

Keywords: Visual impairment; Visual field; Refractive errors

Introduction

Falls among the elderly are a major public health concern, contributing to significant morbidity, mortality, and reduced quality of life. Visual impairment is a common age-related issue that can affect various aspects of daily living, including gait stability and environmental perception. Understanding the link between visual impairment and recurrent falls is essential for developing targeted interventions to mitigate the risk of falls and improve the overall health outcomes of older adults [1].

Visual functioning, the ability to detect surroundings, is needed for posture control. Impaired vision may, thus, be a risk factor for falls, especially for recurrent falls. In preventing recurrent falls we need to know the specific features of vision that are risk factors for the recurrence. The development of recurrent falls prevention strategies should be based on the use of practical and exact tests of these risk factors. We decided to perform a systematic review about the relationships between eye diseases or impaired vision and the risk of recurrent falls in order to find the specific features of vision which increase the risk for falling recurrently [2].

Methods

A comprehensive literature search was conducted following PRISMA guidelines. Articles were selected based on their relevance to visual impairment and recurrent falls in elderly populations. Studies that met predetermined inclusion criteria were critically appraised to ensure methodological rigor [3].

Prevalence of visual impairment in the elderly

Visual impairment in the elderly is a multifaceted condition encompassing various ocular disorders such as cataracts, age-related macular degeneration (AMD), glaucoma, diabetic retinopathy, and refractive errors [4]. The prevalence of these conditions increases with age, leading to a higher risk of falls in older adults.

Impact of visual impairment on balance and mobility

Visual cues play a crucial role in maintaining postural stability and navigating the environment. Visual deficits can compromise an

vision can be understood in a different way by different participants. Five prospective studies done in unselected or community-dwelling populations with the adjustment of multiple confounders. Both depth perception and change in visual acuity were measured in one study in which they proved to be significant risk factors [11]. Visual field loss was a significant risk factor in two out of three studies. Poor contrast sensitivity was related to the risk of recurrent falls in one out of three studies. Subjective poor vision and self-reported eye diseases were not found to be risk factors in the study in which they were measured.

Conclusion

Visual impairment significantly influences recurrent falls in the elderly, emphasizing the need for increased awareness and proactive measures to address this issue. By understanding the complex relationship between visual deficits and fall risk, healthcare providers can implement targeted interventions to enhance mobility, safety, and quality of life for older adults with visual impairments. Further research in this area is crucial for developing evidence-based guidelines and best practices to reduce falls and promote healthy aging.

References

1. Timothy McCulley J, Robert Kersten C, Dwight Kulwin R, William Feuer J (2003)