

# Binocular vision and eye movement disorders in older adults.

[Invest Ophthalmol Vis Sci](#). 2013 May 31;54(5):3798-805. doi: 10.1167/iov.12-11582.

[Leat SJ<sup>1</sup>](#), [Chan LL](#), [Maharaj PD](#), [Hrynychak PK](#), [Mittelstaedt A](#), [Machan CM](#), [Irving EL](#).

## **Author information**

### **Abstract**

#### **PURPOSE:**

To determine the prevalence of binocular vision (BV) and eye movement disorders in a clinic population of older adults.

#### **METHODS:**

Retrospective clinic data were abstracted from files of 500 older patients seen at the University of Waterloo Optometry Clinic over a 1-year period. Stratified sampling gave equal numbers of patients in the 60 to 69, 70 to 79, and 80+ age groups. Data included age, general and ocular history and symptoms, use of antidepressants, a habit of smoking, refraction, visual acuity, BV and eye movement status for the most recent full oculo-visual assessment, and an assessment 10 years prior. The prevalence of any BV or eye movement abnormal test (AT) result, defined as a test result outside the normal range, was determined. This included strabismus (any) or phoria; incomitancy; poor pursuits; and remote near point of convergence (NPC). The prevalence of significant BV disorders (diagnostic entities, i.e., a clinical condition that may need treatment and may have functional implications) was also determined.

#### **RESULTS:**

The prevalence of any BV or eye movement at was 41%, 44%, and 51% in the 60 to 69, 70 to 79, and 80+ age groups, respectively. These figures were lower for 10 years earlier: 31%, 36%, and 40% for ages 50 to 59, 60 to 69, and 70+, respectively. The prevalence of any BV or eye movement disorder was 27%, 30%, and 38% for the three age groups and 17%, 19%, and 24% for 10 years prior. Age and use of antidepressants most commonly predicted BV or eye movement AT or disorder.

#### **CONCLUSIONS:**

BV disorders are common among older adults.

#### **KEYWORDS:**

aging; binocular vision disorders; eye movement disorders; heterophoria

PMID:

DOI:

[10.1167/iavs.12-11582](https://doi.org/10.1167/iavs.12-11582)