The disconnect between evidence and practice: A systematic review of person-centred interventions and training manuals for care home staff working with people with dementia

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Key Points:

• Training and interventions based on person-centred care can have a significant impact on agitation in people with dementia, as well as reducing use of antipsychotics
• Despite the wide availability of training programmes for care staff only three have been robustly evaluated
• There is an urgent need to align staff training with the evidence-base in order to provide consistent, effective person-centred care for people with dementia
Abstract

Background: One third of the 800,000 people with dementia in the UK currently reside in a care home. Provision of high quality treatment and care for these individuals has been identified as a priority. This clinical and political imperative relies on the development and nurturing of an appropriately skilled workforce.

Objective: To identify and review the quality of available person-centred intervention and training manuals which address neuropsychiatric symptoms and / or antipsychotic use for people with dementia in care homes. Secondly, to review clinical trials evaluating these manuals. The overall objective is to determine the availability of person-centred intervention and training manuals with clinical trial evidence of efficacy.

Data sources, eligibility criteria and methods: Interventions were identified using a search of electronic databases, augmented by mainstream search engines, reference lists, hand searching for resources and consultation with an expert panel. The specific search for published manuals was complemented by a search for Randomised Control Trials (RCT) focussing on training and activity-based interventions for people with dementia in care homes. Manuals were screened for eligibility and rated to assess their quality, relevance and feasibility.

Results: A meta-analysis of RCTs indicated that person-centred intervention and training manuals conferred significant benefit in improving agitation and reducing the use of antipsychotic drugs. Each of the efficacious packages included a sustained period of joint working and supervision with a trained mental health professional in addition to an educational element. However, of the 170 manuals that were identified, only 30 met the quality criteria and only four had been evaluated in clinical trials.

Conclusions: Despite the availability of evidence based training manuals, there is widespread use of person-centred intervention and training manuals which are not evidence-based. The failure to implement evidence-based interventions is extremely concerning. Moving towards a better skilled workforce in care homes is imperative to provide improved treatment and care for people with dementia and to support all clinicians working into these environments. Clearer guidance is needed to ensure that commissioned training and interventions are based on robust evidence.

Systematic review reference number: CRD42013004091

Introduction

Rationale

Dementia affects 35 million people worldwide¹ and this is expected to rise to 115 million by 2050²
It is a devastating condition leading to progressive cognitive decline, functional impairment and loss of independence. Dementia incurs an enormous personal cost to those affected and a worldwide financial cost in 2010 estimated at $604 billion. In the UK alone there are currently 800,000 people with dementia, more than 250,000 of whom live in care home settings.

Older people with dementia in care homes have complex needs which often require specialised treatment and care. For example cognitive and functional impairment often coexists with additional neuropsychiatric symptoms such as psychosis, aggression, agitation and depression. There is currently a high level of unmet need in these individuals. The quality of care for people with dementia living in care homes has been a matter for serious concern and is likely to have contributed to an increase in neuropsychiatric symptoms and the widespread prescription of potentially harmful antipsychotic drugs. In order to address these issues high quality training and skills development for staff is essential to enable them to provide the best possible care for people with dementia and effective support to clinicians working with people in care home settings.

A number of governments around the world have published national dementia plans addressing treatment, care and research. Many of these have emphasised the importance of better treatment and care for people with dementia in care home settings. National Dementia Strategies in both France and England prioritise improvement in the quality of care and development of an informed, effective workforce for care. The UK National Service Framework for older people and NICE dementia guidelines also highlight the importance of training for care staff, and the need to improve access to effective non-pharmacological therapies in order to reduce unnecessary prescribing of antipsychotic medication to people with dementia. Care home regulators in the US have launched initiatives to tackle the same key issues. These recommendations have resulted in a proliferation of training programmes that are promoted to care providers, however the evidence to support their effectiveness is unclear.

