Eye Care in the African American Community and Beyond

Many Americans at risk of vision loss do not have access to education or services.

BY LEAH D. FARR, ASSOCIATE EDITOR

According to data published in the *Archives of Ophthalmology*,[1] more than 60 million American adults are at high risk of vision loss. Of those adults, one in 12 cannot afford spectacles, and about 50% do not receive dilated eye examinations on a yearly basis.

In 2000, approximately 3.3 million Americans aged ≥40 years were visually impaired, and >11 million of those aged ≥12 years needed spectacles or contact lenses, according to the article. By 2020, those numbers could increase by more than 50%.

Furthermore, data from the 2002 National Health Interview Survey found that 61 million American adults are at high risk of *serious* vision loss. Of those, only half visited an eye doctor or had a dilated eye examination, in the past 12 months. Approximately one-third of the estimated 144 million individuals not at high risk of serious vision loss, visited an eye doctor or had a dilated eye exam in the past year, according to the survey.

"Many conditions causing visual impairment and blindness are often asymptomatic in their early treatable stages," wrote Xinzhi Zhang, MD, PhD, and colleagues. "There is a

INFORMATON GAPS: WHAT DO YOUR PATIENTS KNOW?

People with diabetes should be aware of the following facts:

- Approximately two out of five people with diabetes have diabetic retinopathy.
- In initial stages, there are no symptoms of diabetic eye disease or glaucoma, another threat to the vision of people with diabetes.
- Diabetic eye disease may remain mild, but it can result in visual impairment or blindness.
- Diabetic eye disease can develop even if diabetes is under control.
- Early detection and timely treatment can improve chances of saving vision.
- Laser treatment can prevent vision loss in many patients with diabetic retinopathy.
- People with diabetes should have annual comprehensive eye examinations with dilated pupils.
- Some people with diabetes are at even higher risk than other people with diabetes.
- If detected early, diabetic eye disease may be managed appropriately and vision preserved in most patients.

Source: www.nei.nih.gov/nehep/plans/diabetesplan.asp

PUBLIC AWARENESS INITIATIVES

The National Diabetes Education Program (NDEP) offers several awareness campaigns tailored and adapted for high-risk audiences including:

- African Americans
- American Indians
- Alaska Natives
- Asian Americans and Pacific Islanders
- Hispanics and Latinos
- Women with a history of gestational diabetes
- Older adults

Materials for each of these campaigns are available at the NDEP Web site, www.ndep.nih.gov/campaigns. Campaigns include:

- **Small Steps. Big Regards. Prevent Type 2 Diabetes.** The first national diabetes prevention campaign and the small steps that can prevent diabetes. Material is tailored for high-risk audiences.
- **Prevengamos La Diabetes Tipo 2. Paso a Paso.** Information for Hispanics and Latinos on preventing diabetes.
- **Be Smart About Your Heart. Control the ABCs of Diabetes.** For people who have diabetes and need to know their ABCs. This campaign helps people live longer, healthier lives.
- **Si Tiene Diabetes, Cuide Su Corazón** This campaign adapts and tailors the popular ABCs message specifically for Hispanic and Latino Americans with diabetes.
- **Take Care of Your Heart. Manage Your Diabetes.** Information that can be tailored for American Indians and Alaska Natives or Asian Americans and Pacific Islanders on the ABCs of diabetes.
- **Control Your Diabetes. For Life.** A program for all groups that emphasizes the importance of benefits of diabetes control.

substantial inequity in access to eye care in the United States. Better targeting of resources and efforts toward people at high risk may help reduce these disparities."

AFRICAN AMERICAN COMMUNITY

In an attempt to examine how some of these disparities could have an impact on a specific community, Dr. Zhang, of the Centers for Disease Control and Prevention, and colleagues, analyzed data on a predominantly African American community in Raleigh, NC.[2] The community of Greensboro, NC, was used as a comparison community.

Data were gathered from Project DIRECT (Diabetes Intervention Reaching and Educating Communities Together), the first community project to attempt a comprehensive approach to reduce the burden of diabetes in at-risk patients within the African American community. Dr. Zhang wanted to see if eye care education would improve dilated eye exam rates or the use of eye care services among this at-risk population (see *Information Gaps*).

PROGRAM IMPACT

The DIRECT program gathered data on 646 adults with self-reported diabetes from 1996 to 1997 and 720 adults in 2003 to 2004.

The analysis of DIRECT showed that 41.6% of the Raleigh study population displayed signs of DR in 1997. That proportion dropped to 38.5% by 2004, while DR prevalence rates in Greensboro saw little change during the same time period (ie, 38.5% and 38.1%).

Additionally, the proportion of individuals who received a dilated eye exam increased by approximately 4.5% in the Raleigh group, and by 4% in the Greensboro group. Eye care education, however, increased by 0.3% in Greensboro and decreased by 1.5% in Raleigh.

In an e-mail interview with *Retina Today*, Dr. Zhang cautioned against making a quick judgment on the outcome of the program. "The change in DR is not statistically significant. It takes years for people to develop DR, and it may take much longer for us to see the impact of specific eye care education in this area," he said.

He concluded that community intervention efforts (eg, comprehensive eye care education) may need to be specifically targeted to improve DR and the use of eye care services among at-risk patients (see *Public Awareness Initiatives*).

"Eye care education was found to be associated with increased eye care utilization among people with diabetes. Future community intervention efforts need to continue to target DR, which remains a considerable problem among African American communities," he said. ■

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1. Zhang X, Saaddine JB, Lee PP, et al. Eye care in the United States: do we deliver to high-risk people who can benefit most from it? *Arch Ophthalmol.* 2007;125:411-418.
2. Zhang X, Williams DE, Beckles GL, et al. Diabetic Retinopathy, dilated eye exam and eye care education among African American community, Raleigh and Greensboro, North Carolina – 1997-2004. Poster presentation at 67th Scientific Sessions of the American Diabetes Association: June 22-26, 2007: Chicago.