Visual Impairment and Falls: OT Input in Home Safety and Exercise Interventions (VIP2UK trial)

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Introduction

- Who we are
- Who you are
- Some suggestions for working together

Plan

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
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<tbody>
<tr>
<td>Background and issues with support for people with VI who fall</td>
<td>2.00 pm</td>
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<tr>
<td>Plans for VIP2UK pilot trial</td>
<td>2.15 pm</td>
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<tr>
<td>Home safety, exercise and peer mentors - groupwork</td>
<td>2.25 pm</td>
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<tr>
<td>Feedback, discussion and research so far</td>
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<td>Close</td>
<td>3.00 pm</td>
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Falls and older people with visual impairment (VI)

- 30% of older people aged 65+ fall each year, rising with age
- The rate of falls for older people with VI is 1.7 times higher than general population
- Increased risk for older people with VI is multi-causal
- VI older people report more hospital admissions, nursing home admissions and contact with GP than non-VI peers

Aspects of visual impairment linked to falls

- Poor visual contrast sensitivity
- Decreased depth perception
- Poor visual acuity
- Visual field loss
- Increased visual field dependence

(Lord et al 2007)

Interventions to prevent falls (Gillespie et al 2010)

- Latest Cochrane Review (focusing on community) suggests that multifactorial interventions are effective
- Exercise programmes targeting two or more of strength, balance, flexibility or endurance are effective
- Interventions to improve home safety are most effective with those at high risk
- Otago Exercise Programme has most supporting research evidence
Original VIP trial (Campbell et al 2006)
- **Aim:** To determine efficacy and cost effectiveness of a home safety and home exercise programme to reduce falls in older VI people
- **Method:** RCT with 4 arms: home safety (OT); Otago plus Vit D (PT); home safety and Otago (both); and social visits (control)
- **Results:** Fewer falls occurred in home safety programme, but not exercise programme. Home safety programme cost £234 per person.

Scoping study of Falls Clinics (Lamb et al 2007)
- **NSF for Older People (DoH 2001) established fall prevention services within the NHS**
- **Lamb et al carried out a national survey of Falls Clinics, with 76% participation (231/298) plus systematic reviews**
- **Report concluded that evidence of effectiveness was not robust**
- **Visual impairment was assessed by just half of falls clinics**
- **Little information available about assessment of VI; effective interventions; how general falls prevention should be modified for people with VI**

Thomas Pocklington Trust and OT
- **TPT and OT**
- **History of collaboration between TPT and COT (eg Annual Conference)**
- **TPT funded study into CPD needs of OTs regarding sight loss (Ward et al 2009)**
- **Qualitative evidence synthesis of home safety reduce falls funded by TPT (Ballinger et al 2010)**
- **Joint Study Day!**

Recap: Falls prevention and older people with visual impairment
- **Qualitative evidence synthesis: only three studies of poor quality found. Overarching theme: ’Support for autonomous decision making’**
- **VIP: Whilst OT home safety was effective, Otago Exercise Programme and combined interventions didn’t reduce falls**
- **Scoping exercise: Falls Clinics don’t meet needs of VI older people**

VIP2UK pilot study
- **Small pilot randomised controlled trial funded through the NIHR Research for Patient Benefit Programme**
- **Aiming to explore how to maximise the uptake, adherence and persistency of home safety and exercise programmes by older people with VI**
- **Led by Heather Waterman at Uni of Manchester, with Dawn and Claire as co-applicants**

VIP2UK pilot study: Methods
- **Focus groups with VI older people and HCPs to explore how to improve adherence and modify delivery of home safety and Otago**
- **90 older participants with VI recruited from Low Vision Clinic**
- **Randomised to one of three arms: Home safety; Home safety plus Otago; social visits**
- **Interviews before and after OT**
- **Outcomes: Number of falls and rate of falling**
- **Use of peer mentors to support OT**
Differences between VIP and VIP2UK trials

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<tr>
<th>Challenges with VIP</th>
<th>Changes in VIP2UK</th>
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<tr>
<td>Uncertainty about how OT worked (eg less activity?)</td>
<td>Qualitative interviews to explore process</td>
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<td>Different HCPs delivering home safety and Otago</td>
<td>OT delivering all interventions</td>
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<td>Varied levels of adherence</td>
<td>Use of peer mentors to support adherence</td>
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VIP2UK: OT intervention

- CMOP providing underpinning framework
- Assessment using Westmead Home Safety Assessment
- Joint action plan negotiated by OT and older person with VI
- Interventions could include contrast marking on steps, improved lighting, rails etc

With acknowledgement to Lindy Clemson

VIP2UK: Otago Exercise Programme

- 7 RCTs on effectiveness of 22 Otago home based strength and balance exercises
- Use ankle weights to progress the strength exercises
- Balance exercises progressed through changes in holding chair support
- Home visits and telephone support
- Let’s have a go at some

VIP2UK: Peer mentors

- Peer mentors have been shown to increase uptake and improve adherence in general physical activity programmes
- Their role is to provide support NOT lead exercise

Groupwork directions

- Three groups to consider three aspects: Home safety, Otago Exercise Programme, Peer Mentors
- Within each group, discuss: a) Challenges in delivering/supporting this intervention and b) Potential solutions
- Draw on your own experience wherever possible
- Nominate someone to give 2-3 minutes feedback

VIP2UK: Progress to date

- Focus groups with older people with VIP, carers and HCPs completed
- OT identified to carry out interventions
- Contact made with local OT services, and specialist equipment ordered
VIP2UK: Focus group reflections

- Some enjoyed participating because they liked ‘getting out of the house’
- Others didn’t want to leave home because of caring responsibilities, or because they preferred to remain indoors (so using interviews)

VIP2UK: Use of weights

- OT will need to carry out risk assessment before advising use of weights
- Issues for participants with threading strap through buckle and cleaning
- Will use alternative weights and advise thick socks/trousers

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