Improving quality of life for people with dementia in care homes: making psychosocial interventions work

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ABSTRACT

Background: Psychosocial interventions can improve behaviour and mood in people with dementia, but it is unclear how to maximise their effectiveness or acceptability in residential settings.

Aim: To understand what underlies the successful implementation of psychosocial interventions in care homes.

Method: Systematic review and meta-synthesis of qualitative research.

Results: The synthesis of 39 qualitative papers revealed that beneficial psychosocial interventions met the needs of people with dementia to connect with others, make a meaningful contribution and reminisce. Successful implementation rested on the active engagement of staff and family and the continuing provision of tailored interventions and support. This necessitated staff time, and raised issues around priorities and risk, but ultimately helped redefine staff attitudes towards residents and the caregiving role.

Conclusions: The findings from the meta-synthesis can help to inform the development and evaluation of psychosocial interventions in care homes and support their widespread implementation in clinical settings.
Introduction

Twenty five million people worldwide have dementia, including 700,000 in the UK, of whom an estimated 250,000 live in care homes. Dual concerns about the prevalence of psychiatric and behavioural symptoms, present in 80% of people with dementia in care homes, and the over prescription of antipsychotic medication have led to a renewed emphasis on non-pharmacological interventions. Non-pharmacological interventions use a wide range of approaches, characterised as behaviour-orientated, emotion-orientated, stimulation-orientated or cognition-orientated, that aim to improve quality of life and maximise function in the context of existing deficit. Training and support interventions for nursing home staff have proven to be an effective alternative to neuroleptics in managing disruptive behaviour in people with dementia. A recent appraisal of the quantitative evidence in this area concluded that behavioural management techniques, cognitive stimulation and exercise can improve key mental health outcomes such as agitation and depression. However, none of these interventions has achieved widespread implementation in care home settings and there is no coherent picture of how to maximise their effectiveness or acceptability. Other “promising” interventions have been found to have a positive yet not always statistically significant impact in controlled trials with participants showing marked variation in responses.

Evaluating complex interventions poses unique challenges and revised Medical Research Council (MRC) guidelines highlight the necessity not only of measuring outcomes but also of exploring the ways in which the intervention under study is implemented. Qualitative methods can be used to elucidate this process and to identify the effective components of an intervention and the context in which it can be optimised. Individual qualitative studies provide insight into how different psychosocial interventions are used and experienced within residential settings. Integrating these findings in a qualitative meta-synthesis promises to enhance their
impact upon health policy and clinical practice\textsuperscript{8,9} and help us to understand and overcome the potential obstacles to implementing psychosocial interventions as part of routine care. To our knowledge this is the first systematic review and meta-synthesis of the qualitative evidence in this area.

**Method**

Meta-synthesis is a method of integrating findings from qualitative studies. The aim is not to reduce data to summary form, but to amplify it through interpretation\textsuperscript{10}. Thus, the purpose is to achieve a level of understanding and conceptual development that is greater than that attained from the individual empirical studies alone\textsuperscript{9}. Multiple methods for synthesising qualitative research exist and it is argued that the purpose of the meta-synthesis and the nature of the findings should direct the approach used\textsuperscript{10}. For instance, we aimed to go beyond the description and summary associated with conventional narrative reviews of qualitative research, but were mindful that the wide-ranging level of interpretation of data within the individual studies might preclude a meta-ethnography approach. Meta-ethnography is a widely used method of synthesising qualitative data, but requires all findings to be in the form of concepts or metaphors \textsuperscript{11}. We considered the range in level of interpretation and methodological design typical of qualitative health research and did not wish to restrict the synthesis on this basis. Thus, we used analytical devices such as constant comparison and the creation of taxonomies to develop a conceptual synthesis of the successful implementation of psychosocial interventions in care homes\textsuperscript{10}.

**Identification and selection of papers**

Systematic review methodology was used to identify relevant articles \textsuperscript{12}. A search strategy combining Medical Subject Headings and text words relating to dementia, care homes, psychosocial interventions, and qualitative research was devised and

The study was restricted to English language articles that reported qualitative research regarding the use and effectiveness of psychosocial interventions for people with dementia in care homes, from the perspective of people with dementia, relatives or care staff. Participants with any type of dementia residing in any type of residential facility were considered.