Dementia represents a substantial financial burden to healthcare services worldwide, and it is therefore essential that this expenditure is focussed on interventions that are known to be effective. To increase the skills of the workforce, provision of training for all care staff in England, in line with the National Strategy, would cost an estimated £546,000,000 based on current median training costs and the current number of care homes in the UK, further emphasising the importance of focussing this resource on effective training interventions. It is therefore vital to have a clear understanding of the available intervention and training manuals and their related evidence of quality and efficacy in order to deliver clinical interventions, plan training and care, commission services, and ultimately to provide the best possible care for people with dementia. There are numerous important areas of training and best practice pertaining to people with dementia in care homes, the totality of which would
be difficult to address in one single review. We chose to focus on the implications for neuropsychiatric symptoms and antipsychotic use given the current clinical and political priority of these topics and the existence of clear consensus best practice guidelines for care delivery and treatment.

**Objectives**

This review incorporates two related but independent systematic reviews of available person-centred intervention and training manuals which address neuropsychiatric symptoms and/or antipsychotic use for people with dementia in care homes. The objective is to identify and review the quality of all available published manuals (Quality review) and to determine the evidence for efficacy of manuals which have been evaluated through clinical trial (Efficacy review).

**Methods**

**Protocol and registration**

The protocol is published online at:

http://www.kcl.ac.uk/biohealth/research/divisions/wolfson/research/neurodegeneration/staff/ballardcliffe.aspx

**Quality review**

**Information sources**

Manuals and training packages were first identified through searches of electronic databases described in Box 1. The search incorporated manuals available in a wide range of formats including books, DVDs, leaflets and packs.

**Study selection**

Eligibility criteria are summarised in Table 1. An initial screen excluded unsuitable manuals. Where multiple versions of a manual existed the most recent edition was included. The full content of the manuals was screened for eligibility by three independent reviewers and scored for the comprehensiveness of the intervention and degree of operationalisation. Studies taken forward received scores of three or more for both criteria, were deemed to provide broad person-centred interventions or training which address neuropsychiatric symptoms and/or antipsychotic use for people with dementia in care homes and were suitable for practical implementation. Manuals were excluded if they focussed on a single aspect of care, such as bathing or did not include practical instructions for delivery.
Data collection process
A data extraction sheet was developed to summarise the relevant contents of the manuals. Data was extracted by one author (SM) and checked by two authors (JF and VL). The authors of the manuals were contacted to provide key information where necessary.

Data items
Extracted data were: (i) aim; (ii) type of intervention; (iii) intended outcomes; (iv) setting; (v) target population; (vi) format of manual; (vii) method of development; (viii) stated theoretical basis; (ix) evidence base. Manuals were then separated into categories according to the type of intervention or training identified.

Risk of bias in individual studies
The manuals were rated independently by three of the authors, to assess the risk of bias of individual studies, with good inter-rater reliability and concordance coefficients between raters (0.7 for raters JF and VL; 0.8 for JF and SM and 0.8 for VL and SM).

Summary measures
The type of research evidence available was noted for shortlisted manuals. The levels of evidence summarised were anecdotal, qualitative study, open trials, quasi experimental studies and RCTs. Those with quasi-experimental studies and RCT evidence meeting the inclusion criteria were evaluated in the efficacy review in the subsequent section of this paper.

Efficacy review

Information Sources
The information sources and search terms are summarised in Box 1. For all keywords a variety of alternative terms were also searched.

Eligibility criteria
All RCTs, and quasi-experimental studies with a control group which primarily address neuropsychiatric symptoms and or antipsychotic use for people with dementia in care homes and which were delivered primarily through interventions or training to improve the practice of care staff were included.

Data collection process and data items
Studies identified by the search strategy were reviewed by one of the authors (CB) and selected if they met the inclusion criteria. The selection of included studies was checked independently by a
second author (JS). Differences were resolved by consensus. Data pertaining to neuropsychiatric symptoms (agitation, psychosis, depression, global neuropsychiatric symptoms) or antipsychotic prescribing were extracted for meta-analysis.

