

## **2015-2016 Fellow**



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Vision-impairing diseases, such as age-related macular degeneration, affect an estimated 1.6 million Americans. Additionally, about 10-30% of visually impaired patients with macular degeneration develop clinically significant depression.

Our study in Investigative Ophthalmology & Visual Science, used measures obtained from the previous Low Vision Depression Prevention Trial in Age-Related Macular Degeneration (VITAL) study to conclude that low vision patients who improve in their day-to-day functions, such as cooking, reading mail or using a computer, through at-home training with an occupational therapist have less severe symptoms of depression than similar patients who did not train with an occupational therapist.

Our goal for this study was to see if occupational therapy was a better investment than supportive therapy in preventing depression in low-vision patients. The study was based on information originally gathered for the VITAL study at Thomas Jefferson University in Philadelphia and included data on

188 patients with age-related macular degeneration. All patients reported borderline depressive symptoms. The patients were seen first by a low vision rehabilitation optometrist who then completed the activity inventory, a questionnaire designed to assess the importance and difficulty of daily activities, such as cooking, driving, pleasure reading and using a computer. Patients were then divided into two treatment groups — an in-home occupational therapy group and an in-home supportive therapy group as an attention control.

At the 4-month follow-up, we found that overall both groups improved in their depression symptoms. Furthermore, 26% of the supportive therapy patients reported that their depression symptoms worsened, while only 12% of the occupational therapy patients reported worsening symptoms. In total, these data show that while both forms of therapy decreased depression in patients, the group that received occupational therapy reduced its risk of depression by much more.

Comprehensive low vision rehabilitative services typically incorporate specialized care from an optometrist and other rehabilitation therapists, including occupational therapists. Because the VITAL study was not originally designed to distinguish the differences among these particular low-vision rehabilitation services, one limitation of the findings is we were unable to measure visual function improvements from occupational therapy services alone. Rather, the effects on visual function seen here are the result of comprehensive low vision rehabilitative care, including services given by both the optometrist and the occupational therapist.

Many caregivers and patients may not realize how prevalent depression is among people with low vision, and our duty as health care providers is to raise awareness of the problem and the availability of help. It is good practice not only to refer low vision patients to a mental health expert, but to also suggest low vision rehabilitation and occupational therapy, which could have a huge impact on patients' lives.

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