The psychosocial interventions comprised therapies that were derived from psychological or psychosocial models designed to improve outcomes in people with dementia and the search terms were discussed and agreed upon by the research team. They included: person centred care, person care planning, emotion-orientated, validation, communication, interaction, resolution, engagement, cognitive stimulation therapy, cognitive training, reality orientation, reminiscence, life stories, life review, life history, activity, exercise, psychosocial, psychotherapy, psychoanalysis, counselling, behaviour therapy, creative therapies, art, mural, animal assisted therapy, pets, animals, leadership, education, dolls, music therapy, drama therapy, dance therapy, Jabadoo, self maintenance therapy. Qualitative research is poorly indexed in databases\(^{13}\), so a combination of thesaurus terms and free text terms was used to maximise the recall of potentially relevant studies\(^ {14} \). We augmented the electronic search by scanning reference lists and hand-searching relevant journals and publications of influential research groups in the field (e.g. Journal of Dementia Care, Alzheimer’s Society, Social Care Institute for Excellence, Stirling University Dementia Services Development Centre).
Studies in which interventions were delivered to care staff were included (e.g. training programmes) if a primary aim was to improve outcomes for the person with dementia. The review also included papers that focussed on the implementation of psychosocial interventions. However, purely descriptive or theoretical studies that did not present empirical data on the use of psychosocial interventions in care homes were excluded. In total, 2894 papers were identified; after adjusting for duplicates the abstracts of 2384 papers were screened and 2271 were excluded on the basis that they did not meet the study criteria. The full texts of the remaining 123 articles were then independently assessed for eligibility by two reviewers (VL and JM). Agreement was measured using Cohen’s Kappa and disagreements were resolved by discussion through referring to the eligibility criteria and the original studies where necessary.

**Quality appraisal**

Two experienced qualitative researchers (VL, JM) independently assessed relevant papers for methodological quality using the critical appraisal skills programme (CASP) checklist\(^\text{15}\). The broad quality criteria within this checklist provided a flexible method of assessing the rigour, credibility, and relevance of the heterogeneous set of studies. The reviewers compared their appraisal assessments and reconciled any differences in judgements through debating the rationale for their decisions. Studies that did not use qualitative methods of data collection and analysis or did not give an account of these procedures were excluded at a preliminary screening stage. In qualitative synthesis there is a tension between inclusiveness and quality\(^\text{16}\). We opted for an inclusive strategy and, in common with other synthesis\(^\text{9}\), the quality appraisal process was not used as a criterion to exclude studies but allowed us to judge the value of papers with respect to their contribution to the synthesis. Themes were only included in the meta-synthesis if they were supported by data from at least
one article judged to be of reasonable quality. Scores on the CASP checklist range
from 0-10 and a score of 7 or higher was defined as the threshold for “reasonable
quality” at the outset of the study.

**Data extraction and synthesis**

Data concerning the type of intervention, aims, participant characteristics, setting and
methods of evaluation used in each study were recorded as essential contextual
information for the synthesis. Subsequently, a description of the main concepts
derived from each paper was entered into a table using the original authors’ own
words or a paraphrase. Efforts were made to remain faithful to the meanings and
concepts within each study. Authors’ interpretations, explanations and
recommendations were also extracted from the paper where relevant to the research
question. By examining the concepts and interpretations within the table it was
possible to identify shared constructs across studies and to note areas of
discordance. The themes were combined using an interpretive method of meta-data
synthesis grouping themes where they had greatest explanatory power. This
enabled the construction of a taxonomy that categorised findings in three domains:
beneficial elements of a psychosocial intervention; conditions required for successful
implementation; and challenges to successful implementation (see Table 2). The
taxonomy was developed inductively from the findings and the properties and
dimensions of each domain were explicated through moving back and forth between
findings and taxonomy (a process similar to the constant comparison method used in
primary qualitative research). All members of the research team commented upon
the emerging typology and interpretations were discussed between the first, second
and last author at regular intervals. All authors have substantial experience of
working with people with dementia and their varied disciplinary and methodological
expertise helped to produce insights and generate different questions to be asked of
the primary research. Finally, the synthesis was written and revised several times until a coherent whole was formed.

