Screening for Amnestic Mild Cognitive Impairment (a-MCI)

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Background & Aims

What is a-MCI?
- Cognitive decline, particularly in memory, greater than that expected for an individual’s age and education level but that does not interfere notably with activities of daily life.
- Transitional state between normal cognition and early dementia.
- Potentially a critical time point for interventions to prevent or slow the decline into dementia.

What’s the problem?
- Current procedure for the diagnosis of a-MCI is complex, specialist, time consuming (based on Petersen criteria, comprising lengthy neuropsychological assessment).
- Simpler, non-specialist, shorter procedures would facilitate large scale, pragmatic intervention studies.

What’s the aim of the study?
- To investigate clinical utility and effectiveness of 2 brief screening tools to identify people with a-MCI.

Methods & Recruitment So Far

Methods
Community-dwelling older people (≥ 70 years) assessed with M@T, TYM & battery of neuropsychological assessments (Petersen criteria).

Participant Identification
Stage 1: GP record screen
- ≥ 70 years
- Not resident in a care / nursing home
- No known dementia
- No known current depression
- No history of stroke within previous 3 months
- Not receiving palliative care

Stage 2: Screening leaflet
- Subjective memory problems (CAMDEX)
- Possible depression (PHQ-2)
- Suitability to perform assessments

Stage 3: Telephone follow-up
- Interest in participating & availability
- Medical stability

Assessments
Assessment 1 (at home)
- Background info
- NART
- M@T or TYM – random
- GDS-15

Assessment 2 (at BRI)
- TYM or M@T
- Petersen criteria assessments

Assessment 3 (at home)
- Repeat M@T or TYM (for sample)

Planned Analysis
- Petersen criteria assessments used to classify participants as:
  - Cognitively normal
  - a-MCI
  - Cognitive difficulties > MCI
  - Other (inc. na-MCI)
- Sensitivity/specificity of TYM and M@T for distinguishing between “cognitively normal” and “a-MCI” and between “a-MCI” and “>MCI” to be calculated.
- Test-retest reliability to be assessed
- Clinical utility (admin times and participant burden) to be assessed.

Recruitment So Far...

115 participants recruited, 97 assessed:

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<thead>
<tr>
<th>Characteristic</th>
<th>mean (SD) (unless stated)</th>
<th>Value</th>
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<tbody>
<tr>
<td>% Female</td>
<td>52</td>
<td></td>
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<tr>
<td>Age, years</td>
<td>77 (5)</td>
<td></td>
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<tr>
<td>Years in education</td>
<td>14 (4)</td>
<td></td>
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<tr>
<td>NART IQ</td>
<td>113 (9)</td>
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* Figures as of 1st July 2013

Lower than expected proportion of people with a-MCI recruited.
- Generally higher than average education and IQ levels.
- Future plan to simplify the screening leaflet and target more socio-economically deprived areas.

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Routine screening
If effective, tools could be used by GPs to routinely screen for people with a-MCI in primary care, allowing the timely referral of patients for further cognitive assessment.

Facilitate research
If effective, tools could be used to identify people with a-MCI, facilitating research aimed at developing interventions to prevent or delay the decline into dementia.

Potential Impact:
- If effective, tools could be used by GPs to routinely screen for people with a-MCI in primary care, allowing the timely referral of patients for further cognitive assessment.