Recovery from extra capsular hip fracture. A longitudinal qualitative study of patients’ experiences.

Rebecca Fox, Rachael Gooberman-Hill, Annette Swinkels, Tim Chesser, Shea Palmer
Acknowledgments

University supervisors – Professors Shea Palmer and Rachael Gooberman-Hill and Dr Annette Swinkels, UWE, UK

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My interviewees – who were willing to share their thoughts, highs and lows, through a difficult time in their lives
Background

• How to measure ‘recovery’ as a primary end point for hip fracture evaluative trials? When?

• PROMS – patient involvement? Content validity?

• OMERACT (Carr, 2003)

• Consensus on outcome measurement
  • Cochrane review recommendations – core set of outcomes for hip fracture trials including patient reported measure (Crotty et al 2010)
  • Core Outcome Measurement in Effectiveness Trials COMET

• Core outcome set for hip fracture trials (Haywood et al 2014)
Methodology - Experience of recovery from hip fracture

• Realist approach

• Nested qualitative study within FRACTT

• 2 recruiting sites from within FRACTT sites

• No further exclusion criteria, recruited from either therapy arm or comparative arm

• In-depth interviews in 3 phases over 12 months using a topic guide

• Thematic Analysis guided by Braun and Clark’s 6 stage process
  • Analysis within in phase of interviews
  • Longitudinally across interview phases
## Participants

<table>
<thead>
<tr>
<th>Sex</th>
<th>11 participants 5 women : 6 men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age range</td>
<td>62 – 92 years on entry into study</td>
</tr>
</tbody>
</table>
| Living arrangements prior to hip fracture | All lived in own homes in the community  
5 lived alone (4 women : 1 man)  
6 lived with spouse (1 woman : 5 men) |
| Mobility prior to hip fracture | 5 fully independent no aids (1 woman : 4 men)  
1 independent without aid but restricted distance and pace (peripheral vascular disease) (man)  
3 used 1 stick outdoors (women)  
1 wore a calliper and used 2 sticks outdoors (man)  
1 used 4 wheeled walker outdoors (woman) |
Interviews

Phase One
- 11 interviews completed
- Range 2-3 months since fracture

Phase Two
- 8 interviews completed
- Range 6-7 months since fracture
- 3 participants lost. 1 died, 1 'too stressed', 1 'too busy'

Phase Three
- 7 interviews completed
- Range 12-15 months
- 1 participant lost. Admitted to hospital
In phase analysis and longitudinal analysis – change over time

• Physical and functional recovery
  • Divergent experience – pain, limp, physical functions
  • Consistent – independence in home

• Effect on lifestyle
  • Transport
  • Loss of freedom of movement (spontaneity)
  • Regaining sense of self

• Emotional Response
  • Varied attitude to change
  • Hip fracture as part of aging process

• Hip fracture as part of aging process
it’s just a feeling that you can’t, you know, I mean I wasn’t going out every minute of the day but any anything I wanted I could do I and felt free to do it and the only difference mainly was not in the fact that of the doing but the fact that I wouldn’t be able to do it if I wanted to do it... free to do anything I wanted to do if I wanted to do it [Jamie 110]

Oh (laughs) it’s another world... This is what I wanted to do when you came last, when you said to me. I mean all I want to do is just drive a car and take the dog for a walk. I was – I was peed right off just sat on that settee. I was (big sigh) you know. [Ian 146]

Just the fact of being able to go and do something yourself is – is the thing really. [Gillian 239]

I think to myself, “Ooh now shall I get down there or not?” And before I’d have automatically done it. You know, “Can I get back up again?” (laughs) Or, “OK, I’ll go down the shops,” I’ll say to myself like, “I’ll go down the shops and get that. Ooh, don’t know, better take the car or I’ll never get back up again,” that sort of thing. But before it was a case of just, whoosh, down the shops, sort of back up again. [Collum 284]
Trajectories of recovery

- Gradual improvement across first 6 months (shared experience)
- Continued gradual improvement
- Plateau and maintenance of improvements
- Deterioration

Focus on physical and functional recovery
Focus on lifestyle and sense of self

2-3 months 6 months 12 months

Time
What does this mean for clinical care?

• Breadth of experience not always addressed in clinical care

• Potential benefit from support later on in recovery process?

• Is there a role for individualised outcome measurement tools?
  • GAS, MYMOP, COPM
<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub themes</th>
<th>Health domain (ICF two-level)</th>
<th>EQ-5D dimension</th>
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</thead>
<tbody>
<tr>
<td>Physical and functional recovery</td>
<td>Physical symptoms and limitations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pain</td>
<td>Sensation of pain b280\textsuperscript{2}</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Stiffness and swelling</td>
<td>Mobility of joint b710</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>• Balance</td>
<td>Involuntary movement reaction functions b755</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>• Limp</td>
<td>Gait pattern functions b770</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>• Stamina</td>
<td>Muscle endurance functions b740</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>• Sleep</td>
<td>Sleep functions b134</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>• Walking</td>
<td>Walking d450\textsuperscript{2}</td>
<td>Mobility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moving around in different locations d460\textsuperscript{2}</td>
<td>Mobility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moving around using equipment d465</td>
<td>Mobility</td>
</tr>
<tr>
<td></td>
<td>• Standing</td>
<td>Maintaining a body position d415</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>• Bending / kneeling</td>
<td>Changing basic body position d410\textsuperscript{2}</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>• Stairs</td>
<td>Moving around d450</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>• Tiring</td>
<td>Exercise tolerance function b455</td>
<td>X</td>
</tr>
<tr>
<td>Environment</td>
<td>• Equipment</td>
<td>Physical geography e210, climate e225</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Products and technology per personal use in daily living e115, indoor and outdoor mobility and transportation e120</td>
<td>X</td>
</tr>
<tr>
<td>Functional activities</td>
<td>• Activities of daily living</td>
<td>Lifting and carrying objects d430</td>
<td>Self-care / usual activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Washing, dressing and toileting oneself d510, d520, d530, d540\textsuperscript{2}</td>
<td>Self-care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acquisition of goods and services (shopping) d620</td>
<td>Usual activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Household tasks (preparing meals d630, doing housework d640, caring for household objects d650)</td>
<td>Usual activities</td>
</tr>
<tr>
<td></td>
<td>• Social support / need help</td>
<td>Support from immediate family e310, extended family e315, friends e320, neighbours e325, personal care providers e340</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>• Coping strategies</td>
<td>Higher-level cognitive functions b1640</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>• Alternative strategies</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Take it steady</td>
<td>X</td>
<td>X</td>
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</table>
What does this mean for outcome measurement?

• UK suggested core outcome set is EQ5D + mortality + indoor and outdoor walking status

• Mapping shows the EQ5D maps nicely against the patient derived domains BUT

• Diverse experience of recovery from hip fracture not included in this set of outcome domains

• Timing – patient focus of recovery is different at different timepoints
Where does it go from here?

• Need for a later phase of rehabilitation to support the change in focus and regain life style and ‘new’ normal?

• Qualitative trajectories seen in the outcome measures? (EQ5D)
  • This data set and collaborate to look at larger data sets

• Mapping to other outcome measures?
  • Form of content validity checking?

• Consensus on a core set?
  • What is core? Suggested ‘bolt-ons’?

• Is there a role for individualised outcome measurement tools?
References


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Emotional Responses to circumstances

- Mood
  - Frustration and Boredom
  - Building confidence
  - Perseverance
- Want to be back to normal
- Fear of falling and further damage
- Is it part of a permanent decline?
- Don't want to be like this
- Unable to forget
- Acceptance