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Editorial

The Evolving Workforce in Rheumatology: The Effect of Gender

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Population shifts in the workforce have been noted for the past few decades. In the United States, the number of people aged 65 and older is expected to double, reaching almost a quarter of the population.[1] By 2045, the US is expected to experience a demographic shift, with an increase in the percentage of minority populations to greater than 50%. This diversity is especially noted in younger age groups and is accompanied by an increase in the number of women earning professional degrees at the undergraduate and graduate levels.[2,3] However, despite this progress, women in the US continue to experience a significant pay gap, earning approximately 82 cents for every dollar earned by men.[4]

Within the US Rheumatology clinical community, it is estimated that on average, for every dollar a male rheumatologist earns, a female rheumatologist earns 83 cents.[5] This represents a 17% difference in compensation (average 2016–2018), translating to a significant increase in the number of years needed to work to reach earnings parity. In extrapolating these numbers over a 40-year period, the difference in mean salary between the higher earning male rheumatologist to the average female rheumatologist is $1,760,000. The American College of Physicians, in its position paper in 2018 on gender equity in physician compensation and career advancement, noted that although progress has been made toward gender diversity in the physician workforce, disparities in compensation exist and inequities have contributed to a disproportionately lower number of female physicians achieving academic advancement and serving in leadership positions.[6]

In the American College of Rheumatology workforce study,[5] it was noted that the American Medical Association estimates female physicians on average work 7 fewer hours per week than male physicians, and female rheumatologists have nearly 30% fewer annual patient visits. Consequently, the workforce study characterized female rheumatologists as 0.7 of an FTE (full-time employee). Since female rheumatologists have, on average, fewer patient visits per year, there is a corresponding difference in the average number of relative value units (RVUs; a measure of physician work productivity) per year of almost 20%.[5,6]

Studies also show that female physicians tend to spend more time with each patient, contributing to the lower RVU and consequently, lower compensation.[7,8,9,10] This begs the question: Are female rheumatologists less efficient than their male colleagues? Do they not work as hard? Or are there reasons why women spend more time with each patient? McMurray, *et al*,[11] noted that female primary care physicians tend to see significantly more female patients and patients with complex psychosocial problems, with both patient types requiring longer time for management. These female physicians also reported that they were under significantly more time pressure to shorten patient visits in order to see more patients during the day; this may be explained, in part, by the differences in the patient mix.

The sex and gender of the physician may also influence the physician-patient interaction, as studies have shown that patients of female physicians vs male physicians tend to speak more, disclose more medical information, make more positive statements, report more participatory visits, and in general, are more open with female physicians. The patient interactions of female physicians vs male physicians are more empathetic, and focus more on psychosocial question-asking and counseling. In general, studies have demonstrated that female physicians are more patient-centered in their communications. These differences in both the openness of patients and the patient-centered communications are time consuming and may contribute to the gender-based time differential with each patient.[6]

Patient outcomes may thus be influenced by the very nature of the patient care encounter. A landmark study conducted by public health researchers at Harvard[12] found that elderly hospitalized patients treated by female internists experienced both lower mortality and 30-day readmission rates compared

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to patients seen by male internists. The researchers believed that these differences may be due to the differences in practice patterns between male and female physicians.

These findings suggest that these methods, if applied to the delivery of healthcare in the US, might improve patient outcomes and overall health. A compensation system based on value over volume would provide a more equitable compensation for female physicians and diminish the gender pay gap.

The gender difference in compensation is not a problem unique to rheumatology or medicine. This issue exists across industries as well as across boundaries. In this issue of *The Journal of Rheumatalogy*, Widdifield, *et al* present a retrospective, longitudinal, population-based study in Ontario, Canada,[13] comparing differences in clinical activity and remuneration between male and female rheumatologists, with an evaluation of the association between physician sex/gender, practice size, and patient volume from 2000 to 2015. The authors noted an increase in the percentage of females in the workforce over this same time, to 49% of the workforce in 2015. However, consistently fewer than half (25.3–43.0%) of all female rheumatologists worked at least 1 clinical FTE, compared to a majority (64.7–72%) of male rheumatologists. Median practice size declined over this same time period for both males and females. However, while median practice volumes remained stable for males, the volumes declined for females. Fewer female rheumatologists were classified as practicing in large or high-volume practices, and remuneration was significantly higher for males than for females, with a median difference in gross payments of $45,556–102,176 (Canadian dollars).

The limitations of this study include the inability to measure the contributions of practice type (community vs academic), the presence of collaborative care teams, the complexity of patient disease types, and patient outcomes. As noted by the authors, this will require a separate study to determine if the care patterns and frequency/number of visits contributes to an overall decline, improvement, or null effect on patient outcomes as well as costs to the healthcare system. Also noted as confounders are the expected societal and personal demands placed on female physicians who may then be disproportionately affected by family, caregiver, and social responsibilities.

The question we now face is, how do we move toward closing the gender pay gap in rheumatology? In an era where women are increasingly present in the workforce, this feminization of rheumatology provides an opportunity to assess the needs of working women, the generational shifts in attitudes toward work-life balance, and a change in clinical practice toward value over volume. Ultimately, the focus will be on strategies to achieve high-quality care with efficient and effective delivery of healthcare services.

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