Results

A total of 39 papers, pertaining to 35 individual studies, were included in the synthesis (Cohen’s Kappa = 0.68)\(^{18-56}\). The study selection process and reasons for exclusion are shown in Figure 1. Using the CASP checklist, 29 of the 39 papers were rated as of least reasonable quality (CASP \(\geq 7\)). The level of agreement between reviewers was good (Weighted Kappa = 0.66). Common weaknesses of the 10 remaining papers\(^{21,29,30,33,36,37,39,41,46,47}\) included a failure to demonstrate that the data analysis was sufficiently rigorous or to critically examine the researcher’s role or potential bias. The stated methodology and methods of data collection and analysis of the included studies are specified alongside other study characteristics in Table 1. The 35 studies were conducted in the following countries: 13 in the USA; 7 in Sweden; 5 in England; 5 in Canada; 2 in Australia; 1 in Ireland; 1 in Japan; 1 in Norway. Thus the research was undertaken in a range of care settings, including Special Care Units (SCUs), nursing homes and assisted living facilities, suggesting variations in philosophies, staffing patterns and structures. Enormous diversity exists in the nature of treatments included under the rubric “psychosocial” and this was evident in the 35 studies reviewed. Study interventions were broadly categorised as: music interventions (5)\(^{20,29,42-45,49}\); exercise and other therapeutic activities (4)\(^{23-25,30,38,51}\); reminiscence (4)\(^{26,34,41,48}\); models of dementia care (4)\(^{27,33,46,56}\); communication strategies (3)\(^{19,21,54}\); staff training and supervision (3)\(^{31,40,53}\); methods of orientation (2)\(^{22,37}\); animal interventions (2)\(^{35,36}\); nature related activities (2)\(^{39,47}\); and other (6)\(^{18,28,32,50,52,55}\). The research studies reported a wide range of positive outcomes for people with dementia including improved mood, communication, engagement, occupation, behaviour and quality of life. Researchers examined these outcomes, and drew conclusions about the beneficial elements of psychosocial interventions and the
characteristics that might facilitate or obstruct their implementation, through exploring the perceptions and experiences of staff, relatives, and people with dementia. Multiple methods of data collection were used, including interviews, focus groups, participant / non-participant observation, and staff records, and many of the research studies triangulated multiple data sources to enhance the credibility of the findings 57.

**Beneficial elements of a psychosocial intervention**

Beneficial elements of the interventions were identified, firstly, with respect to people with dementia and, secondly, with respect to care staff. These will be discussed in turn.

**Focus on people with dementia**

One of the principal features of interventions that were perceived to be beneficial was that they enabled people with dementia to “connect with others”. In the first instance, they created a tangible line of communication. Music, animals, dolls, and “remembering boxes” all provided a focal point that stimulated conversation between people with dementia and staff, relatives and other residents20 29 35-37 41 49 52. Interventions involving volunteers from outside the home proved especially valuable in allowing people with dementia to form relationships beyond the normal institutional surroundings35 36 50. Therapeutic interventions involving music and dance afforded the additional benefit of enabling individuals to express emotions and show feelings towards one another20 24 25. Greater mutuality was seen as music and singing enhanced communication and cooperation44. Gottell (2002) reported that singing during caregiving activities created an implicit understanding between people with dementia and staff that reduced the need for verbal instructions. Finally, taking part in activities with other residents, or in some cases simply being present without participating, provided individuals with a valued sense of inclusion58 52 56.
A second distinctive feature of interventions perceived to be beneficial was that they enabled people to feel that they were making a “meaningful contribution”. Individuals demonstrated pride in passing on values and experiences during structured reminiscence about their lives. An enhanced ability to contribute to and initiate conversations engendered a sense of control, while taking responsibility for a doll or animal brought a sense of purpose to residents’ daily lives. Other meaningful activities included those that reflected prior roles or pastimes such as attending church. A third, allied characteristic of beneficial interventions was that they provided an “opportunity to reminisce”. This could be spontaneous, with evidence of music, dancing, animals and dolls prompting residents to recall memories, social skills and procedures, or planned, with structured reminiscence programmes facilitating focussed and insightful thinking. Moreover, the creation of “memory notebooks” and “remembering boxes” provided concrete memory aides that assisted people with dementia in sharing memories and life stories with those around them.

