



### **Editorial**

# Examining Gender Disparity in Medicine and Setting a Course Forward

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Much has been written recently on gender disparities in medicine and the negative outcomes that result for women. The impetus for examining these disparities is manifold. While we intuitively know that achieving gender equity is simply the right thing to do, there are serious stakes not only for women but also for medicine as a field and for the communities we serve that underlie the decisive need to actualize gender equity. Diversity in human capital brings diversity in thought, which leads to innovation, stronger teams, and better outcomes for patients. But, as it stands in 2019, women are still underrepresented in areas like leadership positions, journal authorship, and speaker invitations and are undercompensated compared with their male peers, leaving them more financially disadvantaged in retirement.

We look at 5 articles published in 2018 and 2019 in *JAMA Network Open*<sup>1-5</sup> **(Box)** that examine disparities in different subsets of medicine or in areas related to careers in academic medicine, disparities that not only limit women's career trajectories but also have a significant impact on their compensation and subsequently their retirement security. As Weng et al noted, <sup>1</sup> inequity in a single context may set a precedent for inequity in others, which then contribute to greater disparity.

In the article by Silver et al,<sup>2</sup> the authors sought to determine whether women were underrepresented in perspective-type articles in high-impact pediatric journals. The publication of articles is critical to career advancement in academic medicine, so if women are less likely to have opportunities to publish, particularly as first and senior authors, then their career growth can be impeded. The authors examined the gender-related profiles of authors in the 4 highest-impact general pediatric journals and found that women were underrepresented among physician first authors, particularly in articles categorized as scholarly vs articles categorized as narrative. Women were also underrepresented among last authors and coauthors of articles attributed to both male and female physician first authors. When women are underrepresented as authors, they have fewer opportunities to contribute to and influence the field.

Ruzycki et al<sup>3</sup> analyzed US and Canadian conferences to determine the trend in the proportion of speakers who were women during last decade. Visibility of women as speakers at academic medical conferences is an important part of gender equity, as the article notes, and can have a broad impact on a career. Conferences represent opportunities for networking, mentorship, and career advancement. On the one hand, it was positive that the authors found that proportions of female speakers at these conferences increased from 24.6% in 2007 to 34.1% in 2017.<sup>3</sup> On the other hand, although the proportion increased, women are still underrepresented overall, and without a substantial cohort of women, it is more difficult to weaken stereotypes about gender roles.<sup>6</sup>

When it comes to the accumulation of wealth, small gender-based salary gaps can have a significant impact over a lifetime. Rao et al<sup>4</sup> ran a quality improvement study using simulations of salary and additional accumulated wealth to project how gender equity initiatives could help to reduce gender-based differences in salary and time to promotion. The lag in the promotion of women to full professorships is an important piece of salary inequity and thus accumulated wealth. (Women hold 25% of full professor positions and 37% of associate professor positions in the United States.<sup>7</sup>) Rao et al<sup>4</sup> noted that, to account for lower additional accumulated wealth and longer life expectancy, a woman would have to spend \$0.60 for every \$1 spent by a male counterpart for her resources to last through retirement. The authors found that the salary gap and time to promotion

Author affiliations and article information are listed at the end of this article.

## Box. *JAMA Network Open* Articles on Gender Disparities

Evaluation of Sex Distribution of Industry Payments Among Radiation Oncologists<sup>1</sup>

Assessment of Women Physicians Among Authors of Perspective-Type Articles Published in High-Impact Pediatric Journals<sup>2</sup>

Trends in the Proportion of Female Speakers at Medical Conferences in the United States and Canada: 2007 to 2017<sup>3</sup>

Association of a Simulated Institutional Gender Equity Initiative With Gender-Based Disparities in Medical School Faculty Salaries and Promotions<sup>4</sup>

Assessment of Gender-Based Linguistic Differences in Physician Trainee Evaluations of Faculty Using Automated Text Mining<sup>5</sup>

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decreased after the implementation of gender equity initiatives, although small differences remained.

The words used to describe men vs women differ in significant ways, which can affect their careers. Because narrative evaluations are often used in decisions about academic appointments, promotions, and salary increases, any potential bias—unconscious or conscious—in these evaluations could have far-reaching impacts on careers. Heath et al<sup>5</sup> examined trainees' narrative evaluations of medical faculty. The study identified linguistic differences in trainee evaluations of faculty based on gender and found that word choice differences reflected notable contrasts in the ways male and female faculty are perceived and evaluated. Stereotypical gendered phrases were identified, such as terms that describe ability and cognition in male faculty evaluations and terms that describe emotion in female faculty evaluations.

Gender disparity in medicine reaches beyond the walls of academia. It stretches into clinical and research areas as well. A 2018 study by Doximity<sup>9</sup> found that the national gender wage gap for physicians grew from 2016 to 2017. In 2016, female physicians earned 26.5% less than their male counterparts; in 2017, female physicians earned 27.7% less.<sup>9</sup> Gender can also impact partnerships with industry and the payments that can come with that relationship. Weng et al<sup>1</sup> described the association of physician gender and industry payments in radiation oncology. The authors found that the proportion of radiation oncologists who received at least 1 industry payment in 2016 was substantially lower among female physicians than among their male counterparts. The study was only able to speculate on reasons for the disparity, including a preference for senior faculty, which is disproportionately male in radiation oncology, and socialization—women are less likely to pursue business opportunities that involve perceived ethical compromises.

The articles discussed herein delineate specific areas of disparity that have important consequences in shaping a woman's career and compensation. This is the first step: identifying the areas where harm occurs. It is time now to reshape the systems that women work within through calculated, intentional actions that take place at the institutional level. <sup>10</sup> Institutions must make gender equity an essential part of their missions.<sup>8</sup> Metrics will play a big role in moving the field toward gender equity. In journals, we must track gender data for editorial positions and solicitations and then create a process that supports equitable inclusion. In academic medicine, we must track gender data for faculty salary and appointments. In 2019, the Association of American Medical Colleges published Promising Practices for Understanding and Addressing Salary Equity at U.S. Medical Schools, 11 an effort to help guide institutions to achieving salary equity. It offers processes to help implement salary equity initiatives, including creating a compensation committee to design a salary equity study, develop an overarching compensation philosophy, track the representation of women in leadership roles and among new hires, and provide departmental leaders with on-demand salary benchmarking. There must be training in implicit bias to understand how it may contribute to institutional bias. Sponsorship has to be part of the institutional game plan as well. Institutions need to make the sponsorship of women a strategic priority, develop formalized sponsorship programs, and create the expectation that sponsorship is an essential component of good leadership. In all these areas, men must be engaged in creating supportive institutional and organizational environments.

We can all agree that we want our institutions to grow and innovate and provide the best possible outcomes for our communities. The same can be said for our journals and our professional societies and meetings. The way to ensure peak performance across the board is to eliminate gender disparities. Diversity, equity, and inclusion in leadership and thought strengthen all of us.

## **ARTICLE INFORMATION**

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