# Help Low Vision Patients Avoid Depression: Get Them Started on Social Media

We all derive support from family and friends. But after patients develop visual impairment, that network of support can start to unravel. This is because new impediments—such as the inability to recognize an acquaintance's face or the inability to drive—can prevent patients from maintaining social ties.

One potential remedy: online social networks. "I believe that this opportunity for social interaction can bring hope to our patients," said Rahul N. Khurana, MD, a retina specialist in Mountain View, California.

## Feeling Isolated and Miserable

**Recognize the risk of depression.** "As ophthalmologists, we often give all of our attention to disease management and overlook the importance of managing the impairment caused by the disease. But it is essential to recognize that individuals with low vision are up to 3 times more likely to develop depression than are those without a visual impairment," said low vision specialist John D. Shepherd, MD. "Furthermore, the degree of depression directly correlates with the level of disability. This essentially means that the more difficult it is for our patients to participate in their favorite activities, such as socializing, the greater the likelihood of depression," said Dr. Shepherd, at the Weigel Williamson Center for Visual Rehabilitation in Omaha, Nebraska.

## Depression—Who Is at Risk?

"Individuals who might be having significant trouble participating in favorite activities include those who have a chronic eye condition, visual acuity of less than 20/40, or a central or paracentral scotoma," said Dr. Shepherd.

**Ask a few basic questions.** "When you encounter any of those scenarios, you should simply ask your patient if he/she is having difficulty participating in activities—particularly reading or using the computer," said Dr. Shepherd. "If your patient responds with a lengthy list of deficits, there is a much greater likelihood for depression."

**Provide solutions.** "Many of our patients with vision loss do not realize that participating in social media is possible," said Dr. Khurana. "It is therefore important for us to raise awareness and educate them about the available social media accessibility options."

**Look for cues and ask questions.** Because patients are prone to report the physical symptoms that they are experiencing rather than identifying tasks that they are unable to accomplish, it may be necessary to delve a little deeper to determine the level of impact that vision loss may be having on an individual's activity participation.

**Vision loss is on the rise.** A study published in *JAMA Ophthalmology* found that the number of new cases of low vision and blindness is projected to double during the next 30 years.[1] According to the authors, however, this estimate may be low due to the limited sample size of particular populations (e.g., certain racial/ethnic groups). In any event, the number of your patients at risk for depression is set to rise.

## Urge Patients to Go Online

Keeping patients engaged is thought to reduce feelings of isolation and depression that frequently accompany vision loss. And for many people, social media platforms—Facebook, Instagram, and Twitter, for example—are a good option for maintaining social ties. "These and other platforms have made tremendous strides to make the internet, and specifically social media, more accessible to individuals with low vision and vision loss," said Dr. Khurana, who has observed patients socially withdraw and become depressed once they lose vision. "It is important for us to inform them about the various options that can help them connect or remain connected with others," he said.

**Support networks are important.** Although there is currently no empirical evidence to suggest that starting to use social media will help prevent or reduce depression, it is likely that this

BY LESLIE BURLING-PHILLIPS, CONTRIBUTING WRITER, INTERVIEWING **RAHUL N. KHURANA, MD, JOHN D. SHEPHERD, MD,** AND **JEFF WIELAND.**

social interaction could minimize the sense of loneliness that often accompanies visual impairment.

**Patients can exchange tips with their peers.** Patients can connect with others who are experiencing the challenges of low vision and blindness; ideas and suggestions can be exchanged.

## The Tools

**Usage patterns are similar.** More than 100 million people use the zoom feature in a desktop browser, and 1 in 5 increase the text size on their mobile device for a more readable online experience, according to Jeff Wieland, director of accessibility at Facebook. His department is responsible for educating Facebook's product teams about accessibility so that they can build products for people with disabilities. "We have found that people with vision loss and blindness use social media in the same ways as everyone else," said Mr. Wieland. "The only difference is the mechanism employed for interacting with Facebook. For instance, someone who is blind will use a screen reader to access Facebook and, therefore, navigation patterns change. This individual is likely to navigate by page headings or landmarks and, in some cases, from user-interface element to user-interface element to gain context," he explained.

Facebook utilizes shortcut keys that enable individuals who only use their keyboards for online navigation to "Friend," "Like," "Comment," and "Share," just as sighted users can. This is particularly relevant to those with low vision because research indicates that patients with a strong desire for social interaction use online social groups to make one-to-one connections with other users by friending.[2]

**Font size and screen readers.** All computer operating systems have capability features that enable the end-user to increase the font size or change the text and background colors for improved readability. When this is not sufficient, screen readers enable even those who have extremely low vision or are completely blind to access the internet and social media. This technology converts text to speech and reads aloud what is displayed on the screen.

**What about images?** Now that every smartphone includes a camera, photographs often play a starring role in social media posts. And the text that accompanies these image-based posts might not make much sense without the context that the image provides.

**Automated Alt Text technology can help unlock the meaning of image-based Facebook posts.** "Automatic Alt Text uses Facebook's proprietary object recognition service that currently detects approximately 120 distinct objects and concepts within the hundreds of millions of photographs that are uploaded and shared on Facebook daily," said Mr. Wieland. "The service runs instantaneously at the time of an upload and is supported in 20 languages." The result is a brief but descriptive narrative of what is depicted in the photograph. Now, when the screen reader encounters a photograph on Facebook, rather than simply stating "image," Automatic Alt Text enables screen readers to read aloud a description of the photo (e.g., "Image may contain: Two people, smiling, beach").

## Refer Patients When Necessary

Patients who struggle with using the computer, navigating the internet, and other day-to-day activities due to their visual impairments should be referred to a low vision specialist.

"The goal of the low vision specialist is first to identify all of the functional difficulties that an individual is having and then to minimize the disability through the use of optical devices, accessibility options, skill training, environmental adaptations, and counseling," said Dr. Shepherd. For those in areas without a low vision specialist, state and local services for the blind and visually impaired are a good starting point for helpful information.

## Additional Resources

**American Foundation for the Blind** has a social media overview: www.afb.org/info/living-with-vision-loss/using-technology/using-social-media-with-a-visual-impairment-or-blindness-facebook-twitter-and-linkedin/123.

**Facebook** offers some basic resources to get started:

- The Facebook Accessibility Help Center: www.facebook.com/help/
- The Facebook Accessibility Page for news and updates: www.facebook.com/accessibility

**More than 100 iOS apps** designed for blind and low vision users can be found at www.applevis.com/apps/ios-apps-for-blind-and-vision-impaired.

**The Academy initiative in vision rehabilitation** will help you to refer low vision patients or provide them with vision rehabilitation. To learn more, visit aao.org/low-vision-and-vision-rehab.

**Related reading.** Visit aao.org/eyenet and click "Archive" for the following articles: Low Vision Drivers: The Ophthalmologist's Role and Responsibility (Clinical Update, October 2017); Boost Website Accessibility for Those With No Vision and Low Vision (Practice Perfect, October 2017); A Guide to Vision Aid Apps for Apple and Android Smartphones (Practice Perfect, April 2016); Make Your Office Safer for Patients With Low Vision (Practice Perfect, November 2014).

1 Chan T et al. *JAMA Ophthalmol.* Published online Nov. 2, 2017.
2 Chung JE. *J Health Commun.* 2014;19(6):639-659.

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