5-2023

The Leaky Pipeline in Academia.

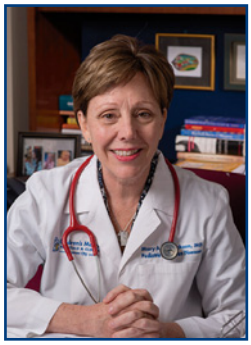
Mary Anne Jackson

The Leaky Pipeline in Academia

by Mary Anne Jackson, MD

As we navigate the complexities of our healthcare system in academic medicine, recruitment of the best and brightest medical students and recruitment and retention of talented faculty is central to ensuring top quality patient care. It is critical in our goal to diversify our workforce to eliminate health disparities.

The term "leaky pipeline" has been used as a metaphor to identify the loss of women in science and medicine who opt out of an academic career even as they are starting to expand their footprint.



Mary Anne Jackson, MD, FAAP, FPIDS, FIDSA, a Pediatrician in Infectious Disease, is Dean and Professor at the University of Missouri - Kansas City School of Medicine and Children's Mercy Hospital, Kansas City, Missouri.

The challenge is formidable as the pipeline is rich, but women leaders are less commonly competing for or selected for significant roles as CMOs, chief physician officers, deans, department chairs, journal editors, and medical society leaders. We continue to see a promotion gap where fewer women are moving to full professor rank. A recent study that covered a timeframe of 35 years looking at medical graduates between 1979 and 2013 found fewer women than men who made it to the upper faculty ranks, with no significant narrowing of this gap during the timeframe.[1] While some note these equity gaps are beginning to narrow, the pace is glacially slow, and certain groups, like women of color, have even smaller representation in leadership positions.

Add to this, the alarming numbers of women exiting the practice of medicine, that has clearly been amplified by the COVID pandemic challenges and its aftermath. There is no doubt that mentors, sponsors,

and allies are vital to the success of women in medicine who are considering career options and aspire to academic specialties and leadership roles where women are underrepresented, but this is not enough. The competing priorities of personal homelife and professional responsibilities in the workplace must be met with more options for flexibility, autonomy of schedule, and even more resources to tackle the "work outside of clinical work," such as the disproportionate time women spend on clinical note writing and increased patient portal requests compared to men.[2]

I've been struck that the challenges in closing the gender gap start early with more biases targeting women as they start in their journey in medical school. This is where the role of mentorship and allyship becomes critical. For many the challenges are alleviated somewhat once they enter residency and fellowship training. Some have suggested this relates to the robust infrastructure and leadership in residency programs especially those that have discrete pathways for aspiring leaders. The barriers become more active once the clash of personal and professional life changes emerge in mid-career. Gender gaps that materialized early in women physician's careers become most tangible as they approach the conflict of navigating the responsibilities of being a parent with competing opportunities for leadership roles, particularly as they contemplate roles that are at the top of the academic hierarchy.

The gender bias that continues within healthcare organizations is a key obstacle and spotlights the role of organizational leaders to raise women up. Words and actions must align with the recognition that stereotypes that persist, and directly undermine the environment needed for women leaders to succeed. The insidious impact of marginalization and subtle forms of differential treatment from the student to faculty level is clearly associated with higher rates of burnout and the "leaky pipeline" in academia continues.

As leaders, it is critical that we listen to those who navigating challenges in their career and who are asking for support, and encourage them to be thoughtful, honest, and strategic in their requests, and to insist that organizational leadership acknowledge them and work as our partners to respond. The benefits of assuring gender equity including pay equity are well established. Including more women at the top levels of leadership in medicine is associated with more innovative teaching, expanded research with a health equity focus, improved access to care in underserved communities, improved financial performance within organizations and better patient outcomes.[3,4]

Building the path toward more women physician leaders requires intentionality in action and must include the engagement of our male colleagues as our allies. It also requires women leaders to be unwavering in setting the cultural change that starts at the top, as we develop organizational goals with metrics that really move the needle toward gender equity.

Building leadership opportunities for women and people of color needs to identify that these individuals encounter more levels of "invisible" work that can end up discouraging them from seeking roles where real decision making occurs. Invisible work includes work that is uncompensated and/or unrecognized but that is deemed necessary to promote an organization. This includes such tasks as representing the organization in advancing diversity efforts, chairing committees, and leading mission critical work in the well being space. Important work, yes, but work that can be more equitably shared.