Risk of bias in individual studies
The methodological quality of included studies evaluated with RCTs or a quasi-experimental design and with an available manual was assessed applying the Cochrane system as used by Corbett and colleagues using the headings ‘Adequate Sequence Generation’, ‘Allocation Concealment’, ‘Blinding’, ‘Incomplete data’ and ‘Free of selective reporting’, and with a red, amber, green traffic light rating system.

Synthesis of results
Meta-analysis was undertaken with the Comprehensive Meta-analysis (v2 Hewlett Packard) package for key neuropsychiatric outcomes (agitation, depression, total neuropsychiatric inventory) reporting standardized mean differences with 95% confidence intervals and for antipsychotic drugs (reporting odds ratios with 95% confidence intervals) when data were available from two or more RCTs or quasi experimental studies.

Results

Quality Review Results
Figure 1 shows the flow of studies through the selection process. 170 books, videos, DVDs, manuals and packs were identified as possible person centre intervention or training manuals for people with dementia. 58 manuals were initially excluded (Figure 1), and 112 manuals were assessed against the screening criteria, noting contents and structure. 49 of these were excluded following more detailed review. 63 manuals met the screening criteria and were rated against the six quality assessment criteria. 30 manuals were shortlisted, having obtained sufficient scores against the criteria. Of these 30 manuals only four were supported by evidence from randomized controlled clinical trials. The manuals and related evidence are described in more detail in Table 2.

Efficacy Review
Table 2 shows that seven RCT / quasi-experimental studies of person-centred intervention or training manuals (three of which were already selected through the manual review) were identified Five of these studies were parallel group RCTs. Three studies evaluated the impact of person-centred care training on antipsychotic use, with two studies indicating significant reductions of 12.8% and 21.5%
greater in the person-centred care training group than in those receiving usual care. A meta-analysis indicates a significant reduction in antipsychotic use across the three studies (Figure 2). Quantitative evaluation of agitation was undertaken in five studies of person-centred care training, but only four of these studies included the data in the paper\textsuperscript{20, 22, 23, 25} with an overall highly significant benefit in agitation evident across the studies (Figure 3). A beneficial impact in the treatment of depression was evaluated in a study including person-centred care training in assisted living environments, but was not reported specifically in any of the studies in care home settings. Only one trial reported global impact of person-centred care training on neuropsychiatric symptoms in people with dementia in nursing homes, reporting a significant 8.7 point improvement in the person-centred care training group compared to usual care. All six of the studies included in the meta-analysis received a ‘Green’ score for quality and risk of bias according to the Cochrane rating scale.

**Excluded studies**

Several other promising intervention approaches did not meet inclusion criteria, including Reducing Disability in Alzheimer’s Disease (RDAD),\textsuperscript{26} Error! Reference source not found. STAR-C\textsuperscript{27} and Cognitive Stimulation Therapy.\textsuperscript{28} Reasons for exclusion included studies focussed on specific domains, not focussing on neuropsychiatric symptoms or antipsychotic use, that they have been evaluated in non-care home settings or that they are interventions delivered directly to people with dementia rather than through care staff. These are described in more detail in Table 3.

**Combined Quality and Efficacy Review**

Only four of the available training and intervention manuals, met the stipulated quality criteria and had published clinical trial evidence of efficacy (Table 2). The Focussed Intervention of Training for Staff (FITS),\textsuperscript{20, 29} a ten month person-centred care training package delivered by a FITS therapist, a mental health professional who had undergone a specific ten-day training course. The RCT showed the intervention resulted in a 19.1% reduction in use of antipsychotic medication in the treatment group (95% confidence interval 0.5% to 37.7%). A collection of evidence-based protocols for integrating non-drug strategies into the care and treatment of older people with dementia, N.E.S.T.\textsuperscript{30, 18} Error! Reference source not found. and the related manual, ‘Simple Pleasures’, were evaluated in 60 people in a nursing home over ten weeks. The study showed improvements in agitation (CMAI p=.01) and depression (GDS; p=.001). The ‘Simple Pleasures’ manual\textsuperscript{19} was evaluated in a six month crossover RCT involving 40 individuals which demonstrated significant improvement in agitation compared to the control period (p=0.001). Improving Dementia Care\textsuperscript{31} is a practical training and staff development resource for use with care staff to develop an understanding of person-centred care principles and practice, as part of an RCT of person-centred care training and a specific care programme including Dementia Care Mapping (DCM) in 15 care homes\textsuperscript{25}. Outcomes showed a
reduction in symptoms of agitation in residents although the outcomes showed variability between sites (CMAI; p=0.01). DCM was utilised as part of this effective intervention, but in a way that is different from routine clinical implementation. A further RCT of DCM using the more widely implemented method is ongoing in the UK. Three other training programmes have demonstrated evidence of efficacy in clinical trials, but are not available for general implementation.

