

Research Brief

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RISK FACTORS FOR VISION LOSS AMONG NURSING HOME RESIDENTS: A CROSS-SECTIONAL ANALYSIS

Keywords: vision impairment, blind, vision loss, vision care, nursing home, older adults

Purpose of the Study: To better understand the prevalence of vision loss (impairment and blindness) among nursing home residents, and to identify factors that contribute to vision loss.

Key Findings: Vision loss is prevalent among nursing home residents, and often co-occurs with age-related eye disease. Results also demonstrate that glasses improve vision for many residents.

Major Policy/Practice Implication: Vision loss is a highly modifiable risk factor for health and wellbeing outcomes, such as falls and social isolation. Providers and policy makers should collaborate to enable accessible, routine eye exams in nursing homes.

IMPORTANT BACKGROUND INFORMATION

In the next thirty years, worldwide visual impairment is expected to increase by 33% and blindness is expected to increase by 30%. Currently, 63% of nursing home residents experience vision loss (impairment and blindness), and many residents have age-related eye disease that may be associated with poor health outcomes, such as falls and social isolation. Yet, 90% of vision loss is preventable or treatable. Several national efforts stress the importance of eye care in nursing homes, however, there is minimal data on the prevalence and nature of eye disease among nursing home residents.

STUDY METHODS

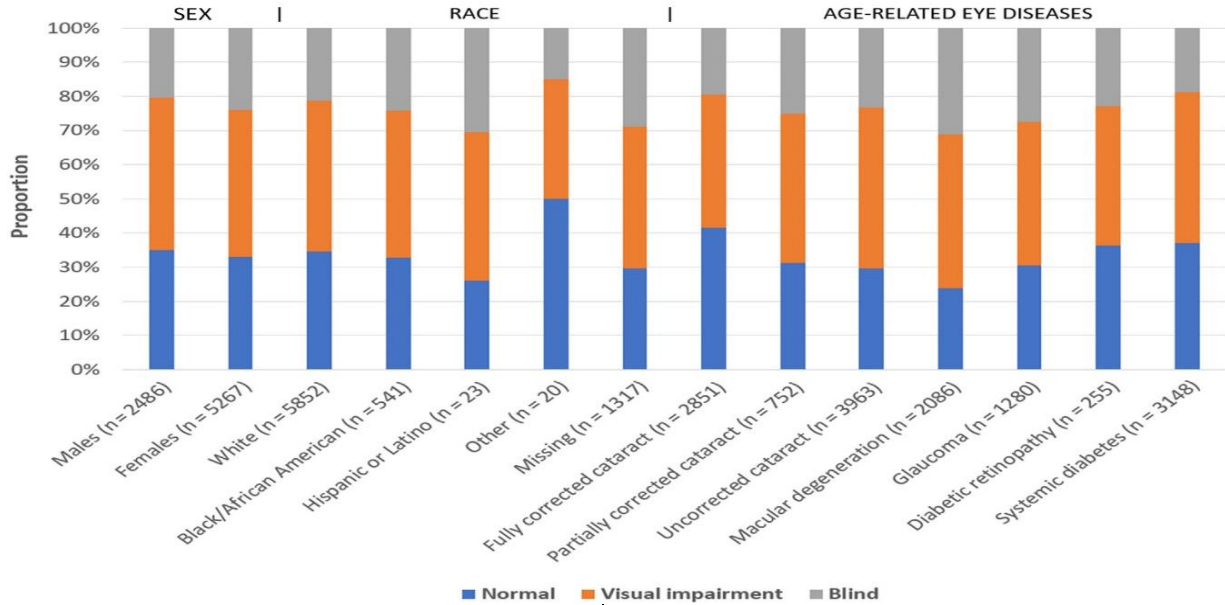
Researchers reviewed 7753 clinical records that included eye exam data from 74 nursing homes in North Carolina from 2010 to 2018. Eye exams measured visual sharpness with and without glasses, intraocular pressure—an indicator of glaucoma, and near/far

sightedness. Eyesight was classified as normal, impaired, or blind using national standardized measurements. Researchers assessed the relationships between resident characteristics (e.g., age, disease status, etc.) and vision loss. They also examined the relationship between resident characteristics and blindness, alone. The bar graph below demonstrates vision status categorized by resident characteristics.

KEY FINDINGS

- ✓ **Overall, 66% of participants had vision loss, and many cases could be improved with glasses (see circle graphs).**
 - On average, residents with vision loss were older, and more likely to be female and have eye disease
 - 75% of the 23% of participants classified as blind improved to impaired vision with glasses
 - 37% of the 44% of participants with impaired vision improved to normal vision with glasses

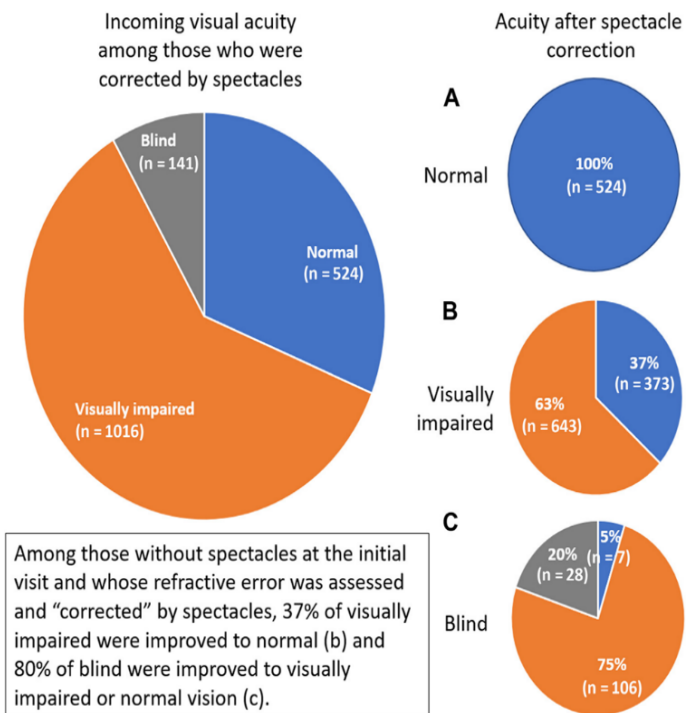
Distribution of vision status across demographic characteristics



- 34% of participants had normal vision without glasses

✓ **Most residents with age-related eye disease had vision loss.**

- 70% of the 51% of residents with cataracts had vision loss
- 76% of the 27% of residents with macular degeneration had vision loss
- 70% of the 17% of residents with glaucoma had vision loss
- 64% of the 3% of residents with diabetic retinopathy had vision loss
- 63% of the 41% of residents with systemic diabetes had vision loss
- When considering all resident characteristics vision loss was statistically associated with macular degeneration, cataracts, and older age.



ORIGINAL ARTICLE

Monaco, W., Qureshi, R., Arif, A., Aggarwal, S., Meng, H. (2023). Risk Factors for Vision Loss among Nursing Home Residents: A Cross-Sectional Analysis. *J Am Med Dir Assoc*, 24(1). doi: 10.1016/j.jamda.2022.10.018

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