

## Women in Medicine: Enormous Progress, Stubborn Challenges

I recently attended an awards ceremony honoring three professional women. One was among the first female graduates of the University of New Mexico law school, class of 1953; another was a Navajo physician who had worked as a family medicine faculty member and later as the surgeon general for the Navajo Nation; and the third was an African American attorney who currently serves as a colonel and judge advocate for the Air Force.

While each of the women's stories was unique and fascinating, there were several themes that connected them. The first theme was the need to overcome obstacles—including the medical school and law school admission processes—a hostile learning environment, and demands related to family obligations. The second was the importance of strong support from their parents, particularly their fathers, who believed that they could succeed and that nothing should stop them from being whoever they wanted to be. And the third was the role of mentorship in their lives, from both men and women, to help guide and support them. Each of these women had at times contemplated quitting. Mentors helped them through those difficult periods. All of them had to convince skeptical men that they had the motivation and the perseverance to succeed and that they would bring unique contributions to their fields based on their experience as women. While I was inspired by the stories, they made me wonder about the current state of women in medicine. Have we solved the problems related to selection, learning environment, family obligations, support, and mentoring that the awardees articulated so clearly?

The proportion of women applying to medical school has grown from 22.7% of the applicant pool in 1975<sup>1</sup> to nearly 48% in 2015<sup>2</sup>; of that year's matriculants, 47.8% were women.<sup>3</sup> The proportion of women on faculties has also increased substantially over the past 20 years,

from 25% to 38% in 2013.<sup>4</sup> These data seem very encouraging. However, the proportion of women in leadership positions at academic health centers (AHCs) is not as encouraging. In a recent brief report by Lautenberger et al,<sup>4</sup> women made up only 16% of medical school deans and 15% of chairs in 2013–2014. Why has the growth in the proportion of women in leadership positions at AHCs not kept pace with the other increases? What can we do to accelerate women's leadership opportunities?

In this special issue of *Academic Medicine*, which is devoted to the topic of women in medicine, DeCastro et al<sup>5</sup> present a mixed-methods study of men and women in the health professions who were recipients of National Institutes of Health (NIH) career development K awards and of the recipients' mentors. In the survey of the K award recipients, they found that men were more likely to consider it important to earn a high salary; develop a national or international reputation as an expert; and obtain a departmental, school, or national leadership position than did women. However, women were more likely than men to consider the importance of balancing work with other activities. This difference in what men and women value as important may be one explanation for the relatively smaller presence of women than men in leadership positions and their lower salaries. However, I have observed that it is often ambition—and the ability to pursue it—rather than talent alone that can catapult an individual into a leadership position. One set of quotes from interviews conducted by DeCastro et al seems to make this point:

You don't always make the most ambitious move if it doesn't feel right for your whole family. —Female mentee

So I think doing what I do to try and keep people involved in clinical work as well as research and raising a family is an extraordinarily difficult thing to do ... that's just really hard for young women with a family. —Mentor

What I learned from these interviews and the survey is that even as the opportunities for women may be increasing, the reality of balancing a family with heavy work demands has led many women to choose not to pursue leadership opportunities or seek high salaries, at least temporarily, while they have young children.

Freund et al<sup>6</sup> in this issue explore the salary differences between men and women medical faculty. They demonstrate that over a 17-year period, discrepancies persisted and that currently women are still paid, on average, about 90% of what men are paid. However, many of the differences were accounted for when the specialties and seniority of the faculty were factored in. And when adjustments for part time and leave time were included in the analysis, the differences no longer remained statistically significant. This suggests that women may earn less than men partly because of their decisions to take off time for family-associated issues.

Girod et al<sup>7</sup> in this issue describe an intervention to address one of the possible contributors to low involvement in leadership by women: implicit bias. Implicit bias refers to beliefs that may not reach conscious awareness but that affect thinking and attitudes related to women as leaders. While Girod et al acknowledge the contributions of “unsupportive work environments, active discrimination, personal choices, institutional barriers, and a leaky pipeline” as explanations for why women do not reach leadership positions, they also believe that decisions made about hiring women for leadership positions may be affected by implicit biases of those who hire women. They describe a brief educational intervention that raised awareness of implicit bias and reduced the bias. They hope that widespread adoption of a training program about implicit bias might lead to the hiring of more women in leadership positions.

Chatani et al<sup>8</sup> provide an international perspective and describe the situation for Japanese female physicians. They note that Japan faces a severe physician shortage, but women physicians often leave the workforce at the time of having their first child, often before completing their training. The authors explain that promotion to a leadership position requires completion of either specialty training or completion of a DMSc (an advanced academic degree) or both, but many women never complete either, because of child-rearing responsibilities. Chatani et al describe a “classical collision between biological and professional clocks,” which has affected the progression of women into leadership positions in health care as well as exacerbating physician workforce shortages in Japan.

Rochon et al<sup>9</sup> also discuss the conflicts between personal responsibilities and professional leadership attainments for women in their reflection on progress that has been made for women in medicine in the United States over the past 25 years. They noted that

women often have a slower start as they balance career and family responsibilities. This initial phase, when family needs and career demands are at their highest, deters some women from even considering careers in academic medicine, and the lack of academic success in this early period is responsible for the decision of many women in academic medicine to leave research.

