Functional communication recovery in aphasia: realising opportunities for enriching the communicative environment

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Conflicts of interest

• Horton and Lane received funding from the UK National Institute for Health Research, Research for Patient Benefit (RfPB) programme: **SCIP-R study** (ref: PB-PG-0609-17264)

• Shiggins received funding through a University of East Anglia, UK PhD studentship: **OASIS study**

*The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR, the Department of Health or the University of East Anglia*
Background

- Recovery from stroke is enhanced by exposure to enriched environments and practice (Kleim & Jones, 2008; Levin, 2011; Lohse et al., 2014)
- People with aphasia (PWA) after stroke need to practice language in everyday situations to optimise recovery of communication function
- Risk of learned non-use is high for PWA (Hersh et al., 2016; Byng et al., 2003)
  - People with moderate-severe aphasia particularly vulnerable
Research questions

• In the course of routine rehabilitation for PWA what are the opportunities for enhancing functional communication practice?
  • What do these look like?
  • How do these arise?
  • How are they realised or not?
  • Are there time costs or other resource implications?
## Methods: data from two studies

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<thead>
<tr>
<th>Study</th>
<th>Data collection</th>
<th>Interview / focus group</th>
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<tbody>
<tr>
<td><strong>Early Supported Discharge (OASIS)</strong></td>
<td>HCPs n=21: OT=5; PT= 4; RA=6; Nurse=3; AP=2</td>
<td>HCPs n=8: OT=1; PT=1; RA=2; AP=3; Nurse=1</td>
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<td></td>
<td>PWA n=10: severe=4; moderate=2; mild=4 (33.5 hours observation)</td>
<td>PWA n=9: severe=3; moderate=2; mild=4</td>
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<td>(Interviews: 15 - 70 minutes)</td>
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<td><strong>In-patient (SCIP-R)</strong></td>
<td>HCPs n=8: OT=1; PT=2; SLT=1; Nurse=1; AP=2; NCA=1</td>
<td>HCPs n=11: OT=1; PT=2; Nurse=2; HCA=4; AP=1; NCA=1</td>
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<td>PWA n=6: severe=3; moderate=3 (1.2 hours observation)</td>
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- Staff completed a ‘learning log’ to record any changes to usual time taken for activities with PWA (SCIP-R only)
Methods: data analysis

**SCIP-R**
- Interviews / focus groups: thematic analysis
- Video: conversation analysis (CA)

**OASIS**
- Videos viewed: topic guide developed
- Interviews: thematic analysis
- Focused video analysis (CA)
Video data analysis

• Particular focus on
  • Ecology of the setting: people involved; spaces; objects; activity focus
  • Interaction: turn-taking sequences; discourses (talk and non-verbal communication)
Findings: illustrative example

Nurse: ...and your provostatin ((pointing to tablets))
Joan: oh er I can’t...
Nurse: what’s it for?
Joan: no, prova-? statin?
Nurse: that’s for your cholesterol
Joan: oh, right

- Initiations (e.g., inquiries, offers) by aphasic patients with moderate-to-severe impairments may cause lengthy repair sequences
- Busy staff may try to avoid this, or use strategies to close down the inquiry/offer
- Staff may capitalise on objects in the immediate environment, fragments of talk or gesture by the PWA
Findings: illustrative example

AP: so we’re going to finish with one more activity...OK can you tell me the most embarrassing moment you’ve had in your lifetime

John: ooh as a kid....I don’t know... I don’t know
AP: what about holidays?
John: erm I don’t know...

• Opportunities for ‘natural conversation’ arose during routine rehabilitation. These opportunities were inconsistently realised, in favour of rehabilitation ‘tasks’
• Attempts to elicit ‘natural’ conversation, as a rehabilitation task, were often met with confusion as they were not personalised / not salient
• The home based environment provided ‘springboards & scaffolds’ for conversation & rapport building
• Interviews suggested that barriers to realising these opportunities may arise from
  • Time constraints
    • Increased risk of ‘learned non-use’ and social isolation for people with moderate-severe aphasia
  • Noisy in-patient environments
  • A lack of HCP training and low confidence in working with PWA
In-patient: time costs

### Added time per session by HCP type

- APR
- HCA
- Nurse
- PT
- OT
- SLT

### Added time per session by activity type

- General care
- Nursing care
- Therapies
- Support activities
- Other / not recorded
Conclusions

• Rich use of interactional strategies and resources by HCPs and PWA
• A focus by staff on the business in hand and getting the work done
  • Lack of flexibility, and control of the agenda by HCPs were barriers to practice opportunities

• Opportunities to produce stimulating environments for functional communication practice
  • Can be realised during routine rehabilitation
  • There are staff time cost and training implications
References