Focus on staff

Staff across the studies agreed that from their own perspective psychosocial interventions were invaluable in helping them to “see beyond the illness”. Often, this was manifested in the view that getting to know the person assisted staff in understanding and responding to behaviours that they had previously found challenging. This was achieved through life review work or the use of formal assessment measures that enabled staff to learn the personal histories of residents. Seeking information from family members not only proved expedient in getting to know personal characteristics, accomplishments, values and preferences, but also enhanced the care staff’s appreciation of the resident as a person embedded in a family context. Ultimately, knowledge of the individual and their family helped staff to relate on a more personal level and develop a more meaningful relationship with the person with dementia.
A variety of other methods were used to reduce the distance between professional caregivers and patients. Dramatised vignettes and role plays were a powerful catalyst in allowing staff to imagine what life must be like for people with dementia in care homes\textsuperscript{31}. Palo-Bengtsson (2000) observed that simply sharing experiences during dance events generated a new psychological closeness between residents and staff. SCUs demonstrated expertise in dismantling “us” and “them” relationships; efforts were made to eliminate separate areas for staff and people with dementia and residents were encouraged to support each other and contribute to aspects of daily living rather than just being cared for by staff\textsuperscript{27 56}. Thus, interventions perceived to be beneficial helped staff to see the person beyond the dementia, but also assisted practitioners in broadening their concept of the caregiving role. Moreover, SCUs where staff members played multiple and integrated roles, for example sharing responsibility for resident care, house-keeping and formal activities, encouraged staff to respond to the social and emotional, as well as the physical and medical needs of residents\textsuperscript{27 46}.

In attributing a greater range of meaning to residents’ behaviour, practitioners began to consider the importance of their own professional approach. Beneficial interventions fostered critical reflection in staff regarding how their own approach to care interactions might influence resident’s behaviour and reactions\textsuperscript{31 40 41}. As a result the focus shifted from the emphasis staff placed on the time pressures in the workplace to the importance of making time to help the person with dementia feel comfortable\textsuperscript{31 40}. Supervision provided a valuable forum for staff to reflect on their caregiving style\textsuperscript{40}. This appeared most beneficial when discussion extended to practical problems, rather than considering theoretical principles alone, and when staff were able to talk through the issues that arose from applying the intervention in their everyday work\textsuperscript{26 40 53}. Research methods that encouraged staff to share their
perceptions of the interventions with each other provided another useful opportunity to discuss barriers to implementation.\textsuperscript{33, 55}

**Conditions required for successful implementation**

The research studies demonstrated that people with dementia were entirely reliant on staff to access certain interventions, such as therapeutic gardens and listening to music, and suggested a shared expectation that staff would decide what to do, when to do it and what was allowed.\textsuperscript{20, 38, 39, 47} Certainly, care home staff played a crucial role in initiating, directing and maintaining activities. Structure provided people with dementia with a sense of security and direction, although Kovach (1996) observed that therapeutic activity groups with less structure and smaller numbers allowed greater opportunities for self expression and a focus on individual needs.\textsuperscript{30} Knowing the person emerged as one of the key benefits and determinants of a successful intervention. Staff not only used their knowledge of the individual to provide appropriate encouragement and motivation,\textsuperscript{30, 34, 38, 47, 51} but also to reassure residents and help them to feel comfortable and secure during interventions involving dance, music, and reminiscence.\textsuperscript{20, 24, 25, 45, 48} Knowing the person also proved invaluable in offering music and activities that were tailored to the preferences of the individual,\textsuperscript{29, 38, 42, 49} and the residents’ physical and cognitive abilities.\textsuperscript{23, 25, 37, 40, 48, 54} Finding the right level of complexity was considered important, but sometimes difficult to achieve. In a structured reminiscence programme involving 9 people with moderate dementia, tangible cues to focus memory replaced psycho-motor tasks, which were found to be too difficult.\textsuperscript{48} Conversely, the simple design of a “memory notebook” and the reliance on patients’ distant rather than recent memory for dancing were seen to contribute to their successful implementation.\textsuperscript{37}

Interacting with family members was found to assist staff in getting to know the likes, dislikes and capabilities of the person with dementia,\textsuperscript{20, 49, 55} and promoted mutual
appreciation and respect. Several studies reported creative methods of stimulating communication between relatives and staff such as ‘action groups’ and ‘family biography workshops’. Long-Foley (2003) concluded that the active involvement of family members in decision making, monitoring of case management and supporting staff ideas was critical to the successful management of behavioural problems in SCUs and should be fostered by encouraging participation in care planning (by conference call and evening meetings if necessary), activity planning, support groups and assisting staff with caregiving (if desired). A further condition for successful implementation was scope for the intervention to be delivered flexibly to accommodate the range of abilities and behaviour. This included flexibility regarding the pace of the intervention and the required level of engagement e.g. supporting residents in listening to the music if they did not wish to dance. Finally, there was also a suggestion that activities should occur across a sufficiently prolonged period to allow residents to develop confidence in the intervention e.g. enabling people with dementia to become familiar with the dog and volunteer in animal assisted therapy.

