

2005 Survey of Public Knowledge, Attitudes, and Practices Related to Eye Health and Disease

Executive Summary



March 2008

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Eye diseases, which include diabetic retinopathy, glaucoma, cataract, and age-related macular degeneration, cause blindness and impaired vision in millions of Americans (Congdon et al., 2004). The growing prevalence of many eye diseases is a major public health problem that can lead to loss of productivity and reduced quality of life.

Additional research indicates that disparities exist in the prevalence of certain eye diseases and in the use of vision care services among minorities, particularly among Hispanics (Higginbotham et al., 2004; Kempen et al., 2004; Varma, Ying-Lai, Klein, & Azen, 2004). Notwithstanding, the aging of the Nation, the increasing prevalence of eye diseases, and the disparities in use of vision care services bring into question the public's overall knowledge about eye health and disease, as well as their attitudes and practices regarding eye health.

To better ascertain the public's knowledge, attitudes, and practices (KAP) regarding eye health and disease, the National Eye Institute (NEI) and the Lions Clubs International Foundation (LCIF) cosponsored a national telephone survey titled 2005 Survey of Public Knowledge, Attitudes, and Practices Related to Eye Health and Disease. NEI and LCIF cosponsored the first KAP Study in 1991. In addition to providing a current assessment of the public's KAP regarding eye health and disease, the 2005 KAP Study offers second point-in-time estimates for selected eye health and disease issues, and provides direction for messages and programs.

Methodology

NEI and LCIF formed a work group composed of nationally recognized eye health professionals, survey methodologists, and statisticians to review the 1991 survey, consider the overall purpose of the 2005 survey, and recommend modifications to the 1991 survey instrument. The work group decided that the 2005 KAP survey would include the following seven sections:

1. General Health
2. Eye Health
3. Eye Examinations: Experiences and Attitudes
4. Knowledge About Eye Disease

5. Information Sources
6. Insurance
7. Demographic Information

The 2005 KAP Study was conducted in compliance with the U.S. Department of Health and Human Services' regulations for the protection of human research subjects (45 CFR 46), including review of the survey instrument and data collection protocol by the Institutional Review Board at Macro International Inc., a contractor of NEI and LCIF.

Between October 2005 and January 2006, telephone interviews were conducted with randomly selected non-institutionalized adults, aged 18 and older, living in land-line telephone-equipped housing units in the United States. Interviews were conducted in either English or Spanish. To support more precise estimates for the Asian population living in the United States, a supplemental sample of Asian adults aged 18 and older was obtained. A total of 3,180 interviews were completed.

Key Findings

All reported findings have been statistically weighted to the 2000 U.S. Population Census using geographic location, race/ethnicity, age, gender, and years of education. To appropriately compare percentages of persons from different races and ethnicities reporting certain KAP regarding eye health and disease, those percentages must be age-adjusted so that any differences between groups reflect real differences and not simply differences associated with age. Highlights of selected key findings are summarized below.

General Health

Most adults report being generally in good to excellent health and having seen a doctor in the past two years. Many adults report that loss of their eyesight would have the greatest impact on their daily life.

- Eighty-three percent (83%) of adults aged 18 and older describe their health as good, very good, or excellent.
- Ninety-three percent (93%) of adults aged 18 and older report visiting a health care provider (HCP) within the past two years. An HCP can be a doctor such as

a primary care provider (PCP), nurse practitioner, or other medical professional who has given a physical examination or written prescriptions.¹

- Forty-three percent (43%) of adults aged 18 and older report having been told by their HCP that they have a chronic health condition. Those chronic health conditions include high blood pressure (27%), arthritis (21%), diabetes (10%), heart disease (7%), and cancer (6%).
- When asked to think about certain conditions that would affect their day-to-day living, 71% of adults aged 18 and older report loss of eyesight as a 10 on a scale of 1 to 10, with 10 indicating greatest impact.

Eye Health

Two-thirds of all adults report wearing some type of eyewear, and nearly one-quarter of adults report that they have an eye condition or disease.

