## Of Puppies and Dinosaurs

Why the 80-Hour Work Week Is the Best Thing That Ever Happened in American Surgery

HE JOKE IS SHOPWORN by now: "What's the difference between a puppy and a surgeon?" "A puppy stops whining as it gets older." Well, it's time for us in surgery to collectively stop whining when it comes to work hour limitations. In fact, it's time for us to embrace them. The Accreditation Council for Graduate Medical Education (ACGME) work hour rules were instituted in 2003. An entire surgical generation has been trained under these rules, but we just can't seem to get over it.

Multiple articles, letters, and addresses concerned with work hour limitations are published and presented in surgical journals and forums every month. Recently, the Massachusetts General Hospital surgical residency program was placed on probation by the ACGME for work hour violations, launching yet another public debate, this time in the pages of the Boston newspapers. In his presidential address to the Southern Surgical Association, James O'Neill, MD, stated that he personally uncovered over 750 articles on the topic.2

And what has this onslaught of intellectual energy uncovered? Not much, actually. It seems that our residents are a little happier, have more time for family obligations, and do not crash their cars so often. Case experience and test scores have not changed much, and academic attending physicians have to work a little harder to pick up the slack. That hasn't exactly caused a stampede out of academia, though. Maybe the sky isn't in danger of falling after all.

Despite a failure to demonstrate any significant detrimental impact of the work hour rules through data, it has recently become fashionable to blame work hour rules for eroding the surgical culture of accountability and ownership. According to this line of thought, work hour rules come with significant unintended consequences: surgical residents are acquiring the mentality of shift workers, no longer assuming the same ownership that we attained through working 100-hour-plus weeks. This is not something that can be measured, but we know it is happening nevertheless. This was the topic of the Association of Surgical Education presidential address at the 2009 spring meeting in Salt Lake City, Utah, and has been a recurrent theme elsewhere. At the 2009 Annual Meeting of the New England Surgical Society in Newport, Rhode Island, no less than a half dozen surgeons who rose from the audience to comment on papers addressing surgical workforce issues prefaced their remarks by facetiously announcing that they felt like "dinosaurs" in believing in the core values of accountability and responsibility to patients.

This kind of thing would be much easier to ignore if it was not so corrosive to the morale of surgical residents, and if it did not fly in the face of what I see in the role of surgical program director every day. What is the magic number of hours that one must work to learn the lessons of responsibility and accountability anyway? Is it 100 hours a week? Ninety hours a week? How is it that an academic surgeon can embody these qualities even as 20% of his or her time is protected for administrative and academic obligations, whereas a resident who works 6 days a week for 49 weeks a year cannot? The "average" surgeon in the United States works 60 to 70 hours a week<sup>3</sup> but somehow understands this noble quality of patient ownership, whereas today's residents are "shift

workers"? Do we really believe that providing a careful and comprehensive handoff to a fresh colleague after 30 hours equates with a lack of ownership or some type of abandonment? If we cannot inculcate the values of the surgical culture in our residents in 80 hours a week with a 30-hour shift limit, then maybe the best place to look for the problem is the mirror. Responsibility, accountability, and integrity are attitudes and values learned through deliberate mentorship and role modeling, and there is no time limit on them. As others have observed, we have confused endurance with steadfastness.

To be sure, modeling accountability and patient ownership in today's medical world of increasing complexity, where hierarchal models of care are being replaced by collaborative ones, is a new and different challenge. We recently had a near miss in our institution regarding wrong-side surgery when a knife hit skin on the wrong extremity. In the aftermath of this incident, the shaken surgeon was contrite and wanted to shoulder all of the blame for the episode. This surgeon did not grasp that his true failure was that he had failed to lead and establish a culture of safety and openness in his operating room (OR). He had not empowered those in his OR to speak up, he had not mastered the communication skills necessary to be a team leader, and he had not engaged in the processes and systems that might have prevented the incident. To him, surgical ownership meant "shouldering the load alone." If surgeons are to thrive in the future, that definition must change, and we must take ownership of processes and systems in addition to our personal actions. Our residents, precisely because they are forced to negotiate shift changes, complicated handoffs, and complicated systems are better prepared for that future. They will not make these same mistakes. Responsibility and ownership will never go out of style, but how those values are manifested is changing. Our residents know that accountability and collaboration are not mutually exclusive.

I believe that the current generations of surgical residents are *better* than we were, and work hour restrictions are part of the reason. They are a technologically savvy, cooperative, balanced generation. They are more efficient than we were, more open to new ideas, and just as committed to their patients. They understand the public's uneasiness with our infatuation with endurance as a stand-in for excellence.

The one piece of solid data that does seem linked to work hour limitations is the resurgent interest in surgery by medical students. After an increase in unmatched positions in 2001 and 2002, there was a collective gnashing of teeth and wringing of hands in the surgical community. Magically, in 2003, after the introduction of work hour rules, the problem abated, and the

proportion of women matching into surgical residencies took an upturn. Coincidence? Perhaps. But work hour limitations are viewed as a good thing by upward of 90% of medical students. Our response? It has been suggested, in print, that surgery should just focus on the tiny minority of medical students who do not like those rules. † Really? Is that what we want for our profession?

Future surgical generations will judge us on how well we meet the challenges that arise during our time, not how doggedly we cling to the past. Yes, the 80-hour week poses challenges to surgical education but no more so than the increasing complexity of medicine in general or the increasing focus on medical complications and their cost to society. It is time to put away the subtle digs, like comments about "country club residencies" and being "proud to be a dinosaur." It is time to stop tacitly accepting or even approving of work hour violations. It is time to think creatively and to establish models of surgical responsibility and ownership appropriate for today's more collaborative medical environment and to utilize the strengths of our current generation of surgical trainees. It is time to grow up and stop whining. The dinosaurs went extinct, and our surgical heritage deserves to evolve.

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