**Challenges to successful implementation**

Many of the interventions demanded extra work, reallocation of staff time and flexibility. For instance, the numerous practical prerequisites to dance events and attending ‘action group’ meetings or implementing music interventions all took time. Mostly, staff accepted this as a requisite feature of the intervention that was justified by the outcomes it produced, but there were instances where low staffing levels restricted the use of psychosocial interventions, denied staff the opportunity to experiment with or adjust to a new way of working or prompted the alternate use of pharmacological interventions. In a minority of cases, discussed below, staff did not feel that the benefits of the intervention warranted the extra workload. In response to concerns about staff pressures, several studies
stressed that activities such as singing, music and spending time outdoors had the potential to be incorporated into normal practice and the everyday care of people with dementia without placing extra demands on staff time\textsuperscript{20,39,42}.

There was a general sense that care professionals were being asked to implement psychosocial interventions against a ‘changing landscape’ of lower staff to resident ratios and heavier, more complex care needs among residents\textsuperscript{32,46}. This seemed to reinforce a focus among care staff on “priority needs” whereby managing behaviour took precedence. There was a strong emphasis on preventing or avoiding behavioural outbursts through accomplishing tasks as quickly as possible e.g. a focus on getting residents showered, rather than on how staff could best help residents during showering\textsuperscript{19,28,32,51}. Priority was given to aspects of physical care and safety rather than promoting autonomy and behaviours perceived as being potentially harmful were actively discouraged\textsuperscript{47}. Risk of physical harm, falling, or wandering were all considered barriers to implementing activities and exercise\textsuperscript{27,32,51}.

Attitudes of individual members of the care team presented further challenges to implementing psychosocial interventions. Some staff members were uncomfortable participating in the intervention itself, stating that they disliked singing, dancing, or going out into the garden\textsuperscript{24,39,42}. Kolonowski (2010) reported scepticism and a general lack of knowledge about the effectiveness of non-pharmacological interventions among care professionals who were not currently involved in their use\textsuperscript{32}. However, staff in only 2 of the 35 studies in this review questioned the therapeutic value of the intervention under study, commenting, for example, that nature related activities appeared quickly forgotten\textsuperscript{47,55}. Finally, there was evidence among some staff of a resistance to interventions of any sort, with staff finding meetings with researchers from “The University” threatening \textsuperscript{55} and believing that they had “nothing more to learn”\textsuperscript{53}. 
Discussion

The meta-synthesis identified a number of key issues that, if addressed, would help to enable the widespread implementation of psychosocial interventions in care homes. This includes the importance of providing individualised interventions that are tailored to the person’s preferences and abilities and of obtaining the full support of care staff. Staff members enable access to psychosocial interventions and provide essential encouragement and reassurance. Yet it is apparent that pressures on staff time, an associated focus on “priority needs” and a preoccupation with risk present enduring barriers to implementation. The findings offer unanimous support for the principles of person-centred care and have important implications for clinical practice and research, which will now be discussed.

While it is self-evident that psychosocial interventions require the involvement of care staff, the synthesis underlines the absolute necessity of their commitment, knowledge and skills. Too often staff members are reluctant participants in dementia care training. The meta-synthesis suggests an initial scepticism about non-pharmacological approaches that needs to be addressed prior to implementation. It is essential to demonstrate that psychosocial interventions are a valuable option. Collaborative approaches that acknowledge staff perspectives and expertise from the outset offer an important method of engagement. This involves listening to any preferences or concerns that staff members have about the intervention in question. Finally, it is essential to obtain the full support of managers given their role in facilitating interventions and effecting cultural change within the home. The synthesis attributes equal importance to the collaboration of relatives who help staff to get to know the person with dementia. Workshops and groups proved an effective method of fostering their involvement and ultimately enhanced cooperation and trust between relatives and the care team. This joint input, alongside flexibility in timing, duration and intensity, helped implement psychosocial interventions that were relevant to the
interests, abilities, and willingness of the individual. Of course the challenges involved in delivering a flexible, personalised intervention are magnified in controlled trials and this does not always occur, which may explain some of the ambiguous results reported \(^61\). A notable exception is the work of Cohen-Mansfield and colleagues \(^62\) that demonstrated the efficacy of systematic individualized non-pharmacological interventions for decreasing agitation, and increasing pleasure and interest, in nursing home residents with dementia. We concur that tailoring psychosocial interventions to individual profiles enhances their clinical usefulness.

