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Perfect Storm

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Abstract

Letter from the Editor-in-Chief

Keywords

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Letter from the Editor



Paul B. Freeman, OD
Editor-in-Chief

Finding a safe path through the storm

As I mentioned in my April 2021 editorial, I will begin this editorial “with heartfelt recognition to frontline workers who (work to) keep us healthy and safe, along with those trying to maintain some sense of normalcy in our lives.”¹ I naively thought that this editorial was going to be an historical recognition rather than a continuation of my concern for all the brave individuals who are trying to steer the healthcare ship through this pandemic storm. And as Alfred Sommer, MD, MHS said in JAMA Ophthalmology (also quoted in my last editorial, which I believe deserves repeating) “We keep making the same mistake: underestimating the threat of new infectious agents and failing to implement public health interventions as rapidly and vigorously as required”² and, given the trending numbers of newly infected people, those admitted to hospitals, and those dying, there are still some who seem to be ignoring his admonition. An analogous situation of this evolving crisis comes to mind....

The Perfect Storm is a story about a New England commercial fishing crew who set out to sea on their fishing boat, the Andrea Gail and, because of poor fishing luck, traveled to another location where the fishing was better. Unfortunately, they got caught in a major storm. The captain of another ship, knowing about the storm they were heading into, tried desperately, but unsuccessfully, to warn the crew of the Andrea Gail to change course. After trying to make it through that violent storm and recognizing their mistake, the Andrea Gail turned around. Ahead they saw clear skies and an apparent path out of the storm, but they were soon in another terrible

storm that (spoiler alert) ended in tragedy. In our pandemic, two analogies to this story stand out.

The first analogy relates to the crew's perception of clear sailing ahead after the trial of the first storm. A few months ago, many of us felt like we were seeing a reasonably clear, albeit slow, path out of the pandemic because of the incredible vaccines (full disclosure, I am fully vaccinated), businesses reopening, mask mandates loosening, and more events being allowed with masking. Unfortunately, like the crew of the Andrea Gail, our path is being disrupted by another storm: the Delta variant of the SARS CoV-2. Regrettably, this new storm is more muddled and fraught with far more confusion: when to wear or not wear a mask, how to social distance with respect to indoors/outdoors and crowd size, how to protect children who appear to be more susceptible to this mutated virus, questions about the efficacy of our vaccines given breakthrough infections in fully vaccinated individuals, and the potential for other mutated virus variations.

As frontline healthcare workers, optometrists and ophthalmologists will need to help steer through this storm, in our practices and as advocates for minimizing the spread of this virus. To minimize infection among our patients, staff members, and ourselves, we will need to continue to follow protocols put in place in the first wave of the pandemic.

The second analogy relates to the attempted warning by the captain of another ship who was trying desperately to have the Andrea Gail return, knowing what they were sailing into. However, the Andrea Gail could not hear the warning, continued into the storm, and met with a tragic ending. Those who are unvaccinated despite warnings are potentially heading into a viral storm. It is now well known that the Delta variant of the virus is significantly more contagious than the original virus, and it appears that unvaccinated people are suffering more from the variant, which is highly transmissible by everyone. Optometrists and ophthalmologists need to be part of the public health team that provides *scientific evidence-based correct* information to help our patients understand how they can minimize being infected by or transmitting the virus. Our discussions need to be tempered with compassion while emphasizing how to avoid being infected.

Unlike last year when COVID-19 first appeared, in this new storm with the variants, we will now all be seeing many patients who have had COVID-19. We also need to recognize that many of our patients may have "long COVID,"³ that is, long-lasting symptoms after the COVID-19 infection has apparently resolved - much the same as getting off a boat and continuing to feel seasick. The duration of these long-lasting symptoms is yet unknown. And, given that most organs can be

affected in the short or long-term by this virus, our patients will not be immune to initial or long COVID with respect to the eye. In fact, a recent review reported that individuals with SARS-CoV-2, even without classical pulmonary symptoms, can exhibit visual impairment.⁴ Studies also show that some patients can have changes in the eye and visual system which may show up after the infection resolves. The conjunctiva,⁴ cornea,⁵ aqueous,⁶ choroid,⁷ retina⁸ and the neurological system⁹ can be affected. For example, in one study, SARS-CoV-2 viral genetic material was found in the aqueous humor of asymptomatic individuals without a known history of COVID-19, but how long it was there or will be there is not known.⁶ We do not know what this will mean for future vision, eye diseases, or ocular surgery. In another study, patients who recovered from mild COVID-19 infections had changes in retinal microvasculature that could, in theory, increase the risk for future retinal vascular complications.⁸

Finally, we should be sensitive about how the perception of this pandemic can impact those who are visually impaired or have other sensory deficits.¹⁰ Many of these individuals have multiple comorbidities and are older, making them at higher risk for COVID-19 infection. With the fear of infection, the challenges in day-to-day life, and difficulties accessing health care in general, the thought of getting anything more than basic eye care must be overwhelming.

Hopefully, when we see the next clear path, it will lead to smoother and safer sailing, but just like with weather, there will always be another storm. The question is, how well will we be prepared?

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