

What is the relationship between dementia and visual impairment? A review of the literature

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Introduction

Dementia and visual impairment are two of the most common disorders of older age. Both have a profound impact on quality of life and independence, yet awareness of the relationship between the two is not widespread. This review aims to determine the implications of living with both dementia and visual impairment, and how doctors can help to alleviate this burden.

Results

6418 articles were identified with the primary search terms. 258 abstracts were read and 112 met the criteria for full review.

Up to one-third of dementia patients have treatable visual impairment. Patients and their carers are largely unaware of national guidelines for annual testing and domiciliary sight testing availability.

Poor visual acuity is an independent risk factor for development of cognitive impairment, possibly due to an increase in cognitive load and social isolation. Visual impairment will affect the diagnosis of dementia as the symptoms of both such as disorientation and difficulty finding objects can be conflated, and tests such as MoCA and MMSE have visuospatial components (Figure 1).

Visual impairment will aggravate symptoms of dementia as patients lose reliance on visual cues such as street signs or faces, and become increasingly disoriented and reliant on others. Poor vision increases psychological morbidity including depression and visual hallucinations.

Methods

Search of PubMed and Embase using the search terms “dementia”, “cognitive impairment”, “vision”, and “visual impairment”. Titles and abstracts reviewed and the full length of relevant papers read and summarised into a spreadsheet.

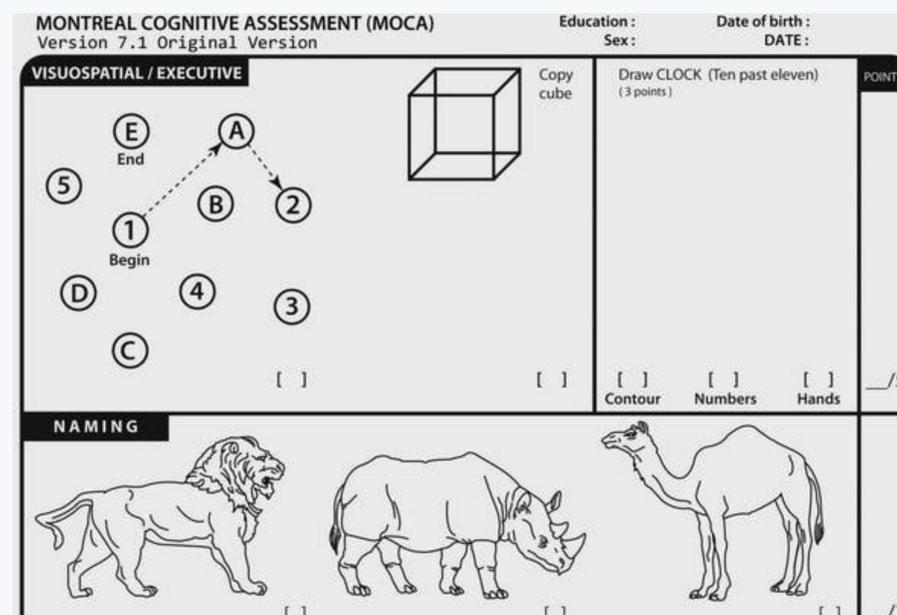


Figure 1. Example of visuospatial elements present in the Montreal Cognitive Assessment (MoCA)

Conclusions

Visual impairment exacerbates the loneliness and psychological burden of dementia. As many of the eye conditions present in dementia patients are treatable, such as cataract, this suggests a barrier to access of services.

Doctors should ensure that an up-to-date eye test has been completed in those with cognitive impairment, increase awareness of home testing, and encourage patients to attend annual vision testing.