CORR Insights: Orthopaedic Residency Applications Increase After Implementation of 80-hour Workweek

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Abstract This CORR Insights™ is a commentary on the article “Orthopaedic Residency Applications Increase After Implementation of 80-hour Workweek” by Anakwenze et al. available at DOI [10.1007/s11999-013-2785-1](https://doi.org/10.1007/s11999-013-2785-1).

Where Are We Now?

There has been much interest in the effects of the 80-hour workweek on resident performance, lifestyle, and education. As Anakwenze et al. note in this article, there have been conflicting data and opinions regarding whether the work-hour restrictions have achieved their intended results of decreased medical error, increased patient safety, and improved resident performance and satisfaction. Similarly, it has been hard to prove or disprove whether the 80-hour workweek has had negative ramifications on the breadth, depth, and quality of resident education and experience. Even harder to study and quantify is the question regarding whether work-hour restrictions have negatively impacted

the socialization of residents, by having diluted residents’ sense of ownership and responsibility for their patients, interrupting continuity of care, and fomenting a “shift-worker” mentality. There also has been much interest in factors that influence medical students’ choice of residency. Two studies found that “controllable lifestyle” is the single most important factor, especially for women [5, 6].

Where Do We Need to Go?

Anakwenze and colleagues examine the relationship between implementation of the 80-hour workweek and the number of applications to orthopaedic residencies. The results showed a 21% increase in orthopaedic residency applications after the work-hour restrictions, which the authors attribute, at least in part, to medical students’ perception of an improvement in the lifestyle of orthopaedic residents. They found a concomitant 18% decrease in applications to primary care fields, and speculate that in essence, the work-hour restrictions level the playing field between residencies traditionally perceived as more strenuous, and those regarded as less demanding. Of course, choice of residency is multifactorial, as evidenced by the 24% decrease in applications to general surgery during the course of the study. We evaluated medical students in the class of 2008 at the University of Nebraska; at the beginning of each year, we asked them about their choice of residency, and contacted them again after the Match. Our response rate was low, (29%), but we found that 65% of respondents changed their minds during the course of the 4 years. A negative perception of residency lifestyle was the only statistically significant factor in the decision to make a change. Interestingly, none of the three students who

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indicated an interest in orthopaedics at the beginning of medical school changed their minds (Scherl S, Samuelson EM. Unpublished data).

How Do We Get There?

The question of what leads a given medical student to choose a particular specialty is important to medical educators, and it has been exhaustively studied. In 2009, the American Academy of Family Physicians published a study monitoring the choices of 310,000 respondents during a 24-year period [4]. Studies have focused on the particular interests and values of students in the millennial generation [2, 3]. Going forward, I think the question of what drives the choices of medical students is going to be less critical than the issue of what effect the 80-hour workweek has on the training, and ultimately the competence, of residents. Two large meta-analyses of the current literature have been somewhat contradictory and inconclusive [7, 8]. In Britain, a competency-based, rather than time-limited, orthopaedic residency has been introduced [9]. A pilot study of a similar program has been initiated in Canada, with promising initial results [1]. I think the next step in the United States would be to implement and study such a pilot program, to ensure that in the coming years we will be able to maximize the educational value of the limited time that the residents spend with us, while providing optimal care for our patients.

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