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Research article

Hospital admissions in older people with visual impairment in Britain

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Abstract

Background: We aimed to assess the risk of hospital admission associated with visual impairment in a representative sample of older people living in the community in Britain.

Methods: Design: Prospective study of hospital admission in a population-based sample of community dwelling people aged 75 years and above in Britain. Setting: 53 general practices. Participants: 14,394 participants in the MRC Trial of Assessment and Management of Older people in the Community. Main outcome measure: Hospital admission.

Results: Visually impaired older people had 238.7 admissions/1000 person-years compared to 169.7 admissions/1000 person-years in people with good vision: age and sex adjusted rate ratio (RR) 1.32 (95% CI 1.19 to 1.47). Adjusting for a wide range of potential explanatory factors largely eliminated this association: RR 1.06 (95% CI 0.94 to 1.20). However, adjusting for a more limited range of confounding factors, excluding those factors possibly a consequence of reduced vision, left a modest increased risk: RR 1.19 (95% CI 1.06 to 1.34).

Conclusion: The association between visual impairment and rate of hospital admission can be attributed to higher levels of co-morbidity and reduced functional ability among people with reduced vision. Visual impairment is likely to be an important contributor to reduced functional ability, but other factors may also be involved.

Background

The prevalence of visual impairment in older people admitted to hospital has been estimated to be as high as 50%[1]. There is limited evidence as to the risk of hospital admission in visually impaired people. One study suggested that there is an increased risk of hospital admission in visually impaired people[2] and one study that visual impairment increases the average length of stay in hospital[3].

The aim of this study was to assess the risk of hospital admission associated with visual impairment in a representative sample of older people living in the community in Britain.

Methods

The Medical Research Council (MRC) trial of the assessment and management of older people in the community was a large cluster randomised trial in 106 general prac-