However, the meta-synthesis indicates that the successful implementation of psychosocial interventions is also a question of resources and time. Organisational support is necessary to enable care staff to sustain good practice e.g. modifying work schedules, providing practice opportunities, and changing policy or treatment guidelines \(^63\). Training and mentoring programs can require a substantial time commitment. Again, it is important to justify this investment through educating managers and care staff on the benefits of psychosocial interventions, not only for improving residents' behaviour and mood, but also for creating more efficient care practices within the home. Yet the current climate of financial constraints demands that attention is also given to how psychosocial interventions, be it therapeutic activities, reminiscence work or staff training, can be embedded into daily care. Examples within the synthesis include playing individual's favourite music during morning care or enjoying meals outdoors. To a large degree, this requires educating staff on person-centred practices that recognise, respect and provide opportunity for individual's self-expression. Equally, it is important that staff take a person-centred approach to assessing risk that does not simply identify every person with dementia as being at equal risk \(^64\). The synthesis suggests that concerns around risk prevent staff from implementing certain activities. It is vital to challenge these perceptions
and to encourage staff to consider, alongside any physical risks, the negative psychological effects of not being able to participate in meaningful activities 64.

The findings are unequivocal that psychosocial interventions must be anchored in person-centred care. The synthesis underscores the fundamental importance of connecting with others and the benefits derived from social contact of different forms. Moreover, the desire to make a meaningful contribution and to reminisce mirror Kitwood’s (1997) psychological needs of occupation and identity 58. While no conclusions can be drawn about the relative effectiveness of the different interventions, the synthesis suggests that some psychosocial interventions are more likely to achieve these aims than others. For instance, reminiscence sessions provided opportunities to interact, to pass on values and experiences and to recall memories. This afforded multiple benefits; the challenge for controlled trials is how to measure the respective effects of the different active ingredients. Additionally, the synthesis offers support for certain procedures such as the use of volunteers, to allow residents to have social contact beyond the home, and concrete memory aids, which supported people in sharing memories with others. With respect to formal training for care staff, role plays, videos and vignettes emerged as an effective teaching method, as illustrated elsewhere 59. A striking finding of the synthesis was that merely participating in psychosocial interventions, such as life review work or music events, helped staff to see beyond the symptoms of dementia and to broaden their conceptualisation of the caregiving role. Yet, the findings also reinforce the importance of providing mechanisms for staff to reflect on their practice 59. Future intervention studies need to consider how supervision, peer support or audit practices can support staff without placing excessive burdens on resources.

Overall, the meta-synthesis presented a positive picture in which people with dementia, family and staff members derived important benefits from psychosocial
interventions. However, further well-designed research is needed to strengthen the evidence base for psychosocial interventions in long term care\textsuperscript{5}. Randomised controlled trials of complex interventions could be enhanced by integrating outcome evaluations with process evaluations that utilise qualitative methods\textsuperscript{7}. For example, future trials could include focus group discussions with care staff to understand and inform the process of implementation and to increase their collaboration in the research programme. The revised implementation plan for the National Dementia Strategy\textsuperscript{65} and parallel review of anti-psychotic medication for people with dementia\textsuperscript{66} afford a unique opportunity to move forward on a national basis and develop a better trained workforce that is skilled in delivering psychosocial interventions and care. Combining quantitative and qualitative methods in clinical trials to identify “what works” and “how and why it works” in different circumstances can help to develop and deliver effective psychosocial interventions in real clinical settings.

**Limitations**

The study used rigorous methods for systematic review that included a comprehensive search of 7 electronic databases, relevant journals and publications of influential research groups using predetermined criteria. Qualitative meta-synthesis offers a systematic, relevant overview of international qualitative research whilst retaining much of the detail that individual studies provide. However, there is a risk that synthesising across qualitative studies could compromise the integrity of the individual projects, and their emphasis on context and holism\textsuperscript{8}. We are mindful that this review identified a heterogeneous set of studies ranging in care setting, intervention type and methodological design. For this reason we provide comprehensive details about the primary studies in Table 1 to convey the context of the study. Findings were also compared with reference to the study context and efforts were made to identify conflicting results. We also recognise that the sample size is large for a meta-synthesis, but are satisfied that the scope of the review was
sufficiently focussed and believe that the range of data assisted in identifying the properties and dimensions of the key concepts. As a consequence, the analytical themes presented in the synthesis offer a high level of conceptual thinking about the implementation of psychosocial interventions that can be applied across groups and settings.

