Obstacles to improving visual health in older people.

Why does screening for remediable eye disease in older people not lead to improvements in the older population’s visual function?

This publication summarises findings from research funded by Thomas Pocklington Trust and carried out at the Research Department of Primary Care and Population Health, University College London, by Professor Steve Iliffe, Kalpa Kharicha and Sybil Myerson.

Background

Prevalence

Despite the availability of free NHS eye examinations for those aged 60 and over, between 12% and 50% of older people have undetected visual loss. A substantial proportion of this visual impairment is due to remediable causes such as refractive errors and cataracts. Unrecognised functional loss is often tractable. The UK Vision Strategy, launched in April 2008, aims to improve the eye health of the nation by eliminating avoidable sight loss.

Population Screening vs. Case-Finding

There is still an incomplete understanding of the best methods of identifying those with unrecognised visual loss and persuading them to take up services that will potentially improve their eyesight and quality of life. Research has shown that screening for unrecognised visual impairment does not lead to improved visual function in the older population. Opportunistic case-finding – that is, identification of unrecognised visual function loss during routine encounters in
primary care – may be a more productive way of addressing the problem of unrecognised, remediable eye disease in older people. However, we do not know enough about the characteristics of people with unrecognised or untreated visual function loss to be able to characterise a group for targeted assessment. Furthermore, we do not have an explanation for the limited uptake of treatments by older people with identified visual impairment, even where such treatments are offered and are known to be effective.

Role of Primary Care

The reason for the lack of response in routine general practice to evidence of visual impairment in older patients is not clear. We do know from the 2002 MRC Trial of Assessment and Management of Older People in the Community, and other studies, that general practitioners are not acting systematically on the results of visual screening, even in research projects where there is an emphasis on intervention. There are a number of possible reasons for this. They include:

- not recognising a pattern of symptoms as indicative of visual impairment;
- not knowing the prevalence of tractable eye disease and thereby underestimating the probabilities of attenders having undiagnosed visual function loss;
- perceived lack of diagnostic skills;
- negative perceptions of older people’s willingness to seek treatment; and
- perceived lack of local specialist resources.

Currently, visual assessment is required only for diabetes under the Quality and Outcomes Framework (QOF), the annual incentive programme for disease management in general practice. However, QOF requirements are evolving and it would be potentially useful if an educational programme could be tested and refined before eyesight assessment in non-diabetic patients becomes part of QOF.
The Health Risk Appraisal for Older People tool (HRA-O) and the National Eye Institute Visual Function Questionnaire (NEI-VFQ)

The Health Risk Appraisal for Older people (HRA-O) is the most extensively evaluated case-finding tool available for a community-dwelling older population. It assesses health and lifestyle behaviours using a self-completion questionnaire and risks are identified using evidence-based computer software. Personalised feedback is produced both for the older person and their general practitioner.

The HRA-O questionnaire is comprehensive and uses standardised and validated instruments to collect data on vision as well as co-morbidities, medication use, health service use and uptake of preventive services (including opticians’ eye tests), the experience of pain, depression and memory problems, social networks and risk of social isolation, self-efficacy, smoking and alcohol consumption, functional ability and falls history, hearing, physical activity and nutrition. Demographic information includes questions on educational attainment, income, previous employment, ethnicity and current living arrangements.

Vision data are based on responses to the following questions from the National Eye Institute Visual Function Questionnaire (NEI-VFQ):

- How much difficulty do you have reading ordinary print in newspapers?
- How much difficulty do you have doing work or hobbies that require close vision?
- Because of your eyesight, how much difficulty do you have going down steps, stairs or kerbs in dim light or at night?
- Because of your eyesight, how much difficulty do you have noticing objects off to the side while you are walking along?
- Because of your eyesight, how much difficulty do you have finding something on a crowded shelf up close to you?
- Are you limited in how long you can work or do other activities because of your eyesight?
Aims and Objectives
The aim of this study was to explore the obstacles to improving visual health in an ageing population.

