

SCIENTIFIC COMMUNICATION: AN ESSENTIAL TOOL FOR AN OPHTHALMOLOGIST'S TOOLBOX



Learning to navigate the media is critical in the digital era.

BY SHIVANI MAJMUDAR, MSJ

Medical trainees typically learn that medicine is an art based on science. We spend the first 2 years of medical school studying the pathophysiology of disease and pharmacology of treatment and the next 2 learning the art of navigating national guidelines to provide personalized, compassionate patient care. Surgery is yet another art form to master, and every ophthalmologist must work through the nuances of a procedure with individual enhancements and modifications.

The art of communication is another essential aspect of medical practice. Whether used to explain a treatment plan to patients, discuss new research with colleagues, or encourage masking and social distancing during a global pandemic, effective communication is the key to enacting behavioral change. For ophthalmologists, clear verbal communication can transcend challenges associated with a patient's loss of sight and absence of visual cues.¹

Many physicians consider their responsibility for health and well-being to extend beyond their individual patients and to include their communities at large. Visual impairment can significantly inhibit education, productivity, and social welfare for many individuals. Ocular disease can lead to a loss of livelihood and a decreased sense of self-worth.²

OPHTHALMOLOGISTS' VOICES ARE CRUCIAL

I have realized that my role as an aspiring ophthalmologist does not exist separately from my previous identity as a journalist. In the aftermath of the COVID-19 pandemic, which shook an already feeble health care system, eye health is at a critical junction. The incidence of myopia is rising at alarming rates, likely due in part to reduced time spent outdoors and increased screen time during lockdowns. In addition, access to and quality of eye care is consistently poor in underserved communities.³ Ophthalmologists' voices are trusted—and needed—now more than ever, and the power of their advocacy lies in the strength of their communication.

Amplifying our voices in the digital era can be as simple as the click of a button. When the pandemic challenged physicians to share real-time data and health policy, many took to social media platforms like X (formerly Twitter) and TikTok to ensure factual messaging would not be buried under waves of misinformation. At the peak of the pandemic, subspecialty societies like the American Association of Ophthalmic Oncologists and Pathologists and the American Society of Retina Specialists shared new patient care recommendations.⁴

In the wake of COVID-19, public media platforms remain powerful tools for improving health education and health literacy. Long gone are the days of the unilateral physician-patient relationship. As such, today's physicians have a responsibility to understand and navigate the changing media landscape and meet patients where they are.

Although the global accessibility of the media today is unmatched, gender and racial disparities continue to persist in these channels. Studies show that women and marginalized physician populations are less likely to be verified on Twitter,⁵ reducing the credibility of their voices. When physicians are asked to speak as expert media contributors on primetime cable news shows, women are interviewed less often⁶ and have less speaking time than their male counterparts. This is exacerbated in ophthalmology, which has been cited as one of the least diverse specialties in regard to race, gender, and ethnicity.⁷ Increasing the diversity of the ophthalmology workforce not only does right by our colleagues but also allows us to better leverage the trust of our patient populations and reduce disparities in health outcomes.⁸ This requires building collaborative relationships through science and storytelling, skills I learned in both medicine and journalism.

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Medical students have an important role in this, too. Our short white coats neither absolve us of the responsibility to advocate for eye health nor diminish the strength of our voices. Yet, scientific communication skills are often not taught in medical school. In Chicago, we are looking to change that.

In collaboration with Dr. Shikha Jain, associate professor at the University of Illinois College of Medicine, and Dr. Vineet Arora, dean of medical education at the Pritzker School of Medicine, we are building an elective course that empowers medical students to battle misinformation by harnessing the power of journalism and advocacy.⁹ In this course, students will learn to apply scientific communication principles to identify

misinformation and address it through the creation of infographics or a similar media project. Just as medical students are given the knowledge and skills to prepare for future pandemics, our goals are to equip them with the tools to battle the so-called *infodemic*.¹⁰

CONCLUSION

By investing in a comprehensive medical education that includes communication, we can prepare future ophthalmologists to promote eye health, prioritize equitable access to care, and better protect the vision and overall health of patients. Furthermore, sound communications skills can empower ophthalmologists to use their voices to mitigate the spread of misinformation during a health crisis. ■

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