HEALING ARTS

Materia Medica

A Eulogy to Traditional Overnight Call

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On July 1, 2011 we lost one of the last great giants in medicine: in-hospital, overnight resident call, which for generations has constituted a fundamental element of physicianship. Until this year, call has been akin to DNA for physicians—a universal signpost linking us to the history, purpose, and rigorous training that have defined medical practice across generations, regardless of specialty and changing residency phenotypes. The lore of overnight call abounds, receiving far greater reference and reverence than even the greatest physician legends of the last 100 years, including Sir William Osler and Michael DeBakey. Alas, the ACGME rules, which mandate that continuous hours worked by PGY1 residents not exceed 16 hours, have rendered traditional overnight call obsolete. A death of such magnitude deserves a reflective pause by all of us.

Traditional overnight call has served as the classroom *de rigueur* for countless resident physicians for as long as anyone can remember, so it is with great shock and perhaps sadness that many of its pupils now try to imagine residency life without it. This distinctive requirement of medical training was not found elsewhere in the professional world. The lay public looked with both intrigue and alarm upon the sheer audacity of call—engagement in the most challenging cognitive and physical tasks for considerably more than 24 consecutive hours while actively denying basic physiologic needs.

Overnight call was an often harsh and rarely fair educator, but consistently provided its own “teachable moments” and lesson plans. I will always remember what Osborne waves look like on an EKG, not because I read about them in a book but because, riveted by the adrenaline surge necessary to stay up all night in the ICU, I recognized this characteristic EKG finding while caring for a patient who arrived frigid and pulseless from prolonged exposure to the San Francisco night. Amazingly, she looked me in the eye and squeezed my hand the next morning when she awoke. On rounds, fueled by my third cup of coffee and squinting my eyes as the sun lit up the Golden Gate Bridge outside the large panoramic windows, I was exhausted and overwhelmed, yet recounted with a sense of accomplishment each twist and turn of her case from the night before, from frequent electrolyte shifts to the sudden development of an upper GI bleed.

Traditional call provided not only the rigor of sustained, intensive, middle-of-the-night clinical exposure with limited support and thus a greater burden of direct responsibility, but also the opportunity to witness rapid transitions in pathophysiology over the course of hours. I have seen patients with asthma exacerbations, gastrointestinal bleeding, urosepsis, and countless other maladies transform before my eyes overnight. It is incredible to watch young patients, initially gasping for air, once again taking for granted the ability to breathe—elderly patients with rigors, unable to speak, reborn

with diligent IV fluids and antibiotics. The well-rested, well-dressed attending physician meets them in the morning and wonders why they were even admitted.

Of course, I have as often watched the opposite conversion, as a patient’s illness continues to misbehave despite my best efforts. Unexpected complications, sudden decompensations and diagnostic dilemmas commonly arise in the middle of the night. Indeed, whenever I felt that I was getting more comfortable with the practice of medicine, overnight call reminded me that there was still much to learn. These critical learning experiences are threatened in an era of shift-work, in which the feedback loop of hypothesis-driven therapeutic intervention touches not the person who made the initial decision but a substitute who arrives to insure duty hour standards are not violated.

Overnight call also provided an oft-desired sense of autonomy for residents, even as it offered both the self-fulfillment and terror inherent in this ideal. At the beginning of my internship, I realized that while I could recite the precise chromosomal mutation causing cri-du-chat syndrome, medical school had never taught me the correct way to write for intravenous potassium or the difference between a high-resolution or volumetric CT scan of the chest. As the year went on, I learned to replete potassium in my sleep (literally) and became an expert on whom I needed to call at 2:00 am to get an ultrasound done. Nights brought septic joints that needed to be tapped, urgent thoracenteses, lumbar punctures and more importantly, the understanding that it takes to answer the question, “Can it wait until the morning?” Medical education must now provide the right balance of autonomy, driving trainees to a higher level of performance, and the supervision necessary to ensure patient safety—and all within a shift no longer than 16 hours.

In a busy academic hospital, the wee hours of the night sometimes provided important quiet space for reflection—more meaningful and possible with fewer people present. I recall sitting alone in front of my computer, contemplating the pathophysiology behind the “preload dependence” of my patient with severe aortic stenosis and appropriate fluid management. There were also times when early mornings provided the only time in my busy resident life to reflect on the humanity of my patients. On one occasion, I was awakened from sleep to pronounce the death of a middle-aged woman. As I approached the solemn, weeping husband, with whom I had shared many heartbreakingly discouraging setbacks over the last few days, I had to steel myself in order to not break down. I listened with my stethoscope to the eerie silence of absent

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breath and heart sounds. She was not a dead patient or a body, but rather a wife and mother. As I stood, hugging her husband and sons alone in the hallway, I thought about what it really means to be a physician.

But admittedly, as is often the case with eulogies, we tend to glorify the departed. We selectively recall good times and positive attributes. However, it would be unrealistic not to mention that overnight call was more often than not a real curmudgeon—a tyrant demanding everything from its students, at times inhumanely depriving us of the basic rights to sleep, eat and go to the bathroom.

There are indeed many devotees that seem sincere when they exclaim, “Without overnight call, how will anyone ever learn clinical medicine / surgery / obstetrics / pediatrics?” Even though overnight call may be missed, life and clinical training will continue without it. Physician trainees will still

work hard to achieve the knowledge and skills necessary to sustain a life-long journey of learning in medicine. Residency training will still present countless obstacles and challenges. And even though they may be sleeping in their own beds at home, residents will still feel tired and overwhelmed.

But today, we take a moment to remember the long legacy of traditional overnight call. May it rest in peace.

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