EXPLORING THE GENDER GAP THROUGH AUTHORSHIP IN RETINA

Significant progress in gender equity has been made in retina; here's how we can continue the momentum.

By Ankur Nahar, BS, and Julia A. Haller, MD

Although it has been nearly 175 years since Elizabeth Blackwell became the first woman to receive an MD in the United States, women continue to face challenges. Lack of recognition by patients and peers, a persistent pay gap, professional isolation in surgical specialties, and a paucity of mentors and role models are just a few barriers women face that impede their career advancement.[1] These obstacles then make attaining positions of leadership more difficult. In academic medicine, women currently account for just 18% of departmental chairs and deans. Furthermore, while 41% of full-time faculty are women, only 25% are full professors.[2]

In academic ophthalmology, similar disparities exist. A study by Tuli et al showed that the number of faculty who are women in ophthalmology has risen from 24% in 2003 to 35% in 2017. However, this was primarily due to an increase in assistant professors, and the gap between male and female professors persists.[3] Similarly, women made up just 2.1% of departmental chairs in ophthalmology in 2003, which increased to 8.4% in 2017.[4]

With fewer women in these key positions of authority, their representation in domains that are dependent on rank—such as research—is significantly lower. For example, Camacci et al found that the editors-in-chief of 23 of the 24 (95.8%) journals in ophthalmology and the presidents of 13 of the 15 (86.7%) professional societies in ophthalmology were men as of 2020.[5]

THE IMPORTANCE OF AUTHORSHIP

For women to attain positions of influence in academic medicine, their research productivity as trainees and early career physicians is critical. Specifically, authorship in key first and last author positions is an important component of advancement in academia. Therefore, gender composition in authorship can be examined as a proxy for gender disparities within the field.

Based on this hypothesis, we looked at trends in first and last authorship of women within clinical retina literature over the last 25 years.[6] Notably, we found a statistically significant rise in women as first and last authors, which contrasts with prior authorship studies in glaucoma and cornea.[7-9] This finding is particularly encouraging, as retina has traditionally been a male-dominated field; as of 2018, only 19.8% of retina physicians were women, according to the American Board of Ophthalmology.[10]

All signs point to retina moving in the right direction. The proportion of women retina fellows is now 30%, in part due to the evolution of retina as a specialty and societal shifts toward acceptance and inclusion.[11] More underrepresented groups have been drawn to the field due to greater time flexibility through medical retina and the acceptance of family-friendly policies. In addition, gender norms are changing, and more women feel comfortable breaking out of stereotypes and into traditionally male-dominated fields of medicine.

Not only is the representation of women in retina improving, but when women get opportunities in the field, they excel. Our study showed that the number of last

AT A GLANCE

- Authorship in key first and last author positions is an important component of advancement in academia.
- The authors found a statistically significant rise in women as first and last authors, which contrasts with prior authorship studies in glaucoma and cornea.
- When women were last authors, the first author was more likely to be a woman, supporting the hypothesis that mentorship is leveling the playing field.

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authors who were women in the United States was significantly higher than the number of retina specialists who were women registered with the American Society of Retina Specialists (ASRS), indicating that women are disproportionately productive relative to their representation in the field.[6] This may also be due to a tendency for women to choose academic positions more often than men, as has been documented in other surgical fields.[12]

Our findings indicate that retina is leading ophthalmology in closing the gender gap. Nevertheless, implicit and explicit barriers remain for women, especially in historically male-dominated specialties. Furthermore, a disparity continues to persist among leadership in academic ophthalmology, despite the disproportionate productivity of women in retina. We still have work to do.

MENTORSHIP IS KEY

An important finding from our analysis is that mentorship is leveling the playing field. We found that when women were last authors, the first author was more likely to be a woman.[6] This suggests that women trainees may feel more comfortable asking for guidance from a mentor who is a woman, or may be more likely to receive it. Mentorship, therefore, plays a critical role in increasing authorship by women in retina and improving female representation and academic advancement.

The role of mentors extends beyond gender to apply to other underrepresented groups in medicine. Thus, programs such as those facilitated by Women in Ophthalmology, Women in Retina, the AAO's Minority Ophthalmology Mentoring program, the ASRS, Retina Society, and others, are important. These groups function as support systems for women to help them traverse the difficult landscape of medicine and may also improve their sense of belonging.

NEXT STEPS

By raising awareness about disparities, providing opportunities to connect underrepresented groups within the field, and elevating these individuals within leadership positions, we can help break down the barriers of entry and continue to promote diversity within retina. Furthermore, greater diversity increases the variety in approaches and perspectives, which can be a source for innovation and aid in solving challenges within the field.

We can be proud that, regarding leadership in research publications, retina is a field where women are already excelling. Most importantly, by achieving greater equity among the ranks of retina specialists, we foster an atmosphere that is welcoming and inclusive, conducive to personal and professional growth, and more likely to deliver the highest quality patient care. ■

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