

Wake Up to Sleep Deprivation!

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Don't you just love it when scientific evidence confirms the obvious? In a landmark study published in *The New England Journal of Medicine*,¹ researchers from Harvard Medical School found that sleep-deprived doctors make significantly more medical errors than those who work less and sleep more.

In this study, medical interns (first-year doctors) who worked less than 80 hours per week slept 5.8 hours longer than when they worked more than 80 hours per week. When they slept more, they "had less than half the rate of ... failures while working during on-call nights." The study concludes that "eliminating intern's extended work shifts in an intensive care unit significantly increases sleep and ... reduces failures during night work hours."

Have you ever had a relative in intensive care? How would you like to find instruments left in his or her body? Did you ever wonder what exactly went into that I.V. drip? Or who touched it? Or whether the hands were washed or if a sterile procedure was applied? Or whether the staff was so tired that medical information was lost or overlooked? Fatigue may compromise clinicians, but it can be deadly for patients.

The Harvard study is being used to help public policy-makers and regulatory agencies reduce current expectations that doctors should work more than 80 hours per week. Europe already has learned this lesson and limits interns to a more reasonable 50-hour work week. But in the U.S., where we think we have the best health care system in the world, we hold firmly to our commitment to excess. We work more, work longer and commit more errors than any other culture.

Harvard's top researchers make a great point: If you work a reasonable schedule, you'll perform better and make fewer (potentially fatal) errors. Fewer errors, taken over time, mean that if you work accurately, ultimately, you reduce the amount of work you (or someone else) does. In short, adequate sleep is necessary for top performance, and top performance reduces cost. Yet sleep is considered an optional resource in organizations.

Most organizations value getting a job done and exhibit little concern for how much time or how many night hours must be expended. Working professional parents, for example, frequently leave work by 5 p.m., and start work again after 10 p.m. when the children are asleep. This phenomenon is so well-known that it is documented in a business best seller, *The Second Shift*, which illustrates the physical and psychological deterioration of working parents.

Consider the sales manager who travels after a day's work to a trade show, stays awake to get materials ready, goes to sleep after midnight, is up by 5 a.m. setting up the booth, is on his or her feet all day giving presentations, and spends nights dining with prospective customers; or any manager who truly believes 24/7 service is realistic. Fast? Yes. But accurate? Rarely, and always exhausting.

The consequences of sleep deprivation are well-documented. In the short term, the primary problems include:

- memory and cognitive impairment - ability to retain and use information;
- decrease in performance and alertness;
- occupational injury;
- automobile injury: The National Highway Traffic Safety Administration estimates that drowsy driving is responsible for at least 100,000 crashes, 71,000 injuries and 1,550 fatalities each year;
- stress on relationships (disruption of the bed partner's sleep can cause significant problems in relationships);
- poor quality of life (inability to sustain attention with children, or other relationships outside of work).

Longer-term consequences are more serious and include:

- obesity
- diabetes
- hypertension
- heart attack
- heart failure
- psychiatric problems, including depression and mood disorders
- ADHD
- mental impairment
- fetal and childhood growth retardation
- poor quality of life.

One would think the evidence would raise this problem to the public eye, yet it remains a silent, potentially deadly threat.

Most workers find it easy to deny they aren't getting enough sleep. For one, recognition of this fact is as good as admitting weakness. But secondly, most sleep-deprived people actually are too tired to realize just how tired they are. According to a leading sleep researcher at the University of Pennsylvania, Hans P.A. Van Dongen, PhD, "the most worrisome part of this is that these [sleep-deprived] people don't realize how sleep deprived they are."²

When leaders are sleep deprived, everyone loses. The signs are recognizable in the workplace. Unrealistic deadlines and productivity measures are set and often go unquestioned by underlings who rise to (unrealistic) challenges despite the cost to them or their families. Leaders often don't get truthful feedback about the impact of their actions, particularly if subordinates disagree. Thus, leaders assume things are fine, and go on making overly ambitious plans. As a result, the workforce gets more fatigued and thus less productive. Then projects take longer, require even more effort and produce even more fatigue. The spiral is never-ending, until someone shows up in our offices complaining of memory loss, hypertension, disorganization, or sleep disorders. You have met these people (I have many as clients) - well-dressed, arrive at your office while talking on a mobile phone, use every available second to get work done. They look at their palm pilot in the waiting room and respond to instant messaging while waiting. They appear active, not tired. Fortunately, Chinese medicine understands that hyperactivity can be a symptom of deficiency, thus we expect fatigue. But the average person will see our "people of perpetual motion" and assume they are high-performing, energetic individuals who probably work out at the gym and don't even notice they are tired.

Accustomed to running on adrenaline, these people do more with less energy. They work late hours, don't wind down and rely on sleep medicines to get a night's rest. But they don't like the grogginess they feel the next morning; it gets in the way of their alertness and productivity. They go to bed wired and wake up tired. There are no priorities. All needs are urgent - go faster 'til you drop.

What will it take to restore the yin - the reserves - of such a driven culture? What will it take for us to tell the truth to leaders? What will change in order to let them listen?

Let the symptom answer the questions. sleep deprivation is often related to a disturbance of the heart's *shen* - the spirit of equanimity underlying one's unique identity and place in the world. Restore the spirit to the (collective) body, and insight, compassion, and intelligence result. If the insight of the heart had power, would we need heart attacks to stop us in our tracks? Would we act more from the heart and less from the adrenals?

References

1. *The New England Journal of Medicine* 2004;351:1838-48
2. "Sleep Deprivation Leads to Trouble Fast." WebMD, March 14, 2003.

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