



THE IMPORTANCE OF DIVERSITY IN OPHTHALMOLOGY

Why action is necessary to improve diversity, equity, and inclusion.

BY PAUL P. LEE, MD, JD

In a seminal article published in 2016, Xierali and colleagues demonstrated that women and groups traditionally underrepresented in medicine (UIM) remained significantly underrepresented as practicing ophthalmologists, faculty, and residents compared to the US population.¹ Xierali et al defined UIM as Black, Hispanic (Latino/Latinx), American Indian, Alaskan Native, Native Hawaiian, and Pacific Islander.

From 2005 to 2015, the proportion of practicing ophthalmologists from UIM groups remained flat at 7.2% (30.7% of the US population). More telling is that the proportion of residents from UIM groups fell from 8.7% to 7.7% during this period. Ophthalmology faculty from UIM groups fell from 6.2% to 5.7%. The percentage of residents from UIM groups entering ophthalmology training represented approximately half of the percentage of graduating medical students from UIM cohorts (ie, our field was not attracting a proportionate share of graduating US medical students).

In 2015, 22.7% of practicing ophthalmologists, 35.1% of ophthalmology faculty, and 44.3% of ophthalmology residents were women. From 2005 to 2015, of those who graduated from US medical schools in 1980 or later, the proportion of female practicing ophthalmologists increased from 23.8% to 27.1%. More recently, the proportion

of women matching in ophthalmology has declined.¹

WHY IS A MORE DIVERSE WORKFORCE DESIRABLE?

According to Scott E. Page, MA, MS, PhD, a professor at the University of Michigan, diverse teams that include different kinds of thinkers outperform homogenous groups on complex tasks. This translates, for example, into better problem-solving, greater innovation, and more accurate predictions—all of which can lead to better performance and results. Dr. Page has also demonstrated that various types of cognitive diversity are related to better outcomes and that cognitive differences themselves are influenced by other kinds of diversity, including racial and gender differences.²

With the many challenges of providing vision care, including refractive error correction, to those who need it, we must determine innovative and practical solutions. Teams made up of individuals from different backgrounds can help us do better. For example, we know that patients from poorer communities and those from minority backgrounds do not use health or eye care in the same way as other patients. It's important that we understand why.

One important and often under-explored reason for this is that there

is a lower level of trust in the medical community among people of color. Antecedent reasons include current racial inequalities that have been accentuated by the COVID-19 pandemic, the American Medical Association's refusal to admit Black physicians until the 1920s, and the infamous Tuskegee Study of Untreated Syphilis in the Negro Male, often referred to as the Tuskegee Experiment.

In addition, Black patients consistently experience poorer communication quality from providers than White patients. For example, Black physicians can be more effective at convincing Black patients to use preventive care.³ A shared background can improve communication between physicians and patients, resulting in better outcomes and saved vision for our patients.

In 2012, the Centers for Disease Control and Prevention held a conference on a public health surveillance system for vision, with a special focus on disparities in eye care and eye health. The proceedings were published in a special supplement to the *American Journal of Ophthalmology* (bit.ly/AJOHealthDisparities). The conference provided insight into the nature of disparities and the development of a public health surveillance system to illuminate and track visual health and disparities over time. Other researchers



have also examined populations at high risk of vision loss and underutilization of eye care and thus identified avenues for potential improvement.⁴

Data from the US Census Bureau indicate that a majority of this country's population will be non-White before 2050—less than 30 years away. Certain states' populations are predicted to be majority non-White even earlier. Going forward, embracing diversity, equity, and inclusion will only become more important. It is imperative that ophthalmologists learn how best to care for patients from different backgrounds.

ACTIONS TO IMPROVE DIVERSITY IN OPHTHALMOLOGY

For many years, the Rabb-Venable Excellence in Research Program, which is supported by the National Medical Association, the National Eye Institute, and committed donors and is led by Mildred M.G. Olivier, MD, BS, and Eydie G. Miller-Ellis, MD, has successfully attracted and provided professional development for UIM students interested or potentially interested in a career in ophthalmology. The program is a model for focused skills development, academic enrichment, and networking opportunities. In the most recent ophthalmology match, UIM students who participated in the Rabb-Venable Excellence in Research Program matched at a higher rate than all US senior graduates and match participants overall.

Even with the success of this program and pipeline programs to attract medical students from diverse backgrounds (such as the one developed at the University of Michigan by Ariane D. Kaplan, MD, and Kevin Heinze, MD), it is clear that further action and additional mentoring resources are needed to enable medical students from diverse backgrounds to experience the joy of being an ophthalmologist and ultimately increase the diversity of our workforce.

One such effort is the Minority Ophthalmology Mentoring (MOM)

program, a partnership between the AAO and the American University Professors of Ophthalmology. The MOM program's executive committee includes many leaders in the field, and it is chaired by Keith D. Carter, MD, FACS, the chair of the Department of Ophthalmology and Visual Sciences at University of Iowa Health Care. Thanks to strong leadership and industry support, the number of students who can participate in the MOM program and the range of opportunities it offers continue to grow.

In addition, the AAO's Board of Trustees has created two task forces to examine diversity, equity, and inclusion in ophthalmology and provide recommendations for improvement. One of these task forces is led by Terri L. Young, MD, MBA, the chair of the department of ophthalmology at the University of Wisconsin-Madison. Its focus is on the structures and processes within ophthalmology and ophthalmology organizations. The second task force includes Anne L. Coleman, MD, PhD, and Tamara Fountain, MD, and focuses on how the AAO can address disparities in vision health and outcomes, such as access to eye care, the eye care workforce, the application of data sciences, and provider and public/patient education.

CONCLUSION

There is still much to be done—and in reality, the work (like all important work) will never be finished. There are many simple, straightforward steps that can be followed:

- Show up. Be more engaged in the community with health fairs, educational outreach, and other activities. So many of our colleagues are cornerstones of their communities. We can also attend or support the National Medical Association section meeting in ophthalmology and the Women in Ophthalmology annual meetings. For academic institutions, participating in the meetings of organizations such as the Student National Medical Association will provide the

opportunity to meet and attract great potential colleagues to our field.

- Examine policies, practices and procedures that may create an advantage for some and a disadvantage for others. What is the educational background that we truly need for each position? Consider whether a candidate's skills and competencies translate from one area to another, instead of relying solely on prior experience in that skill set or a score on an exam.

- Educate ourselves about the backgrounds, cultures, and experiences of our colleagues who do not have the same life experiences that we do.

- Learn about social determinants of health and how they affect our patients' lives, their ability to take care of their health, and our ability to participate in their care. Acknowledge and learn more about the role that systemic bias (eg, racism) plays in these social determinants and therefore our patients' health as well as our colleagues' experiences.

- Work to recognize, acknowledge, and address our own biases to mitigate their negative effects. To function in today's complex world, we all use mental shortcuts to provide swift estimates of probabilities in life situations (often referred to as *heuristics*). Although these are often the foundation of superb clinical judgment, they can also result in error, stereotyping, and other incorrect judgments with negative consequences. ■

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