

## **See the future: Extension's role in vision education for older adults in the community**

**Jeanne D. Brandt, Ed.M.**

Oregon State University Extension Service  
Family and Community Development Faculty - Washington County  
18640 NW Walker Road, Beaverton OR 97006

**Carolyn Raab, Ph.D., R.D.**

Oregon State University Extension Service  
Extension Foods and Nutrition Specialist  
161 Milam Hall, Corvallis, OR 97331-5106

### **Abstract**

Good vision is essential for personal safety and well-being. By providing vision education, Extension can play a role in helping community members understand the normal changes related to aging, what common disorders to watch for, and what to do to maintain and protect their vision.

*See the Future: Your Vision as You Age*, an Extension-developed program, was offered as a statewide Family and Community Education (FCE) program. To date, 276 participants have completed evaluation surveys following the program. On a scale from "none" to "very good," participants reported significant increases ( $p=.000$ ) in their understanding of how age affects vision, signs and symptoms of common vision disorders in later life, and what to do to protect eyes and vision. Fifty-five percent indicated that they planned to take action after the program including seeking vision care from a professional (17 percent).

**Keywords:** vision, aging, independence, community education

## Introduction

Good vision is essential for personal safety and well-being. Deteriorating vision, particularly in older adults, can result in increased falls and other accidents, reduced involvement in hobbies and activities, loss of the ability to drive safely or at all, decreased competence in performing the activities of daily living, social isolation, and depression (Brennan, Horowitz, and Su 2005; Nnodim and Alexander 2005; O'Donnell 2005; Ragland, Satariano, and Macleod 2004; Sussman-Skalka, Cimarolli, and Stuen 2006; Tolman et al. 2005). Each of these negatively impacts quality of life for older adults as well as family and friends close to them (Charters 2005, O'Donnell 2005).

Significant change or loss of vision is not part of the normal, age-related process. Contrary to what many believe, most people experience only minor changes in their vision as they age (Lighthouse Inc. 1995). This generally includes a reduction in the ability to focus on items close to them, increased difficulty reading small print, need for additional light, and need for a slightly longer time to adjust to changes in light levels (Charters 2005, Nusbaum 1999).

Visual deterioration may occur gradually so older adults may not notice or be alarmed by the changes they experience and therefore, do not seek professional care. Other reasons that older adults may not obtain vision check-ups and care include lack of insurance coverage for vision care; absence of awareness of the importance of vision examinations, lack of care and treatment options for potential eye disorders in their community; and the expectation that vision deterioration is normal. (Charters 2005, Lighthouse Inc. 1995, Nusbaum 1999, Reisinger 2006).

Regular vision care has been shown to have a positive relationship to maintaining vision over time (Sloan et al. 2005). While it is unlikely that vision care and treatment can reverse damage already experienced, it may be able to halt further deterioration if care is sought immediately to preserve the level of vision the individual has at that point and it can help them adapt to the situation with the least loss of quality of life (Heyl 2001).

### **Why should Extension address vision and aging?**

Extension educators reach audiences in communities across each state. We provide unbiased, research-based education for our community members, allowing them to make informed decisions and take positive action. Many of the efforts directed at older adults are focused on helping them maintain their independence and quality of life. Joining the aging network in including the message of the importance of vision care in our programming is a valuable public service Extension could provide (O'Donnell 2005; Sussman-Skalka, Cimarolli, and Stuen 2006). Extension educators need not be vision care experts to provide basic facts about normal changes

in vision, eye-related disorders, and the importance of regular check-ups. Materials addressing this issue are available from multiple sources.

### **A vision and aging lesson**

*See the Future: Your Vision as You Age* is an Extension-developed, packaged program focused on providing older adults with current information to encourage them to maintain healthy vision as they age. The goals of this program are to help participants do the following:

- Understand normal changes in eyes and vision as they age
- Learn to protect their vision
- Be able to identify the most common eye disorders in later life
- Become aware of signs of possible eye disorders
- Increase the likelihood they will seek regularly scheduled check-ups from a qualified eye-care professional

The package contains a teacher guide with teaching outline, poster for participants to self-assess their vision, examples of flipcharts listing vision changes associated with aging and tips for living with low vision, anatomy of the eye handout, vocabulary game, tips for eye care, descriptions of common vision disorders, and a brief evaluation survey to be distributed to participants following the lesson.

This program was developed in response to a request from the Oregon Association for Family and Community Education (FCE) Board of Directors. FCE is the state affiliate of the National Association for Family and Community. This is a membership organization, founded in 1936, whose mission is "To strengthen individuals and families through continuing education, leadership development and community service." FCE groups meet monthly for educational programs. This lesson was of great interest to their membership, whose average age is over 70. The content is based on current information in professional journals and was reviewed for content and accuracy by a local optometrist who specializes in the vision care of older adults. Sources were consistent in identifying the expected changes in vision in later life and the most common disorders experienced by older adults. The program was pilot tested at an Extension community learning day and at a senior center where comments and suggestions were solicited.

