Dementia Risk Reduction in Primary Care: Research design, progress and challenges

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Background

- Translation of dementia risk reduction knowledge into interventions that can be applied in the real world is a challenge.

Results from our previous study:
- Developed Body-Brain Life (BBL), an online dementia risk reduction program; and
- Showed BBL improved protective factors over a 6-month period (Anstey et al., 2015; see Figure 1).

Study aims:
- To implement BBL in primary care; and
- Strengthen key risk reduction components by engaging clinical advice for physical activity and diet.

Methods

- **Primary care setting** which had existing practice-based Lifestyle Management Program (LMP)
- **Participants**
  - 125 patients with diagnosed chronic medical condition
  - GPs deemed LMP program would be beneficial
- **Pragmatic single blind RCT** (see Table 1 and Figure 2)

Table 1. Trial conditions and sample sizes

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<thead>
<tr>
<th>Intervention</th>
<th>LMP</th>
<th>Active control</th>
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<tr>
<td>Body Brain Life-General Practice (BBL-GP)</td>
<td>n = 42</td>
<td>n = 41</td>
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<tr>
<td>6-week Lifestyle Management Program (originally 12 weeks, reduced after project was funded)</td>
<td>n = 41</td>
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<td>12-week email only program providing general health information</td>
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- **Primary outcome**
  - Modified ANU-ADRI-Short Form
- **Secondary outcomes**
  - Cognitive function
  - Physical activity (IPAQ and actigraph); depression (CES-D)
  - Quality of life for cost evaluation (SF-12)
  - Framingham coronary heart disease risk score
  - The AUDS risk assessment tool
  - Diet quality (Australian Recommended Food Score)
  - Sleep quality (Pittsburgh Sleep Quality Index)

Preliminary Findings

- **Baseline characteristics**
  - 68.8% female, 31.2% male
  - 62% are partnered
  - Mean age 50-83 (SD = 13.3)
  - Mean education 16 years (SD = 4.1)

As compared to baseline measures of BBL (Anstey et al., 2015), the current study had:
- A lower mean age,
- Greater % female, and
- Higher average education (see Figure 3); smaller % of smokers,
- Smaller % with overweight or obese BMI, and
- Greater % with diabetes (see Figure 4).

- **Practical challenges in implementation**
  - Working within existing practice
  - Procedures and assessment protocols
  - Training nurses to collect data for research
  - Keeping track of equipment, and
  - Dropout from follow-up assessments

Discussion

- Research collaboration with primary practice enables access to large target samples, but presents unique challenges.
- As compared to research, primary care uses a different model of patient interaction.
- i.e. prioritisation of individualised treatment v standardised interventions in RCTs
- Despite different processes and goals effective communication and relationship building at all staff-levels is essential.
- Although quantitative results are not yet available, preliminary observations are that using or building on existing systems and programs is highly recommended.