Discussion

Summary of evidence

This review has identified robust evidence demonstrating the benefits of person-centred care intervention and training for improving agitation and reducing the use of antipsychotic medications in people with dementia living in care homes. However, this outcome was based on intervention studies performed on only a fraction of the training programmes that are currently available. Only 30 (18%) of the intervention and training manuals identified followed good educational and person-centred care principles and only four (2.3%) had clinical trial evidence of benefit. The importance of this is perhaps highlighted more starkly by highlighting the reverse statistic, that more than 80% of available intervention and training packages are of variable quality and 98% are not evidence based. The limited availability of high quality and in particular evidence-based interventions is extremely concerning. Healthcare and care home sectors are investing significant amounts of budget in training following the directive from the NDSE which highlighted it as a key area for improvement. Yet this investment is currently being spent largely on programmes that carry no evidence that they reduce or improve neuropsychiatric symptoms or influence antipsychotic prescription. If the UK is to meet the imperative of providing better social and medical care for people with dementia, basing care on evidence-based intervention training to improve person-centred care must be a priority. It is of particular importance that the interventions for which there is evidence of benefit were delivered over a period of at least four months and involve some on-going clinical supervision or support following training to embed implementation into care home practice. This suggests that commissioning “one-off” training packages or classroom based training is likely to be ineffective.

The meta-analysis clearly shows that person-centred intervention and training packages have a significant positive impact on both agitation and on reducing the use of antipsychotic medications, strongly reinforcing the value of this approach. The literature does not currently provide any evidence for the impact on psychosis, depression and quality of life. This is an important priority for further research. A recent department of health report also indicates that these types of training and interventions are likely to be highly cost-effective.
Based on the evidence reported in this review, there is a clear and urgent need for change in regulation and guidance for commissioners, the care home sector and health professionals on the most appropriate training to be delivered to care staff working with people with dementia. It is imperative to prioritise use of high quality intervention and training packages with established evidence of efficacy, and which include an element of on-going work with care home staff to embed the principles into routine practice.

Limitations

Limitations in review strategy
Although the review incorporated national and international English language intervention manuals, it is nevertheless a limitation that the review is limited to English language publication. The specific search for published manuals was also complemented by a search RCTs, focussing on training and activity based interventions for people with dementia in care homes, thereby mitigating the limitations of the manual review search strategy, to ensure that a broad international perspective was incorporated into the review. In addition, the nature of this review dictated that existing and published training programmes without available manuals were excluded. It is also important to note that a number of the manuals reviewed had a broader framework for care delivery than a specific focus of neuropsychiatric symptoms. It is therefore likely that wider benefits for the alleviation of distress were not captured by this review.

Risk of bias
As this review included qualitative ratings by individuals this may have raised potential personal bias in the ratings. However, this was minimised through the use of an established pro-forma.

Conclusions
In conclusion, there has been a welcome recognition of the importance of a well trained workforce to support people with dementia living in care homes. However, there is a major disconnect between the interventions that are routinely available and being commissioned, and the evidence base indicating benefit. It is important that people purchasing, commissioning and delivering psychosocial interventions and training packages have access to evidence-based approaches, and that we move to a set of standards where evaluation of the benefits of training for people with dementia is part of the accreditation process for training courses and packages. More rigorous standards are needed to ensure that the training that is provided is conferring benefit to people with dementia.

