Married with Children: Does it Impact Surgical Competence?

By Chuck Dinerstein, MD, MBA — October 16, 2019

To become a Board Certified surgeon, you must have completed a five to six-year approved training program and then run the gauntlet of two examinations. First, a qualifying exam, consisting of several hundred multiple-choice questions often about diseases we know a great deal about, but that you will rarely if ever, see. Then there is the certifying examination, consisting of three half-hour oral exams, more like interrogations, by Board Certified senior surgeons – a mix of community-based and academic surgeons. Three of my six, where nationally recognized surgeons who had written the book, or at least several chapters. While the first test is designed to quantify your surgical book smarts, the certifying examination seeks to quantify your street smarts, how you will take care of patients under changing conditions.

Board Certification is an emblem of competence, and most health systems require Board Certification or eligibility [1] of their staff. The pass rate for the qualifying examination is 85%, for the certifying test 79%, for a combined passing rate of roughly 67% - being Board Certified reflects competence and hopefully safety.

A new JAMA study looks at a variety of factors in those who do not pass. I found the study troubling. Building from a survey of 1048 new surgical residents (virtually the entire group) begun in 2007, they identified 662 who had both a complete data set and had completed their surgical residency and were therefore eligible to take their Board examinations. 65% male, 69% white, and with an overall passage rate of 87%. [2]
In a univariant analysis, the only factors predictive of successfully becoming Board certified was their initial score on the ABSITE, a version of the qualifying examination given annually to all surgical residents and the year of graduation from residency. And the same holds for the qualifying examination, that multiple-choice test. Certainly, we could explain the correlation as a mixture of residents' self-study and educational support by their training program.

But for that possibly more subjective face-to-face certifying examination disparities along racial and family status lines appeared. 84% of white surgeons passed that examination on the first try as compared to 74% of nonwhite surgeons. Family status was defined as being single, unmarried with a partner, married without children, and married with children. Family status had no impact upon first-time pass rates for men, but for women, it was significant. Single women had a 90% pass rate, unmarried with a partner or married without children, the pass rate was about 75%, and for married women with children, the first-time pass rate dropped to 55%.

The discussion

The researchers raise two possibilities. First, is there an “implicit bias” among the examiners. While implicit bias might be a factor in the racial differences in pass-rates, how can it explain the family status disparity? After all, the examiners do not know an individual's family status. They quickly move on to a more reasonable possibility. The family status disparity might reflect a more significant cultural norm that women have more direct involvement in the day-to-day care of their families. As a result, in this instance, women with children may have had less time to prepare for this examination. They go on to say that “improved pay parity and increased flexibility in scheduling” would potentially lead to “improved gender diversity in academic surgery.” There is some self-referential thinking going on here; academic surgeons constitute roughly 20% of surgeons, so why limit the discussion to academics? Moreover, how does pay parity and flexible scheduling, admirable goals for both genders, level the disparity in spousal contribution to childcare?

The accompanying editorial suggests, “changing maternity leave to family leave recognizes the importance of supporting family responsibilities for people other than the women who have given birth.” True, but changing the type of leave does not guarantee that husbands pick up more of the workload. It ends with “recognizing the critical value added by individuals from a variety of different backgrounds and identities, rather than aiming for mandated metrics of diversity, will ensure inclusion and promote equity.” What a beautiful thought, but we are talking about the examination that is the primary measure of surgical competence in our healthcare system. Surely, they cannot be suggesting a variety of thresholds for competence.

There are study limitations, the greatest of which is that family status was only determined at the initial study, whether female surgical residents had children during their residency is unknown and unaccounted. They also had no information on what educational support was provided to residents by their programs. But those significant limitations aside, how can we best support an acceptable level of competence in our trainees. They represent a significant social investment in money and opportunity. I know the answer is not in flexibility of competence. I am just not sure where the solution lies. Work-life balance is important. Perhaps there are times when work takes precedence over life, and surgical training may be one of those times. Of course, I am both old school and
male, and I didn’t marry until the last year of my training.

[1] Board eligibility indicates you have completed training in an approved surgical residency and that you are in the process of taking your qualifying and certifying examinations. You have seven years from the completion of your training to successfully complete these examinations.

[2] 4% did not attempt either examination, 8% failed one, or the other exam.

Source: Association of Demographic and Program Factors With American Board of Surgery Qualifying and Certifying Examinations Pass Rate JAMA DOI: 10.1001/jamasurg.2019.4081


Links