Improving vision and eye health care to people with dementia

Introduction

This publication summarises the findings of a brief study in 2009 by Dr Declan McKeefry (School of Optometry & Vision Science) and Dr Ruth Bartlett (Division of Dementia Studies) from the University of Bradford entitled The Development of Professional Guidelines for the Eye Examination of People with Dementia.

The study examined guidelines for health care professionals relating to people with dementia. It also reviewed assessment processes, tests and techniques that are used for sight testing in people with dementia.

Based on the findings of the study, this research discussion paper suggests ways of meeting the vision and eye health care needs of people with dementia and sight loss in a thorough and tailored manner. It highlights the need for further research to develop and evaluate assessment procedures, tools and techniques for the eye examination of people with dementia.
The seven recommendations for action are:

- Obtain comprehensive data on the uptake of eye examinations among people with dementia
- Provide a web-based information and advisory service on dementia and vision and eye health
- Develop education and training resources for practitioners
- Produce a list of optometric practitioners with experience of providing vision and eye health care for people with dementia
- Produce a template for recording eye health/vision following the eye examinations of people with dementia
- Initiate a programme of research to measure the outcomes of vision and eye health interventions among people with dementia
- Commence research into clinical testing methods appropriate for people with dementia.

**Background**

Dementia and visual impairment are prevalent in the ageing population. In view of the ageing demographic profile of modern society, over the next few decades, services need to be prepared to assess and treat increasing numbers of people with both sight loss and dementia.

People with dementia can have impairments of visual acuity, contrast sensitivity and colour vision, as well as spatial awareness and depth perception. The ability of a person to cope with visual impairment is reduced if they also have dementia, and vice versa. As a result they can experience an even greater impact on their cognitive performance, mobility and daily living activities.

The visual assessment of people with dementia can be complicated by the fact that it is often difficult to dissociate the effects of dementia on basic visual function from its effects on higher cognitive function. Poor cognition can lead to poor performance in visual tests and conversely poor vision can produce poor performance in cognitive tests. Yet despite all of these needs, it appears that few people with dementia undergo regular eye examinations. This lack of uptake of basic eye care services is even more crucial in light of the fact that people with dementia as a group are potentially at more risk of visual impairment than people without dementia.
Findings

The study highlighted the following key findings:

- Professional guidelines relating to sight tests and eye examinations of people with dementia were limited in that they were not specific to the problems experienced by people with dementia.

- General guidelines to practitioners may be useful in highlighting the problems encountered by people with dementia and effective testing techniques, but in the absence of further research highly prescriptive guidelines may not be practical or useful. This is because of the wide variation in the cognitive abilities of people with dementia who present for eye examinations. Practitioners have to be flexible in adapting their testing strategies and methods and tailoring them to the needs of individual people.

- There is a lack of basic research and consensus in the clinical and scientific literature as to what tests of visual function are more appropriate for people with dementia. Studies in this field would help inform the optometric profession about the best way to examine people who have cognitive impairment.

- There is a need to gather more evidence that optometric intervention has a beneficial and measurable effect on the quality of life of people with dementia. Research in this area would help identify what kinds of optometric/ophthalmological intervention (e.g. prescription of near or distance spectacles, cataract extraction) produce the most positive outcomes. It would also help inform practitioners about the circumstances under which people with dementia may benefit from interventions.

- Regular eye examinations are important for people with dementia, and improving the uptake of sight tests would seem to be an important step in improving their vision and in examining eye health. Currently, optometrists who provide domiciliary services can be expected to play an important role in delivering this improvement because people with dementia and sight loss are more likely than other people to experience difficulties/barriers in accessing optometrists’ practices. Promotion of the availability of domiciliary services would be valuable in this respect.
• Improving the education and training of optometric and other clinical staff teams in relation to visual problems associated with dementia, in conjunction with training in more general aspects of vision and eye health, would also seem to be an essential factor in improving the eye care of people with dementia.

• Communicating the findings and implications of an eye examination to the person, their family and/or professional carers is central to the maintenance of optimal visual performance.

**Recommendations for future work**

In the light of these findings, the following actions are viewed as important elements in improving vision and eye health care for people with dementia:

• **Obtain comprehensive data on the uptake of eye examinations among people with dementia.**
  According to the Alzheimer's Society there are approximately 750,000 people in the UK diagnosed with dementia; around two thirds of this population live in private households and one third in some form of institutional care setting. Currently, there are limited data on the level of uptake and frequency of sight tests among people with dementia. A systematic study of the availability and uptake of sight tests/eye examinations to people with dementia would determine the take-up of vision and eye health care provision.

