Letters

RESEARCH LETTER

Evaluation of Progress Toward Gender Equity Among Departmental Chairs in Academic Medicine

Although the gender gap in medical school matriculation has closed,\(^1\) the representation of women in leadership roles in academic medicine has been reported to be low, particularly among departmental chairs.\(^2\) This study evaluates the extent of progress in female representation among program directors (PDs), chairs, and deans to provide a valuable benchmark by which to evaluate future progress.

Methods | We obtained data on the gender of chairs, deans, and academic faculty from the Association of American Medical Colleges database\(^3\) from January 1, 2010, through December 31, 2019, for a cross-sectional study. We also obtained data from 2019 on the gender of academic faculty\(^3\) and chairs\(^3\) in 14 of the largest medical specialties. Data on residents and PDs were obtained from the Accreditation Council for Graduate Medical Education; however, the gender of PDs was assigned by name and corresponding online photographs. Our study met Ohio State University Institutional Review Board policy for exemption. The study followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guideline.

Statistical analysis was performed using a 2-tailed, 2-sample proportion test and determined statistical significance as a 2-sided \(P < .05\).

Results | Between 2010 and 2019 (Figure 1), women were underrepresented among chairs and deans compared with female representation in academia. The annual rates of increase in female representation during this period were 0.6% for faculty, 0.61% for chairs, and 0.8% for deans. In 2019, women represented 38.7% of PDs and 18.5% of chairs, while constituting 42.3% of faculty and 46.8% of residents (Figure 2).

The fields of pathology and pediatrics had higher proportions of PDs than female representation within their individual specialties. Family practice had the lowest female representation in the PD role (38.5%) relative to the proportion of women within academic practice (52.8%, \(P < .001\)). Similarly, the fields of psychiatry (PDs, 44.3%; academia, 53.8%; \(P = .003\)) ophthalmology (PDs, 29.6%; academia, 34.6%; \(P = .02\)), internal medicine (PDs, 33.8%; academia, 40.8%; \(P = .001\)), pathology (PDs, 56.3%; academia, 42.8%; \(P = .002\)), and orthopedic surgery (PDs, 8.9%; academia, 19.8%; \(P < .001\)) had significant differences.

Among chairs, there was low representation of women across all specialties compared with representation in academia (anesthesiology: chairs, 11.7%; academia, 36.9%; \(P < .001\); dermatology: chairs, 27.7%; academia, 51.9%; \(P < .001\); emergency medicine: chairs, 11.4%; academia, 37.6%; \(P < .001\); family practice: chairs, 30.7%; academia, 52.8%; \(P < .001\); internal medicine: chairs, 16.8%; academia, 40.8%; \(P < .001\); neurology: chairs, 10.2%; academia, 40.7%; \(P < .001\); obstetrics and gynecology: chairs, 28.2%; academia, 64.7%; \(P < .001\); ophthalmology: chairs, 16.0%; academia, 40.0%; \(P < .001\).
Figure 2. Comparative Depiction of Women in Residency, Academia, and Leadership Roles in 14 Medical Specialties in 2019
P < .001; orthopedic surgery: chairs, 1.7%; academia, 19.9%; P < .001; otolaryngology: chairs, 3.4%; academia, 34.6%; P < .001; pathology [clinical]: chairs, 27.8%; academia, 42.8%; P < .001; pediatrics: chairs, 27.3%; academia, 58.9%; P < .001; psychiatry: chairs, 23.2%; academia, 53.8%; P < .001; radiology: chairs, 17.3%; academia, 29.6%; P < .001). This finding was most pronounced in obstetrics and gynecology, where there were 81.8% of female residents and 64.7% of women in academia but only 28.2% of women among chairs. Female representation among acting and interim chairs was as follows: 25% (in 2010), 24% (in 2019), and 30% (peak in 2014). Similarly, findings among acting and interim deans were as follows: 22% (in 2010), 17% (in 2019), and 30% (peak in 2017).

Discussion | As the gap between male and female faculty in academia has narrowed, representation in residency program directorship has reflected the improving diversity to an extent. In addition, limited data from recent national surveys indicate female representation among associate, associate, and vice deans ranging from 15% to 68%. However, the chair position appears to be less affected by these trends, particularly within obstetrics and gynecology, where there is a clear majority of women. With 82% of current trainees being women in obstetrics and gynecology, the natural transition toward gender parity among chairs may likely be attained within the next few decades. Although achieving gender equity among chairs may be expectedly protracted given the long tenure of chair positions, the slow momentum toward change reveals the necessity for improvement. The current pace suggests that gender equity in academic leadership may be a distant reality.

With the traditional routes of chair election being through departmental faculty vote, rotation among faculty, or appointment by external leadership, any effort to accelerate female representation in the chair position may require initial diversification of academic departments and senior institutional leadership. Term limits for academic leadership positions are critical catalysts to achieve the desired pace of transformative change. In addition, constructive efforts by universities to address implicit bias, expand mentorship structures to ensure appropriate academic support of women, and implement developmental programs that improve the pipeline of women leaders are crucial to foster more rapid and sustainable gains toward gender equity in departmental leadership.

Prevalence of Personal Attacks and Sexual Harassment of Physicians on Social Media

Women are more likely than men to report being harassed online and are more than twice as likely to experience online sexual harassment. Despite broad adoption of social media by medical professionals, there is limited information about physicians’ experiences with harassment on social media. We report on a case series of physicians invited to describe their experiences of harassment on social media.

Methods | We developed the survey instrument through a collaborative consensus process (3 meetings to review survey items and achieve consensus as a group) to capture responses, and use of the instrument was pilot by colleagues. Participants self-reported demographic information, including sex, race, and ethnicity. Participants were asked to answer yes or no to 2 questions: Have you ever been personally targeted or attacked on social media? Have you ever been sexually harassed on social media? An optional text box was provided for description of any such incidents. From February 6 to March 20, 2019, each of us posted a standard tweet weekly with a trackable link (bit.ly) to the survey. We tagged 10 physicians asking them to do the same. This study followed the American Association for Public Opinion Research (AAPOR) reporting guideline for survey studies and