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The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health. Clive Ballard and Anne Corbett were supported by the National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre and Dementia Unit at South London and Maudsley NHS Foundation Trust and Institute of Psychiatry, King’s College London.

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Declaration of competing interests
All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf and declare: no support from any organisation for the submitted work; CB has received research grants and honorariums from Lundbeck Pharmaceuticals and consultancy/honorariums from the following Pharmaceutical companies; Novartis, Acadia, Bial, Napp, Bristol-Myer Squibb, Otusaka and Servier. AC has received Speakers Honoraria from Novartis, Lundbeck and Bial Pharmaceuticals, and does consultancy for Acadia Pharmaceuticals and Department of Health (UK); no other relationships or activities that could appear to have influenced the submitted work.

Data sharing: No additional data available.

Ethics Approval: Not required.

Tables and Figure
Box 1: Search protocol

1. Electronic databases and off-line resources searched for quality and efficacy reviews:
2. Search terms:

- Quality review: 'Dementia' in combination with 'Psychosocial', 'Intervention', 'Manual', 'Person-centred', 'Social interaction', 'Exercise' and 'Training'. The search incorporated manuals available in a wide range of formats including books, DVDs, leaflets and packs.

3. Contact authors for intervention manuals where these were not available.

‘What This Paper Adds’ Box

What is already known on this subject:

- Training for care home staff is highlighted as a priority in national and international strategies for dementia to improve the quality of care received by people with dementia living in care homes.
- Training is particularly seen as a key factor in reducing behavioural and psychological symptoms of dementia and antipsychotic prescriptions.
- There is currently significant expenditure on training programmes yet it is unclear which programmes have supporting evidence to demonstrate their efficacy.

What this study adds:

- There is clear robust evidence to support the benefit of person-centred care training in improving the clinical outcomes or wellbeing of people with dementia living in care homes.
- 170 training manuals are currently available for use in care homes. Only four of these have supporting evidence of efficacy from an RCT.
- This review highlights the need for further RCTs to examine the efficacy of training programmes and the imperative to define clear guidance to ensure training is evidence-based.
Figure 1: Study selection

170 manuals identified
(DVDs, books, videos and toolkits that may be of relevance)

58 initially excluded
- 32 difficult to obtain
- 18 pre-1995
- 1 not yet complete
- 4 superseded by newer manuals
- 3 part of other manuals

112 manuals screened
(Rated against 2 criteria: Intervention and Operationalisation)

49 excluded from review
- 21 not an intervention
- 28 not implementable from source

63 manuals assessed
(Rated against assessment criteria: Relevance, Care Group, Feasibility of implementation, Scope of material, Method of development, “Theoretical” underpinning)

33 excluded from review
- Did not score against all assessment criteria

30 manuals assessed for evidence of outcomes

26 excluded from review
- No evidence of effectiveness

4 manuals selected
(Relevant and supported by evidence)
Figure 2: Meta-analysis of RCTs evaluating the effect of person-centred care interventions and training manuals on antipsychotic prescriptions.

<table>
<thead>
<tr>
<th>Study name</th>
<th>Odds ratio</th>
<th>Lower limit</th>
<th>Upper limit</th>
<th>Z-Value</th>
<th>p-Value</th>
</tr>
</thead>
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<tr>
<td>Iossey et al 2006</td>
<td>3.738</td>
<td>1.962</td>
<td>7.119</td>
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<td>0.000</td>
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<td>Rovner et al 1996</td>
<td>1.855</td>
<td>0.562</td>
<td>6.118</td>
<td>1.014</td>
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<td>Chenoweth 1992</td>
<td>2.018</td>
<td>0.733</td>
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<td>1.358</td>
<td>0.174</td>
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<td></td>
<td>2.861</td>
<td>1.744</td>
<td>4.692</td>
<td>4.163</td>
<td>0.000</td>
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</tbody>
</table>