- Sixty-six percent (66%) of adults aged 18 and older report wearing some type of eyewear, including glasses, contact lenses, both glasses and contact lenses, or reading glasses only.
- Twenty-two percent (22%) of adults aged 18 and older report being told by an eye care provider (ECP) that they have an eye disease or condition. An ECP is an ophthalmologist or optometrist.
- Nineteen percent (19%) of adults aged 18 and older report ever having an eye injury or trauma requiring a doctor's care in the emergency room or at a doctor's office.

Eye Examinations: Experiences and Attitudes

Most adults report having their eyes examined, often by an ECP. Many adults also report having an eye examination within the past two years and having their pupils dilated during the eye examination.

- Ninety-one percent (91%) of adults aged 18 and older report having had their eyes examined by an HCP. Blacks (95%) and Caucasians (94%) more often report

¹ An HCP does not include eye care providers (ECPs). An ECP is an ophthalmologist or optometrist.

having had their eyes examined by an HCP than Asians (87%) and Hispanics (73%).²

For the following series of items, adults were told that an HCP includes their PCP and ECP.

- Of the 91% of adults who report having had their eyes examined by an HCP, 76% report having had their pupils dilated by an HCP during an eye examination.
- Eighty-six percent (86%) of adults typically go to an ECP to have their eyes examined.
- Seventy-four percent (74%) report having had their eyes examined within the past two years by an ECP.

Virtually all adults are likely to seek eye care if encouraged by their PCP and/or family members.

- Almost all adults (96%) say they would be somewhat or very likely to have their eyes examined if their PCP suggested they do so. Seventy-nine percent (79%) of adults say they would do so if a member of their family suggested they do so.

Knowledge About Eye Disease

Most adults report having heard of glaucoma. Fewer adults report having heard of diabetic eye disease, age-related macular degeneration (AMD), and low vision, and knowing specific details about these eye diseases and conditions.

- Ninety percent (90%) of adults aged 18 and older report that they have heard of glaucoma. However, only 8% know that there are no early warning symptoms for glaucoma.
- Fifty-two percent (52%) of adults aged 18 and older report that they have heard of AMD.
- Fifty-one percent (51%) of adults aged 18 and older report that they have heard of diabetic eye disease, such as diabetic retinopathy. However, only a reported

² p<.001 (This represents the probability that the highest and lowest percentages compared are statistically different.)

11% know that eye diseases caused by diabetes usually have no early warning symptoms.

- Sixteen percent (16%) of adults aged 18 and older report that they have heard of the term “low vision.”

Information Sources

Most adults report seeing or hearing something about eye health or disease on television programs or commercials more than any other information source. Almost the same percentage of adults reports having never seen or heard anything about eye health or disease.

- Over the past 12 months, 24% of adults aged 18 and older report seeing or hearing something about eye health or disease on television programs or commercials.
- Twenty-one percent (21%) of adults aged 18 and older report that they have not seen or heard anything about eye health or disease.

Insurance

Many adults report having some form of health insurance in which all or part of the cost of a regular eye exam conducted by an ECP is covered.

- Eighty percent (80%) of adults aged 18 and older report having some form of health care coverage. Among these adults, 94% report having had their eyes examined by an HCP.
- Sixty-seven percent (67%) of adults aged 18 and older report that all or part of the cost of a regular eye exam provided by an ECP was covered by health insurance.

Summary of 1991 and 2005 KAP Comparisons

Although the 1991 data cannot be completely adjusted for statistical comparisons with the 2005 data, there are several noteworthy differences between the 1991 and 2005 KAP Studies (see the following table).

1991 & 2005 KAP Data Comparisons

Survey Item	1991	2005	Difference
Adults who report their general health as being good, very good, or excellent	85%	83%	-2%
Adults who report they have the following chronic diseases:			
• Diabetes	5%	10%	5%
• High blood pressure	19%	27%	8%
• Heart disease	7%	7%	0%
• Arthritis	22%	21%	-1%
• Cancer	7%	6%	-1%
Adults who wear some type of eyewear	66%	66%	0%
Adults who report their eyesight as good or excellent (1991) or good, very good, or excellent (2005)	87%	90%	3%
Adults who have had their eyes examined by an ECP in the past two years	65%	74%	9%
Adults who report being told by an ECP that they have an eye condition or disease	18%	22%	4%
• Cataract	35%	13%	-22%
• Glaucoma	11%	3%	-8%
• Nearsightedness	11%	38%	27%
Adults who report having heard of glaucoma	91%	90%	-1%
Adults who report having heard of diabetic eye disease	39%	51%	12%