The objectives of the study were:
● To describe the characteristics of community-dwelling people aged 65 and over with unmet need in visual function.
● To identify predictors of visual impairment and uptake of vision testing.
● To measure the effect of advice on vision testing.
● To measure the contribution of visual impairment to other disabilities.
● To explore how general practitioners, practice nurses and community opticians understand patients’ reasoning about the significance and tractability of visual loss.
● To identify ‘professional barriers’ to improving visual function in later life.
● To identify ‘patient barriers’ to the take-up of remedial vision services.

Methods
A mixed methodology approach was taken to achieve these objectives, using data collected in earlier health promotion studies (the ProAge and SWISH studies) using the HRA-O tool, including the short version of the Visual Function questionnaire.

Qualitative data were collected from older people who had completed the HRA-O questionnaire, and from general practitioners, practice nurses, opticians and optometrists.

The findings from this study are:
● Older people with undiagnosed visual function loss are more likely to have the following characteristics:
  – basic education only
  – be at risk of social isolation
  – have depressed mood
  – be in need of assistance with one or more Basic Activities of Daily Living (BADL), e.g. eating, bathing, dressing and Instrumental Activities of Daily Living (IADL), e.g. cleaning, shopping
  – have impaired memory
  – describe their health as only fair or poor.
This description is clinically useful as a recognisable pattern that can trigger further investigation.

- Reports of difficulty with close vision hobbies and in reading newsprint predict future visual function deterioration in those with apparently unimpaired vision.

**Questions about these activities could be the basis for a brief screening tool suitable for use in routine primary care encounters.**

- No individual characteristics predict failure to have eye checks in the quantitative analysis, but the qualitative analysis suggested a complex model of decision making based on three axes (see Figure 1): positive attitudes to preventive care versus attribution of change to normal ageing; decisiveness about action versus avoidance or denial; and trusting professional skills and judgements versus distrust of commercial motives. This model can also contribute to pattern recognition for the identification of older people at high risk of visual loss.

- Recommendations to have eye checks are taken up more by those whose vision is unimpaired than by those whose vision is impaired, and also by those under 75 years of age.

- Visual function loss is part of a package of disabilities, and may be a marker for imminent disablement.

**Figure 1: Visual impairment in later life: a model of factors influencing decisions and actions**
How can these findings support primary care in the care of older patients and eye health?

A proposal for an educational intervention

The underlying principles of this educational intervention are that to increase the uptake of eye tests among older people by increasing awareness of visual loss in general practice, we need to work out:

- what needs to be learned,
- how that learning can be facilitated, and
- in what forms knowledge should be organised for maximum impact on clinical practice.

We propose a ‘rule of thumb’ (an heuristic) that could orientate clinical thinking towards identification of unrecognised visual function loss in older people attending their general practice. It is FOCUS:

- **F**railty; visual impairment is part of frailty, and may predict its development
- **O**pportunistic Checks using two questions, about close-vision hobbies and reading newsprint
- **U**nrecognised visual function loss may be tractable, with significant improvement in the quality of life
- **S**oicism and **S**tigma are barriers to action to improve vision

This heuristic needs further evaluation in practice for its acceptability, compatibility and effectiveness.

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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.
How to obtain further information

A report in the form of an ‘Occasional Paper’ entitled Obstacles to improving visual health in older people: why does screening for remediable eye disease in older people not lead to improvements in the older population’s visual function? is available from:

Thomas Pocklington Trust, 5 Castle Row, Horticultural Place, London W4 4JQ

Telephone: 020 8995 0880
Email info@pocklington-trust.org.uk
Web www. pocklington-trust.org.uk

Copies of this report in large print, audio tape or CD, Braille and electronic format are available from Thomas Pocklington Trust.

Background on Pocklington

Thomas Pocklington Trust is the leading provider of housing, care and support services for people with sight loss in the UK. Each year we also commit around £700,000 to fund 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, home care services, resource centres and community based support services.

A Positive about Disability and an Investor in People organisation, we are adopting quality assurance systems for all our services to ensure we not only maintain our quality standards, but also seek continuous improvement in line with the changing needs and expectations of our current and future service users.

We are working in partnership with local authorities, registered social landlords and other voluntary organisations to expand our range of services.

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, improving and developing service outcomes as well as focusing on public health issues.

We are also applying our research findings by way of pilot service developments to test new service models and develop best practice.