

## LACK OF SLEEP A CRISIS IN HEALTH CARE:

### SLEEP DEPRIVED MEDICOS A RISK TO THEIR PATIENTS – AND TO THEMSELVES

In his fascinating 2018 book "Why We Sleep: The New Science of Sleep and Dreams", University of California, Berkeley professor Matthew Walker has much to say about the practice of forcing medicos to work under extremely sleep-deprived conditions. Here are some of the claims he makes (that he says are scientifically provable):

*"We will revisit the effects of sleep loss on emotional stability and other brain functions ... when we discuss the real-life consequences of sleep loss in society, education, and the workplace. The findings justify our **questioning of whether or not sleep-deprived doctors can make emotionally rational decisions and judgments**; under-slept military personnel should have their fingers on the triggers of weaponry; overworked bankers and stock traders can make rational, non-risky financial decisions when investing the public's hard-earned retirement funds; and if teenagers should be battling against impossibly early start times during a developmental phase of life when they are most vulnerable to developing psychiatric disorders.*



*"Think of occupations that require individuals to be sleep-deprived, such as law enforcement and military personnel, **doctors, nurses, and those in the emergency services**—not to mention the ultimate caretaking job: new parents. Every one of these roles demands the accurate ability to read the emotions of others in order to make critical, even life-dependent, decisions, such as detecting a true threat that requires the use of weapons, assessing emotional discomfort or anguish that can change a diagnosis, the extent of palliative pain medication prescribed, or deciding when to express compassion or dispense an assertive parenting lesson. **Without REM sleep and its ability to reset the brain's emotional compass, those same individuals will be inaccurate in their social and emotional comprehension of the world around them, leading to inappropriate decisions and actions that may have grave consequences.***

*"If you are about to receive medical treatment at a hospital, you'd be well advised to ask the doctor: **"How much sleep have you had in the past twenty-four hours?"** The doctor's response will determine, to a statistically provable degree, whether the treatment you receive will result in a serious medical error, or even death. All of us know that nurses and doctors work long, consecutive hours, and none more so than doctors during their resident training years.*

*"The exhausting residency programs, which persists in one form or another throughout most medical schools, has left countless patients hurt or dead in its wake—and likely residents, too.*

That may sound like an unfair charge to level considering the wonderful, lifesaving work our committed and caring young doctors and medical staff perform, but it is a provable one.

"Many medical schools used to require residents to work thirty hours. You may think that's short, since I'm sure you work at least forty hours a week. But for residents, that was thirty hours all in one go. Worse, they often had to do two of these thirty-hour continuous shifts within a week, combined with several twelve-hour shifts scattered in between. The injurious consequences are well documented. **Residents working a thirty-hour-straight shift will commit 36 percent more serious medical errors**, such as prescribing the wrong dose of a drug or leaving a surgical implement inside of a patient, compared with those working sixteen hours or less. Additionally, after a thirty-hour shift without sleep, residents make a whopping **460 percent more diagnostic mistakes in the intensive care unit than when well rested after enough sleep**. Throughout the course of their residency, **one in five medical residents will make a sleepless-related medical error that causes significant, liable harm to a patient. One in twenty residents will kill a patient due to a lack of sleep**. Since there are over 100,000 residents currently in training in US medical programs, this means that **many hundreds of people—sons, daughters, husbands, wives, grandparents, brothers, sisters—are needlessly losing their lives every year because residents are not allowed to get the sleep they need**.



"A new report has discovered that **medical errors are the third-leading cause of death among Americans after heart attacks and cancer**. Sleeplessness undoubtedly plays a role in those lives lost. Young doctors themselves can become part of the mortality

statistics. After a thirty-hour continuous shift, **exhausted residents are 73 percent more likely to stab themselves with a hypodermic needle or cut themselves with a scalpel**, risking a blood-borne infectious disease, compared to their careful actions when adequately rested.

One of the most ironic statistics concerns drowsy driving. When a sleep-deprived resident finishes a long shift, such as a stint in the ER trying to save victims of car accidents, and then gets into their own car to drive home, their **chances of being involved in a motor vehicle accident are increased by 168 percent because of fatigue**. As a result, they may find themselves back in the very same hospital and ER from which they departed, but now as a victim of a car crash caused by a microsleep.

"Senior medical professors and attending physicians suffer the same bankruptcy of their medical skills following too little sleep. For example, if you are a patient under the knife of an attending physician who has not been allowed at least a six-hour sleep opportunity the night prior, there is a **170 percent increased risk of that surgeon inflicting a serious surgical error** on you, such as organ damage or major haemorrhaging, relative to the superior procedure they would conduct when they have slept adequately.

***If you are about to undergo an elective surgery, you should ask how much sleep your doctor has had and, if it is not to your liking, you may not want to proceed.***

*"No amount of years on the job helps a doctor "learn" how to overcome a lack of sleep and develop resilience. How could it? Mother Nature spent millions of years implementing this essential physiological need. To think that bravado, willpower, or a few decades of experience can absolve you (a surgeon) of an evolutionarily ancient necessity is the type of hubris that, as we know from the evidence, costs lives. The next time you see a doctor in a hospital, keep in mind the study we have previously discussed, showing that **after twenty-two hours without sleep, human performance is impaired to the same level as that of someone who is legally drunk**. Would you ever accept hospital treatment from a doctor who pulled out a hip flask of whiskey in front of you, took a few swigs, and proceeded with an attempt at medical care in a vague stupor? Neither would I. Why, then, should society be facing an equally irresponsible health-care roulette game in the context of sleep deprivation?"*

*"Sleep loss inflicts such devastating effects on the brain, linking it to numerous neurological and psychiatric conditions (e.g., Alzheimer's disease, anxiety, depression, bipolar disorder, suicide, stroke, and chronic pain), and on every physiological system of the body, further contributing to countless disorders and disease (e.g., cancer, diabetes, heart attacks, infertility, weight gain, obesity, and immune deficiency). No facet of the human body is spared the crippling, noxious harm of sleep loss. We are socially, organizationally, economically, physically, behaviourally, nutritionally, linguistically, cognitively, and emotionally dependent upon sleep."*

Why We Sleep: The New Science of Sleep and Dreams  
by Matthew Walker  
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