

Do Sleepy Medical Residents Jeopardize Patient Care?

Cheryl Clark, for HealthLeaders Media, February 5, 2010

The agency that accredits U.S. medical schools should limit allowable residents' consecutive work hours to 16 instead of 30 because the long shifts lead to errors that threaten lives of patients as well as their own, the health watchdog Public Citizen said Thursday.

The advocacy group's leaders want more relaxed work rules in medical schools and has launched www.WakeUpDoctor.org to pressure the accreditation agency to establish them. The Web site is set up to collect patients' and residents' stories of harmful errors by medical students who didn't get enough sleep. Some 40 patient safety organizations, such as the Consumers Union's Safe Patient Project, are participating in the campaign.

"It is likely that there are more deaths in U.S. hospitals each year caused by sleep-deprived doctors than the total number of annual deaths from train and plane accidents in this country," said Public Citizen Director Sidney Wolfe, MD, during a press briefing. "The current limits are too lax."

Wolfe added, "Whereas federal regulation significantly and more safely limit the duration of work time for pilots and train and bus drivers, the control of resident work hours has been relegated to the ACGME [Accreditation Council for Graduate Medical Education], which is controlled by private medical hospital organizations that have historically stood in the way of adequate safe regulation of work hours."

Wolfe and several speakers—including two sleep-deprived medical residents, sleep scientists, and a mother who said a tired resident's "failure to rescue" contributed to her son's death—pointed to a 2008 Institute of Medicine recommendation of no more than 16-hour work shifts. The only exception, the report recommended, would be if "an uninterrupted five-hour break for sleep is provided within shifts that last up to 30 hours."

"The science on sleep and human performance is clear that fatigue makes error more likely to occur," according to the 400-page IOM report. "Thus, the committee determined that any adjustments to duty hours should focus on ensuring regular opportunities for sleep to prevent acute and chronic sleep deprivation and to minimize opportunities for fatigue-related errors, rather than focus on simply reducing total duty hours."

ACGME Communications Manager Julie Jacob said yesterday in an e-mail that the agency "has planned to do a comprehensive review of the common duty hour standards ever since the standards were introduced in 2003." A 16-member task force "is meeting periodically to draft recommendations on the duty hour standards . . . (and) will be presenting its recommendations to the board later this year."

However, Jacob forwarded a December 2009 survey, "The Impact of Proposed Institute of Medicine Duty Hours: Family Medicine Residency Directors' Perspective" performed by the American Academy of Family Physicians with family medicine residency program directors that recommends against any change in work hour maximums. Those directors said they "do not think proposals from the IOM to further restrict resident duty hours will result in improved patient safety and resident education."

On the contrary, it would have detrimental effects on the residents, such as "a decline in the overall engagement with, and concern for, their patients ... coincident with further restrictions in duty hours," said Perry Pugno, MD, director of the AAFP Division of Medical Education.

The family practice doctors make a key point that if hours are restricted, the number of "patient hand-offs" would increase, a process increasingly recognized as one fraught with serious medical errors, such as the failure of a departing caregiver to effectively communicate a patient's new medication order or need for a lab test to the one taking over.

But along with Wolfe, medical residents and sleep researchers said that's not the case. Harvard director of sleep medicine Chuck Czeisler MD, said "resident physicians working 30-hour shifts make 36% more serious medical errors caring for ICU patients, including 460% more diagnostic mistakes, than those scheduled to work 16 hours.

"They then have a 168% increased risk of a motor vehicle crash driving home from these marathon 24-hour shifts and are 73% more likely to stab themselves with a needle or scalpel when performing a procedure after working 20 hours than during a 12-hour shift," said Czeisler, who is also chief of sleep medicine at Brigham and Women's Hospital in Boston.

The IOM report's authors said that medical schools could accomplish shift reductions by having salaried personnel, or technicians, do many of the functions that medical residents perform now. That kind of payroll change would cost \$1.7 billion a year, or .4% of Medicare spending, the IOM panel said.

Czeisler said those dollars would easily be saved because the reduction in work-related fatigue among residents would prevent at least 10% of the medical errors they now make, errors that cost the hospital far more in prolonged patient care.

Art Levin, director of the Center for Medical Consumers and a reviewer of that IOM report who participated in the Public Citizen campaign Thursday, said the current practice of forcing medical residents into long shifts leans on traditional practice.

"Unfortunately organized medicine often falls victim to the 'if it was good enough for me,' and 'that's the way we've always done it,' tracts. Well, it isn't good enough for the millions of patients who have or will suffer preventable harm. And the way we've always done has been lethal for many of those who came to the medical system for help and instead were harmed."

In launching the Public Citizen campaign, Wolfe introduced John Ingle, MD, regional vice president of the Committee on Interns and Residents with SEIU Healthcare.

"Life and death decisions should not be made by someone who is sleep-deprived," said Ingle, and a fourth-year ENT resident in Albuquerque. "I know that the public agrees. My patients are usually horrified when they found out that I have not slept since they had seen me the previous day.

"Even more horrifying, I know a chief resident who puts his car in park every time he stops at a stoplight on the way home from the hospital fearing that he will dose off and take his foot off the brake pedal."

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