Future trends in healthcare promise to include multiple challenges. Our patients will include an increase in those with multiple chronic diseases, a substantial increase in those over the age of 80 years, and an increase in underinsured. The innovative work we do in medical education and in training the workforce of tomorrow is exciting, and integrating new smarter EMR technology and incorporating new discoveries in artificial intelligence and genetics will be transformational. As we navigate the complexities of our healthcare system in

academic medicine, recruitment of the best and brightest medical students and recruitment and retention of talented faculty is central to ensuring top quality patient care. It is critical in our goal to diversify our workforce to eliminate health disparities.

If we work together to bridge the gender gap, our profession ultimately benefits at all levels. Preserving our lifeblood—that is our faculty—is key. Tangible interventions that we know have good return on investment include provision of faculty development resources, including those that demystify the academic promotion process. Those who participate in faculty development programs increase their understanding of the promotions process, develop an increased comfort with navigating negotiations, and improve their time management. Those who complete programs are more likely to move forward on promotion and have better retention rates.5

At the University of Missouri - Kansas City School of Medicine through our Faculty Scholars one-year professional development program, faculty identify their strengths and gaps, find mentorship, sponsorship, and allies as they develop a clear understanding of the promotion process. Overall, the first cohort of scholars had success moving forward with promotion and some have taken on other leadership roles within the school of medicine; this year, we welcomed 10 new scholars to the program.

Beyond the Scholars program, there is a robust menu of other faculty development opportunities that focus on professionalism, responding to microaggressions, optimizing self-care, and a faculty mentorship program that allows us to connect junior faculty with appropriate mentors. One-on-one career counseling is available through our Associate Dean in the Office of Professional Development. This pass year, Christine Sullivan, MD, Professor and Associate Dean, introduced a Leadership Book Club that is well attended and brings differing perspectives from a wide range of faculty (clinicians, teaching faculty, researchers) who are or aspire to be leaders. Each book focuses on topics such as improving communication skills, building trust, emotional intelligence, and building teams. And we've begun work to launch a "Mindfulness in Medicine" curriculum for medical students, understanding the importance of such work in reducing burnout and promoting professionalism and more effective patient centered care.

For those like myself in leadership roles where we have influence, we need to advocate fiercely for all of those entering a career in medicine—and to counteract the insidious impact of naysayers. For aspiring students, matriculating students, residency trainees, and faculty colleagues, we need to be ever more active in sending positive feedback and validation, ensuring access to leadership development, role modeling work life balance, even providing resources in the work-life space and ensuring access to reliable and credible physician mentors, sponsors, and allies. Importantly in this post pandemic timeframe, we need to be straight about the barriers we all continue to see and navigate and work actively to make positive changes that will stem the toll from the leaky pipeline.

References

1. Richter KP, Clark L, Wick JA, Cruvinel E, Durham D, Shaw P, Shih GH, Befort CA, Simari RD. Women Physicians and Promotion in Academic Medicine. N Engl J Med. 2020 Nov 26;383(22):2148-2157. doi: 10.1056/NEJMsa1916935. PMID: 33252871.
2. Rule, A., Shafer, C.M., Micek, M.A. et al. Gender Differences in Primary Care Physicians' Electronic Health Record Use over Time: an Observational Study. J GEN INTERN MED (2022). https://doi.org/10.1007/s11606-022-07837-2
3. Tricco AC, Bourgeault I, Moore A, Grunfeld E, Peer N, Straus SE. Advancing gender equity in medicine. CMAJ. 2021 Feb 16;193(7):E244-E250. doi: 10.1503/cmaj.200951. PMID: 33593950; PMCID: PMC8034331.
4. Gomez LE and Bernet P. Diversity improves performance and outcomes. J Nat Med Assoc. 2019 Aug;111(4):383-392. doi:10.1016/j.nnma.2019.01.006
5. Tung J, Nahid M, Rajan M, Logio L. The impact of a faculty development program, the Leadership in Academic Medicine Program (LAMP), on self-efficacy, academic promotion and institutional retention. BMC Med Educ. 2021 Sep 2;21(1):468. doi: 10.1186/s12909-021-02899-y. PMID: 34474670; PMCID: PMC8414755.

MM