### Is the program effective?

See the Future: Your Vision as You Age was offered as a statewide program for FCE groups in 2005. Seven counties conducted hour-long trainings for a total of 75 volunteer leader teachers. Four additional counties distributed the lesson packets to their leader teachers without a formal training session. The volunteer leader teachers taught the lesson in their individual FCE groups.

Participants were asked to complete a brief evaluation questionnaire following the lesson. They rated their understanding of three vision issues before and after the lesson. They also indicated actions that they planned to take as a result of participating.

A total of 276 evaluation forms were returned from the 11 counties. FCE groups did not report total attendance at the lesson, so a response rate cannot be calculated.

As shown in Table 1, participant responses indicated increased knowledge about vision issues. Paired t-tests showed that these changes were significant.

**Table 1. Change in participants' knowledge levels about vision issues as a result of Vision and Aging program\***

[ Alternate: Change in participants' knowledge levels about vision issues as a result of Extension Vision and Aging program. ]

Lesson content	N	Mean pre	Mean post	p value
How age affects vision	266	3.5 ± 0.8	4.3 ± 0.7	.000
Signs and symptoms of common vision disorders	260	3.4 ± 0.9	4.3 ± 0.7	.000
What to do to protect eyes and vision	258	3.6 ± 0.9	4.3 ± 0.7	.000

\*On a scale from 1 (none) to 5 (very good)

Participants were asked, "Do you plan to take any actions as a result of this class? If so, what do you plan to do?" Fifty-five percent of respondents (N=151) indicated they planned to take action after the program, and 44 percent (N=121) listed their intentions (Table 2).

**Table 2. Participants' plans to take action as a result of Vision and Aging program**

[ Alternate: Participants' plans to take action as a result of Extension Vision and Aging program ]

Plan	N	Percent of participants
Seek vision care from professional	48	17
Protect eyes	30	11
Improve nutrition and supplementation	11	4
Add lighting in home	6	2
Other actions listed	26	9

Seventy-six percent of participants rated the program "very worthwhile;" 23 percent rated it "worthwhile."

## Conclusion

Maintaining healthy vision is an important part of staying safe, involved, and independent as people age. By providing vision education, Extension can play a role in helping community members understand the normal changes related to aging, what to do to maintain and protect their vision, and the great importance of regular professional check-ups for their vision as they age.

To date, this lesson has also been offered by two county Extension staff members in other states.

## References

Brennan, Mark, Amy Horowitz, Ya-ping Su. 2005. Dual Sensory Loss and Its Impact on Everyday Competence. *Gerontologist* 45(3):337.

- 
- Charters, Lynda. 2005. Low-Vision Rehab Covers More Than Physical Needs. *Ophthalmology Times* 30(20):132.
- Heyl, Vera. 2001. Psychosocial Adaptation to Age-related Vision Loss: A Six-year Perspective. *Journal of Visual Impairment and Blindness* 95(12):739-748.
- Lighthouse Inc. 1995. Vision Impairment Common for Older Adults, Survey Shows. *National Health* 25(8):26.
- Nnodim, Joseph O., Neil B. Alexander. 2005. Assessing Falls in Older Adults: A Comprehensive Fall Evaluation to Reduce Fall Risk in Older Adults. *Geriatrics* 60(10):26-27
- Nusbaum, Neil J. 1999. Aging and Sensory Senescence. *Department of Medicine Southern Medical Journal* 92(3):267-275.
- O'Donnell, Coleen. 2005. The Greatest Generation Meets Its Greatest Challenge: Vision Loss and Depression in Older Adults. *Journal of Vision Impairment and Blindness*. 99(4):197-208.
- Reisinger, Christine. 2006. Eye Exam Access a Problem, Says NIH *Review of Optometry* 143(6):6-8
- Ragland, David R., William A. Satariano, and Kara E. MacLeod. 2004. Reasons Given by Older People for Limitation or Avoidance of Driving. *Gerontologist* 44(2):237.
- Schmall, Vicki L. 1991. *Sensory Changes in Later Life*. Corvallis, Oregon: Oregon State University.
- Sloan, Frank A., Gabriel Picone, Derek S. Brown, and Paul P. Lee. 2005. Longitudinal Analysis of the Relationship Between Regular Eye Examinations and Changes in Visual and Functional Status. *Journal of the American Geriatrics Society* 53(11):1864-1874.
- Sussman-Skalka, Carol, Verena R. Cimarolli, and Cynthia Stuen. 2006. The Role of Organizations in Reaching Older Adults about Vision Loss. *Educational Gerontology* 32(4):297-306.
- Tolman, Jennifer, Robert D. Hill, Julie H. Kleinschmidt, and Charles H. Gregg. 2005. Psychosocial adaptation to visual impairment and its relationship to depressive affect in older adults with age-related macular degeneration. *Gerontologist* 45(6):747-753.

**Cite this article**

Jeanne D. Brandt and Carolyn Raab. 2008. **See the future: Extension's role in vision education for older adults in the community.** The Forum for Family and Consumer Issues, 13 (2).