Odds ratio and 95% CI

Favours A  
Favours B
Figure 3: Meta-analysis of RCTS evaluating the effect of person-centred care interventions and training manuals on agitation in people with dementia living in care homes

Meta Analysis

<table>
<thead>
<tr>
<th>Study name</th>
<th>Outcome</th>
<th>Std diff in means</th>
<th>Standard error</th>
<th>Variance</th>
<th>Lower limit</th>
<th>Upper limit</th>
<th>Z-Value</th>
<th>P-Value</th>
</tr>
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<td>fossey</td>
<td>Blank</td>
<td>0.400</td>
<td>6.500</td>
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<td>chenoweth</td>
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<td>20.500</td>
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<td>70.560</td>
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<td>36.964</td>
<td>2.440</td>
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<td>cohen-mansfield</td>
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<td>0.133</td>
<td>0.368</td>
<td>1.798</td>
<td>2.969</td>
<td>0.003</td>
</tr>
</tbody>
</table>

-1.00 -0.50 0.00 0.50 1.00

Favours A         Favours B
### Table 1: Study eligibility and assessment criteria

#### ELIGIBILITY CRITERIA

<table>
<thead>
<tr>
<th>Initial exclusions</th>
<th>(i) unavailable for inspection and difficult to obtain; (ii) not yet complete; (iii) incorporated as part of other manuals; (iv) had been superseded by newer manuals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening criteria</td>
<td>(i) Intervention: Extent to which the manual provides a clear, complete intervention, which can be used as a standalone resource (ii) Operationalisation: Extent to which the intervention can be directly implemented from the manual</td>
</tr>
<tr>
<td>Final inclusions</td>
<td>(i) Score of three or more on screening criteria (ii) Provide broad person-centred care training and approaches to improving person-centred activities for people with dementia in care homes. (iii) Demonstrable design for direct implementation with appropriate training, or provide sufficient information about the details of an activity that could be undertaken.</td>
</tr>
<tr>
<td>Final exclusions</td>
<td>(i) Manuals with detailed principles / theory but no clear instructions about delivery were excluded. (ii) Manuals with specific interventions focusing on only a single aspect of care.</td>
</tr>
</tbody>
</table>