They describe the importance of retaining women who are promising clinician–scientists but who may have a slow start to their careers due to conflicting family demands, and the need to provide flexibility in evaluating these women’s productivity and potential for future leadership.

What I have taken away from this special collection of articles about women in medicine is an appreciation for the enormous progress that has been made and the stubborn challenges that remain. While the numbers of women in medicine have increased substantially, the realities of managing a career and a family are daunting. There is more that we in academic medicine could and should do, such as providing child care round the clock at our hospitals and

AHCs for our students, residents, and faculty. This would at least reduce some of the stress that I observe as residents or faculty try to deal with a sick child who cannot go to day care, or attempt to meet a deadline for a child care pickup that conflicts with patient care needs and may require the physician–parent to be late. I am disappointed when I hear that a child care proposal has been defeated because there was not enough money, particularly if the child care proposal was pitted against a proposal for more nurses. Physicians rarely feel comfortable putting their needs ahead of patients’ care needs and will defer to the proposal for more nurses. This should not be an either/or proposition. As we recognize the problems of burnout and physician wellness as critical for patient safety, the presence of a vital support system, such as a 24-hour child care center in the hospital, can become a patient safety issue. This is not just a women’s issue; it is an issue for everyone.

We can also reduce pressure on women—and on men—during the early career years by loosening the tenure and promotion clocks to take into account the conflicting demands associated with relationships, families, and financial obligations. We do not want to lose talented young professionals by creating unnecessary obstacles early in their careers.

Finally, we need to continue the ongoing excellent work focused on mentorship, coaching, sponsorship, and other professional development opportunities for women such as those made possible by the Group on Women in Medicine and Science for early- and midcareer women faculty (sponsored by the Association of American Medical Colleges), the Education Leadership in Academic Medicine program (sponsored by Drexel University), and many of the professional training and mentorship programs of the NIH and other institutions, some of which are described in this special issue. We need to support these initiatives, study them to make them even better, and make them available to other groups such as underrepresented minorities and men, because ultimately a better, healthier workforce, one that nurtures its members’ growth and respects their differences, is in the interest of all of us. Such a workforce will create a healthy

work environment, which will benefit everyone. Equality of opportunity is important, but not if it is equally bad opportunity. Equality of opportunity must be linked with a commitment to make the work environment conducive both to the health of the patients and also to the health of those responsible for the patients.

I began this piece with the stories of three women who were recently honored, and I continue to reflect on their remarkable lives and achievements. However, I believe we are surrounded by equally impressive women whose stories have not yet been told. We need to recognize, encourage, and honor those in our midst and share their stories. Doing this will support them and will also inspire each of us to be the best that we can be and to commit ourselves to action, whether it be fostering awareness of implicit bias, providing mentors, or taking action, political or otherwise, to establish child care and similar necessary supports. We do not need more articles that describe the problems of women in medicine. These are now well recognized. What we do need is the courage and commitment to solve the problems.

**David P. Sklar, MD**

*Editor’s Note: The opinions expressed in this editorial do not necessarily reflect the opinions of the AAMC or its members.*

## References

- 1 Reskovensky LB, Grbic D, Mathew D. The changing gender composition of U.S. medical school applicants and matriculants. AAMC Analysis in Brief. March 2012;12(1). [https://www.aamc.org/download/277026/data/aibvol12\\_no1.pdf](https://www.aamc.org/download/277026/data/aibvol12_no1.pdf). Accessed March 29, 2016.
- 2 Medical school applicants, enrollees reach new highs. AAMC News Release. October 22, 2015. <https://www.aamc.org/newsroom/newsreleases/446400/applicant-and-enrollment-data.html>. Accessed March 29, 2016.
- 3 AAMC Facts: Applicants and matriculants data. Table A-7. <https://www.aamc.org/data/facts/applicantmatriculant/>. Accessed April 4, 2016.
- 4 Lautenberger D, Raezer C, Bunton S. The underrepresentation of women in leadership positions at U.S. medical schools. AAMC Analysis in Brief. February 2015;15(2). <https://www.aamc.org/data/aib/425010/february2015.html>. Accessed March 29, 2016.
- 5 DeCastro Jones R, Griffith KA, Ubel PA, Stewart A, Jaggi R. A mixed-methods investigation of the motivations, goals, and aspirations of male and female academic medical faculty. Acad Med. 2016;91:1089–1097.

- 6 Freund KM, Raj A, Kaplan SE, et al. Inequities in academic compensation by gender: A follow-up to the National Faculty Survey cohort study. *Acad Med.* 2016;91:1068–1073.
- 7 Girod S, Fassiotto M, Grewal D, et al. Reducing implicit gender leadership bias in academic medicine with an educational intervention. *Acad Med.* 2016;91:1143–1150.
- 8 Chatani Y, Nomura K, Ishiguro A, Jagsi R. Factors associated with attainment of specialty board qualifications and doctor of medical science degrees among Japanese female doctors. *Acad Med.* 2016;91:1173–1180.
- 9 Rochon PA, Davidoff F, Levinson W. Women in academic medicine leadership: Has anything changed in 25 years? *Acad Med.* 2016;91:1053–1056.