Staff surgeon competence

Once again, the popular press is speaking to surgeon competence. This time the debate is whether surgeons should perform postcall elective surgery. In the December 30 issue of the *New England Journal of Medicine* (*NEJM*), Nurok and colleagues¹ opined about surgeon competence in the face of sleep deprivation. The article is not in the peer-reviewed section of the journal and shows a heavy-handed bias on the part of the authors. Such bias is certainly not a crime, but it is misleading as the lay press has seen this article as a scientific paper and not just the editorial conjecture that it really is — much like this article! To be fair, the journal invited an American College of Surgeons letter as a counterpoint.²

Nurok and colleagues quoted an old consensus statement that stated sleep deprivation was equivalent to intoxication with alcohol, which is certainly not proven or accepted. It is understandable that the authors have trouble proving their points — there exists little information on how sleep affects surgeon performance. They quote literature about residency programs shortening work hours despite there being no real proof that the change in schedules was needed nor that the changes have positively affected patient outcomes. The authors cite a *Journal of the American Medical Association* (*JAMA*) article³ on complications after nighttime call as the reason to look at this subject. The *JAMA* article concluded that “overall, procedures performed the day after attending physicians worked overnight were not associated with significantly increased complication rates,” although there were some differences in subgroups. I am not sure why Nurok and colleagues cited this article to claim that nighttime activity increased complication rates; there is really little scientific proof that this is true. Actually, there is just as much proof that a surgeon’s performance of elective surgery may not be affected by nighttime call. Psychomotor tests of surgical skills have shown no difference during sleep deprivation among residents and students.⁴ The performance of experienced surgeons can only be better than that of residents. Thoracic surgery literature seems to lean toward this conclusion, although a review of a large patient cohort in the thoracic surgery database had some methodologic flaws as well.⁵

WHAT CONSTITUTES INCOMPETENCE?

The rebuttal in *NEJM* by Pellegrini and colleagues² was correct in pointing out that “many other factors — including marital difficulties, an ill child, financial worries, and so on — negatively affect performance.” Are surgeons culpable unless they report all these factors to each patient? Are hours of duty a detriment to surgical performance? I point out repeatedly to

my residents that some doctors tolerate sleep deprivation better than others. The medical students who needed 10 hours of sleep per night tended to gravitate to psychiatry and non-call oriented specialties, and those who only slept 4 hours per night, whether they were studying, clubbing or playing a varsity sport, tended to gravitate to heavy call-oriented specialties. Of course there are exceptions, but the general rule has seemed to hold true in my experience. Are the hours these doctors keep an indication of incompetence? If they are only sleeping a couple hours per night should they be operating? It is a slippery slope to attempt to define competence or safety around soft factors such as hours of work. I think that most surgeons try to arrange their schedules to minimize postcall surgery; sometimes that is not possible. Certainly the trend in acute care surgery is to dedicate time to call and emergency duties separate from elective time. This includes handing off responsibilities from night to day teams. These are positive, surgeon-driven initiatives we can build on. Experience has shown that government committees will make policies along perceived lines of patient safety without surgical input. I feel that there is a lot less surgeon error owing to lack of sleep than lack of knowledge. We have not been able to address the huge variation in patient care that undoubtedly produces more morbidity and mortality than sleep deprivation. We as surgeons should police our care maps rather than have the American and Canadian medical associations, provincial regulatory authorities or Agency for Healthcare Research and Quality police our time schedules.

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