Conclusions

The overall survey findings may not be surprising, yet patterns and trends in the data merit closer monitoring and a more detailed examination. The following results and conclusions are of particular note:

- Adults aged 18 and older are aware of eye disease and conditions, but few know certain important details about eye disease or conditions, such as that there are no early warning symptoms for glaucoma and diabetic eye disease.
- Asian, Black, and Caucasian adults are more knowledgeable about eye disease, have different attitudes about eyesight, and are more likely to have their eyes examined to prevent or detect eye disease or visual impairment than Hispanic adults.
- More in-depth studies may be important to support strategic intervention efforts to influence eye health knowledge, attitudes, and practices of Hispanics to reduce ethnic disparities in eye disease and visual impairment.

- Adults report getting their eye health or disease information most frequently from television programs and commercials. Adults also receive eye health and disease information in their doctor’s office and from newspapers and magazines.
- PCPs should be encouraged to have basic eye health and disease information available in their offices.
- PCPs, family members, and coworkers have the most influence on the demand for and receipt of eye care services.

Recommendations

The 2005 KAP Study is an important source of information about what adults in the United States know, believe, and do about eye health and eye disease. As a result, we offer the following education and awareness recommendations to help ensure that the information gleaned from the 2005 KAP Study is used to its full advantage. These recommendations include ideas to improve the type of information adults have that can help them make informed decisions about their eye health needs.

Recommendation 1: Implement an educational effort to increase the general awareness of adults about the asymptomatic nature of eye disease and the importance of early detection and treatment.

Although most adults are familiar with common eye disease, they lack key information that can facilitate early detection and treatment. There is a critical need to educate the public about glaucoma, diabetic eye disease, AMD, refractive errors, low vision, and the asymptomatic nature of these conditions.

Improved targeting strategies are also needed to ensure that the general public is aware that many eye health educational materials already exist. Some audience segments that could be considered as a focus for educational efforts to increase awareness that there are no warning symptoms for eye disease include children, the workforce, middle-aged adults caring for their elderly parents, and older adults.

Recommendation 2: Implement a culturally appropriate educational effort for Hispanics to increase awareness about eye disease and conditions for which they are at higher risk for developing.

The U.S. population is becoming more ethnically diverse (Bernstein, 2006), and this diversity is evidenced by the differential knowledge of, attitudes toward, and practices regarding eye health and disease. Hispanics lack key information about protecting the health of their eyes and vision. The survey results indicate that Hispanic adults are less likely to have their eyes examined to prevent or detect eye disease or visual impairment than Asian, Black, and Caucasian adults. More Hispanics (41%) report that they have not seen or heard anything about eye health or disease in the past 12 months compared with Asians (28%), Blacks (26%), and Caucasians (16%).

The reported findings about Hispanics warrant the provision of health educational efforts for eye disease and conditions to make them more applicable and accessible to this population and to convey the importance of eye examinations to preserve healthy vision.

Recommendation 3: Provide information to primary care providers, as well as nurse practitioners, physician assistants, nurses, and other people who typically serve as gatekeepers for medical care, to increase their awareness of the need for regular comprehensive dilated eye examinations for all adults (especially people at higher risk for eye disease and conditions).

Ninety-three percent (93%) of adults have visited an HCP within the past two years. The 2005 KAP Study reveals that virtually all adults (96%) are likely to seek eye care if encouraged by their PCP. Based on the frequency of visits adults make to HCPs and the likelihood of adults to follow their PCP's suggestion to have their eyes examined, serious consideration should be given to having those providers who regularly see patients (e.g., PCPs, nurse practitioners, physician assistants) ask their patients about their eye health, assess whether their patients are at higher risk for eye disease, and refer them to an ECP for a comprehensive dilated eye exam, if appropriate.

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