#### Assessment criteria

<table>
<thead>
<tr>
<th>Relevance (goal outcomes)</th>
<th>Relevance of the manual to improving key clinical outcomes and/or wellbeing of people with dementia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care Group</td>
<td>Specificity of the manual to people with dementia living in care homes</td>
</tr>
<tr>
<td>Feasibility of implementation</td>
<td>Ease of implementation of the intervention, in terms of the materials, resources, flexibility and level of training/support required</td>
</tr>
<tr>
<td>Scope of material</td>
<td>Extent and level to which the manual focuses upon a psychosocial intervention</td>
</tr>
<tr>
<td>Method of development</td>
<td>Level of rigour in the method of manual development</td>
</tr>
<tr>
<td>“Theoretical” underpinning</td>
<td>Level to which the intervention relates theoretical rationale to practice</td>
</tr>
<tr>
<td>Evidence of outcomes</td>
<td>Level of evidence of relevant outcomes/ effectiveness</td>
</tr>
<tr>
<td>Manual</td>
<td>Paper</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td><strong>RCTs for interventions with available manuals</strong></td>
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</tr>
<tr>
<td>N.E.S.T Approach:</td>
<td>Buettner &amp; Ferrario (1998)</td>
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<tr>
<td>Dementia practice guidelines for disturbing behaviours; incorporating: Simple Pleasures: A multilevel sensorimotor intervention for nursing home residents with dementia.</td>
<td></td>
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<td></td>
<td>Buettner (1999).</td>
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<td>A subset of NEST :</td>
<td>Fossey et al (2019).</td>
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<td></td>
<td>Chenoweth et al (2009).</td>
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<tr>
<td>Title</td>
<td>Authors</td>
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<tr>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>professional development</td>
<td></td>
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<tr>
<td>Dementia Care Mapping</td>
<td>Chenoweth et al (2009)</td>
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<td>Burgio et al (2002)</td>
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<td>Unavailable</td>
<td>Cohen-Mansfield et al (2007)</td>
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<tr>
<td>Unavailable</td>
<td>Rovner et al (1996)</td>
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dementia living in nursing homes. RCT with six-month follow-up. 89 participants allocated to the AGE programme or control group.
<table>
<thead>
<tr>
<th>Manual</th>
<th>Paper</th>
<th>Study description</th>
<th>Length of intervention</th>
<th>Training required</th>
<th>Effect</th>
<th>Reason for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bathing without a battle: Person-directed care of individuals with dementia</td>
<td>Hoeffer et al (2006) 34</td>
<td>RCT: 15 homes (69 residents) Two Treatment Groups (staff trained to provide person-centred showering and person-centred bed bath), one Control Group (usual practice)</td>
<td>Intervention delivered over three month period (averaging approx. eight hours per study subject per intervention)</td>
<td>Support staff trained for six weeks in showering intervention and for six weeks in towel bath intervention</td>
<td>Significant improvements in care giving outcomes (comparing mean change on care giving outcomes): Gentleness: Caregiver Bathing Behaviour Rating Scale (16.22; p&lt;.01) Verbal support: Caregiver Bathing Behaviour Rating Scale (12.0; p&lt;.01) Perception of Ease: Care Effectiveness Scale (6.12; p&lt;.01)</td>
<td>Intervention focussed on a specific aspect of care</td>
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<td>Reducing Disability in Alzheimer's disease (RDAD): A</td>
<td>Teri et al (2003) 35</td>
<td>RCT 153 people residing in the community (115 intervention, 96 control)</td>
<td>Intervention delivered over three month period</td>
<td>Caregivers provided with 18 hour-long sessions over</td>
<td>Significant improvements in physical functioning (mean difference 19.29; CI 95%: p&lt;0.001)</td>
<td>Not implemented in care home residents</td>
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<td>Manual for Therapists</td>
<td>STAR-C Treatment of depression and anxiety in persons with dementia</td>
<td>Making a Difference: an Evidence-based Programme to Offer Cognitive Stimulation Therapy (CST) to People with Dementia</td>
<td>Wheelchair Biking for the Treatment of Depression Evidence-based Protocol</td>
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<td>STAR-C</td>
<td>Intervention delivered over an eight week period</td>
<td>Pilot open study with no control</td>
<td>Delivered directly to people with dementia. Main focus not neuropsychiatric symptoms</td>
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<td>Reduction in depression: CANE (-1.03; p=.02)</td>
<td>Reduction between baseline and follow-up in: Depression: CSDD t(31) = 3.403; p=.002 Anxiety: RAID t(31)=.874; p=.389 Behavioural problems: RMBPC t(31)=4.15; p=.013</td>
<td>Significant improvements in: Cognitive function: MMSE( +1.14, s.d.=0.09, p&lt;.05); ADAS-Cog (-2.37, s.d.=.87, p&lt;.01) Quality of Life QoL-AD (+1.64, s.d.=.78, p&lt;.05)</td>
<td>Treatment group- significant improvements in depression: Geriatric Depression Scale: Control group increase (+.70)</td>
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<td>Two workshops delivered to care staff by psychologist and OT; 120 minutes further training</td>
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<td>Intervention focussed on a specific aspect of care</td>
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<td>the protocol for the programme and trained staff from range of professional backgrounds</td>
<td>Treatment group decrease (-3.47) Significant at p&lt;.000 level</td>
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</tbody>
</table>
References


27. Teri L. STAR-C. Treatment of Depression and Anxiety in Persons with Dementia 2002;.

28. Spector A, Thorgrimsen L, Woods R, Orrell M. Making a difference: an evidence-based group programme to offer cognitive stimulation therapy (CST) to people with dementia: the manual for group leaders 2006;.

29. Fossey J, James I. Evidence Based Approaches to Improving Dementia Care in Care Homes. *Alzheimer’s Society* 2008;.


