Are informal carers and community care workers effective in managing malnutrition in the older adult community?

A systematic review of current evidence
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The median age of the Australian, Canadian and American populations from 1950 to 2100 (UN World Population Prospects, 2010 revision)
Malnutrition

Food and nutrient intake is unable to meet requirements

↓ body weight  ↑ Institutionalisation
↓ body composition  ↑ Hospital admissions
↓ physical function  ↑ Mortality

>10 – 30% Community

Watterson et al., 2009; Elia & Stratton, 2005
Community Care Delivery

- Increased demand
- $955.4m
- Independent Living
- Non-clinical community care workers & informal carers
- 64,200 home care packages

AIM
“To investigate the impact of nutritional interventions delivered to or by informal carers and non-clinical community care workers on malnutrition-related health outcomes of community-dwelling older adults.”

Databases
✓ CENTRAL
✓ CINAHL
✓ EMBASE
✓ Health Source: Nursing/Academic Edition
✓ PubMed
✓ Web of Science

Nutrition Interventions to:
A. Informal carers
B. Non-clinical community care workers
✓ Aimed to improve the health of the community-dwelling older adult
<table>
<thead>
<tr>
<th>Studies</th>
<th>Countries</th>
<th>Type</th>
<th>Participants</th>
<th>Results</th>
<th>Design</th>
<th>Risk of Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kurz, et al. 2010</td>
<td>Austria, Switzerland, Germany</td>
<td>RCT- II</td>
<td>Dementia</td>
<td>Unclear</td>
<td>II</td>
<td>+</td>
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<tr>
<td>Lauque, et al. 2004</td>
<td>France</td>
<td>RCT- II</td>
<td>Dementia</td>
<td>12%</td>
<td>II</td>
<td>+</td>
</tr>
<tr>
<td>Masud Rana, et al. 2009</td>
<td>Bangladesh</td>
<td>RCT- II</td>
<td>Older adults and their families</td>
<td>18.6%</td>
<td>II</td>
<td>+</td>
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<tr>
<td>Salva, et al. 2011</td>
<td>Spain</td>
<td>RCT- II</td>
<td>Dementia</td>
<td>31%</td>
<td>II</td>
<td>+</td>
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<tr>
<td>Riviere, et al. 2001</td>
<td>France</td>
<td>Non-randomized experimental trial: Controlled before-and-after study</td>
<td>Dementia</td>
<td>5%</td>
<td>III-2</td>
<td>Ø</td>
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<tr>
<td>Laforest, et al. 2007</td>
<td>Canada</td>
<td>Pilot case-series: post-test</td>
<td>Older adult nutrition volunteers and older adult care recipients</td>
<td>17% (care recipients)</td>
<td>IV</td>
<td>Ø</td>
</tr>
<tr>
<td>Leggo, et al. 2008</td>
<td>Australia</td>
<td>Case series: pre-test/post-test</td>
<td>HACC eligible older adults and HACC providers</td>
<td>40% receiving intervention (n=57)</td>
<td>IV</td>
<td>Ø</td>
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<tr>
<td>Toseland, et al. 2004</td>
<td>USA</td>
<td>RCT- II</td>
<td>Informal carers (spouses) of frail older adults</td>
<td>Unclear</td>
<td>II</td>
<td>+</td>
</tr>
<tr>
<td>Hyland, et al. 2006</td>
<td>UK</td>
<td>RCT- II</td>
<td>Older adults and peer community nutrition assistants</td>
<td>Unclear</td>
<td>II</td>
<td>Ø</td>
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</table>
Results: Interventions

Informal carers? 6 studies
Non-clinical care workers? 3 studies – no intervention evidence
Targeted malnutrition? 5 studies

Strategies were varied:
- Group education
- Workshops
- Social marketing
- Booklets
- Hotlines
- Action protocols
- Dietitian, allied health & physician involvement
Findings

Significance considered at $P<0.05$

<table>
<thead>
<tr>
<th></th>
<th>Nutrition Status</th>
<th>Functional status</th>
<th>KJ + protein intake</th>
<th>Carer burden</th>
</tr>
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<tr>
<td>Lauque 2004</td>
<td>↑</td>
<td>↓</td>
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Implications for future research

• **Australian** studies

• **General** older population

• Interventions by non-clinical **care workers**

• Measure: **validated** tools, **quality of life**
Conclusions

Nutritional status of Rural Community-Dwelling Older Adults

Medical & Health Services

Informal Carers

Roles?

Community Health & Nursing

Community Services
Thank you

Questions?