• **Provide a web-based information and advisory service on dementia and vision and eye health.**
  There is a need to raise awareness amongst people with dementia and their carers of the disruptions to vision and eye health that may be concurrent with or arise from dementia. This means emphasising the importance of regular sight tests and eye examinations. One way of doing this is via information which could be accessed from the websites and information services of Alzheimer's Society and RNIB. Such information could cover the problems associated with vision in dementia, and the concurrence of dementia and eye conditions.

• **Develop education and training resources.**
  To improve the training of optometrists and care home staff we recommend the production of:
  - Teaching resources based on real-life case studies of people with dementia who have had vision problems. These case studies would be compiled and placed on a website for use by students, optometrists and care home staff.
- A series of articles for the professional optometric press to help raise awareness amongst practitioners of visual problems that may be concurrent or associated with dementia and the testing strategies that may be effective.

- **Produce a list of optometric practitioners with experience of providing eye care for people with dementia.**
  
  To facilitate the uptake of eye examinations amongst people with dementia, a database of optometrists who have experience of sight tests for people with cognitive impairment is likely to be useful. This could be made available through the information services of Alzheimer’s Society and RNIB.

- **Produce a template for recording eye health/vision following the eye examinations of people with dementia.**
  
  As part of the drive to improve the communication of the outcomes of an eye examination to the relevant care givers, an appropriate recording sheet should be developed, endorsed by the professional bodies for optometry and made available to care homes.

- **Initiate a programme of research to measure the outcomes of vision and eye health interventions.**
  
  There is a need for evidence-based support to demonstrate that interventions to improve the vision and eye health of people with dementia have beneficial and measureable effects on their quality of life.

  A programme of research should be carried out to measure the effectiveness of:

  - Optometric/ophthalmological intervention (e.g. sight testing, cataract extraction)
  - Training for care staff
  - Environmental alterations.

- **Commence research into appropriate clinical testing methods for people with dementia.**
  
  More research is needed in order to provide guidance to practitioners on the most appropriate clinical testing methods in the sight testing of people with dementia. For example, contrast sensitivity is commonly reduced in people with dementia and this can have debilitating consequences for many everyday tasks.

  A specific project to examine this issue would provide useful guidance to practitioners as to how to examine this important aspect of visual function.
Authors

Dr Declan McKeefry
Reader in Visual Neuroscience, Bradford School of Optometry & Vision Science, University of Bradford

Dr Ruth Bartlett
Senior Lecturer, Bradford Dementia Group, University of Bradford

How to obtain further information

Since this study, The College of Optometrists has produced guidance for eye examinations of people with dementia or other acquired cognitive impairment. A DVD about eye examinations for people with dementia is planned.

The College of Optometrists
42 Craven Street
London
WC2N 5NG
Tel: +44 (0) 20 7839 6000
Web: http://www.college-optometrists.org/

For more detail on the research project discussed above, The Development of Professional Guidelines for the Eye Examination of People with Dementia, contact:

Thomas Pocklington Trust
5 Castle Row
Horticultural Place
London
W4 4JQ
Tel: 020 8995 0880
Email: info@pocklington-trust.org.uk
Web: www.pocklington-trust.org.uk

Copies of this paper in large print, audiotape or CD, Braille and electronic format are available from Thomas Pocklington Trust.
Background on Pocklington

Thomas Pocklington Trust is a leading provider of housing, care and support services for people with sight loss in the UK. Each year we also fund a programme of social and public health research and development projects.

Pocklington’s operations offer a range of sheltered and supported housing, residential care, respite care, day services, resource centres and volunteer-based community support services. We strive to improve continuously the quality standards in our operational centres to meet the changing needs and expectations of our current and future service users. We are proud to be an Investor in People and a Positive about Disability organisation.

Our research and development programme aims to identify practical ways to improve the lives of people with sight loss by improving social inclusion, independence and quality of life, and improving and developing service outcomes as well as focusing on public health issues.

In this publication, the terms ‘visually impaired people’, ‘blind and partially sighted people’ and ‘people with sight loss’ all refer to people who are blind or who have partial sight.