says.

Second, electronics emit just enough light to disrupt our circadian pacemakers--the natural cycle of light and dark that influences wakefulness and sleep. "When we're in darkness, a natural chemical called melatonin is secreted in our brains," says Ramseyer. "Melatonin promotes restfulness and sleep. Even a small amount of light can disrupt melatonin secretion and prevent deep sleep." For thousands of years, the human sleep cycle was dictated by sunrise and sunset. "Only in the last 130 years," he says, "since the advent of artificial light, has our sleep become harder-won and something we need to consciously schedule."

A Nation of Zombies

Whatever the cause, sleep deprivation has reached nearly epidemic proportions in the US. A recent study by the National Sleep Foundation showed that 20 percent of Americans get less than six hours of sleep on average per night, and that the number of people who get eight hours or more is falling rapidly. The statistics are even more sobering for teenagers. Teens require more sleep than adults--8 to 9.5 hours per night as opposed to 7 to 8 hours for adults. Key hormones essential to growth and sexual maturation are released during slumber. Yet, most studies show that teenagers average only 7.5 hours of sleep per night, and that as many as 40 percent of teens may be seriously sleep deprived.

So how do we balance the realities and temptations of our digital world with our need for quality sleep?

According to Dr. Ramseyer, the first step is to realize the value of restful sleep and become conscious of the qualitative difference it has on our day. Next, we need to carve out a sacred space for sleep in our lives and defend the boundaries we create between work, play and rest. Since our electronics are getting smaller, more mobile and more responsive, the limits we place on how they encroach upon our time must be clearer and more conscious.

A Better Way to Wake Up

Ironically, the same electronics that disrupt our sleep can be used to our advantage when it comes time to wake up. New smart-phone applications like Gentle Alarm, for Android phones, use a gradual fade-in of music or a ringtone of your choice to prevent the jarring "wrong side of the bed" phenomenon that seems to come standard with most screeching alarms. Also, newer alarm clocks that use light instead of sound, or a combination of soft light and nature sounds, can be a good choice when sleep is hard won. Waking up without shell shock can make all the difference.

The good news is that sleep disorders are universally treatable. Dr. Ramseyer says that most sleep issues can be resolved by simply changing habits, adhering to schedules and adopting behaviors that promote sleep. Sleep centers across the nation work to explore and treat more serious sleep disorders and engage with patients to promote better living through better rest.

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