Virtual Mentor
American Medical Association Journal of Ethics
July 2006, Volume 8, Number 7: 466-468.

Policy Forum
Will reduced resident work hours improve the state of the art of healing?
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At the outset, it might be best to say that the answer to the question of how reduced resident work hours will affect the art of healing is unsettled in the minds of most. The publication of the Institute of Medicine report, "To Err is Human: Building a Safer Health System," in 2000 resulted in a national initiative to improve quality and safety in medicine [1]. More than a decade earlier, in 1988, New York state had restricted resident work hours to 80 hours a week and imposed rules for supervision. These restrictions came about as the result of an unfortunate hospital death and the assumption that a resident's fatigue was partly responsible for the death. Although numerous studies have failed to prove this assumption and the 80-hour limit was chosen arbitrarily, the Accreditation Council for Graduate Medical Education accepted and codified the New York legislation in 2003, mainly because it "made sense" that a better-rested resident would make fewer mistakes and that, therefore, patient outcomes would be better. So why are there still questions about this assumption?

It should be understood that the 80-hour limit does not seriously impact residents in such specialties as radiology, pathology, dermatology, ophthalmology and others who never worked 80 hours a week on average to begin with. And the effect was minimal on pediatrics and internal medicine, where for years on-call coverage has averaged one night in four. The greatest impact has been on the surgical specialties where, because of patient volume and educational requirements, resident numbers have been limited, and night call has been every other or every third night. It should be noted that in 2004 the Blue Ribbon Committee of the American Surgical Association endorsed the 80-hour work week and proposed measures to implement safe, quality patient care while promoting an environment to reduce resident fatigue, improve family lifestyle and allow time for legitimate personal interests [2].

Literature is now accumulating about how work-hour limitations have affected different aspects of patient care and resident education and how new systems and approaches can accommodate the consequences of these changes. But have we achieved all that the work limitations were meant to achieve? It is useful to interpret this question with the understanding that the purpose of resident education is the production of a safe, knowledgeable, ethical physician who will place the interest of the patient before his or her personal interest [3]. The essence of a physician's

professionalism, then, is dedication to patient service, and satisfaction comes from how well that is accomplished. It is obvious that the current trends toward a more controllable lifestyle, such as work-hour limits, conflict with the traditional ideals of the profession, and the methods we devise to implement change must take this into account.

In light of the above, here are a few observations that have been made about the recent changes. The limitations on work hours have generally been shown to result in less resident fatigue, a greater sense of well-being, fewer motor vehicle accidents during off-duty hours and slight improvement in surgery in-training exam scores [4, 5]. A study of perceived stress in surgery residents showed a decrease following the 80-hour limit, but their stress levels were still above normal levels for subjects in the control group, and rates of burnout in a number of specialties have shown little change [6]. Available studies of patient safety measures have been disappointing so far [7]. Some show a decrease in medical errors by first-year resident trainees with work limitations, but global surgery surveys show some worsening of outcomes following the work restrictions [5].

As we have accommodated the 80-hour mandate, it has been necessary to devise new systems of care that include moonlighting physicians, physician assistants and others. Yet, industrial studies have indicated that adding more people to a process increases the incidence of errors. Kellogg et al found a need for a "new template for professionalism," but this new attitude may not be as satisfying to a physician who entered the profession with different expectations [8]. Night float teams and wide cross-coverage are necessary in this new paradigm, but the risk is that the sick patient will encounter a well-rested physician who is nevertheless poorly informed about that patient. Thus, elaborate computer-based programs have been designed to insure accurate and timely information sharing that will aid in effective communication at the time of "patient hand-offs" [9]. Such measures show promise. Other solutions will be needed, and we must thoroughly evaluate the changes we make. As we introduce change we must ensure that our system of education results in a physician cadre with an attitude that embraces the ideals of the profession—to promote the welfare of the patient *first*—and that the next cadre is knowledgeable, safe, ethical and concerned for the patient; that is the key to improving the art of healing.

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