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**Contributors:** CB originated the study, all authors contributed to either the design of the review or the analysis and interpretation of data. VL produced the first draft of this paper all authors commented on it and contributed to the submitted version.

**Figure 1:** Study selection process
Identification

Medline (n=125)  PsycINFO (n=69)  Embase (n=322)  BNI (n=18)  ASSIA (n=322)  CINAHL (n=416)  SIGLE (n=1622)

Potentially relevant citations after duplicates removed (n=2384)

Articles screened on basis of title and abstract (n=2384)

Articles excluded (n=2271)

Full text articles assessed for eligibility (n=123)

Full articles excluded (n=84)
Descriptive n=29
Quantitative n=26
Exploratory n=7
Theoretical n=6
Intervention not based on psychological / social model n=6
Outcome unrelated to person with dementia n=5
Other care settings n=4
No methods n=1

Relevant papers to include in qualitative synthesis (n=39)

Individual studies n=35

Included

Screening

Eligibility

Included
<table>
<thead>
<tr>
<th>Reference</th>
<th>Interventions</th>
<th>Aim / research question</th>
<th>Country</th>
<th>Care setting</th>
<th>Participants</th>
<th>Data collection</th>
<th>Methodology</th>
<th>Data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aveyard (2006)²⁵</td>
<td>Action group involving staff and relatives</td>
<td>To explore ways of collaborative working to create a more positive environment for people with dementia and carers</td>
<td>England</td>
<td>40 place nursing home for people with dementia</td>
<td>7 relatives, 18 staff</td>
<td>Semi-structured interviews (relatives, staff) Group discussion (staff)</td>
<td>Constructivist approach</td>
<td>Inductive data analysis</td>
</tr>
<tr>
<td>Dupuis (1996)²⁶</td>
<td>Special Care Unit</td>
<td>How do staff and relatives perceive SCU’s as befitting residents with dementia?</td>
<td>Canada</td>
<td>24 bed Special Care Unit</td>
<td>14 relatives, 14 staff</td>
<td>Structured interviews (relatives, staff)</td>
<td>Not stated</td>
<td>Constant comparison analysis</td>
</tr>
<tr>
<td>Eggers (2005)²⁴</td>
<td>Interaction to counteract fragmentation</td>
<td>To Illuminate fragmentation and how carers counteract fragmentation</td>
<td>Sweden</td>
<td>18-bed psychogeriatric ward</td>
<td>15 people with dementia, 7 nurses, 9 nurse aides</td>
<td>Participant observations</td>
<td>Not stated</td>
<td>Interpretative content analysis</td>
</tr>
<tr>
<td>Emilsson (2006)²³</td>
<td>Process orientated supervision</td>
<td>Could process orientated supervision serve as a pedagogic method for training and supporting caregivers and managers?</td>
<td>Sweden</td>
<td>2 group homes with 8 residents with dementia</td>
<td>15 caregivers, 6 managers</td>
<td>Semi-structured interviews (staff) Participant observations</td>
<td>Action research</td>
<td>Thematic analysis</td>
</tr>
<tr>
<td>Fraser (2008)²²</td>
<td>Doll therapy</td>
<td>To investigate the reasons why doll therapy might lead to therapeutic benefits</td>
<td>England</td>
<td>Residential care settings</td>
<td>8 care professionals with experience of doll therapy</td>
<td>Interviews (staff)</td>
<td>Grounded theory</td>
<td>Constant comparison analysis</td>
</tr>
<tr>
<td>Galik (2009)²¹</td>
<td>Restorative care</td>
<td>To explore facilitators and barriers to engaging cognitively impaired residents in functional activities and exercise</td>
<td>USA</td>
<td>66-bed nursing home</td>
<td>7 nursing assistants</td>
<td>Focus group (staff)</td>
<td>Not stated</td>
<td>Content analysis</td>
</tr>
<tr>
<td>George (2011)²⁰</td>
<td>Inter-generational volunteering</td>
<td>To investigate whether a structured intergenerational</td>
<td>USA</td>
<td>Assisted living facility (several in locked)</td>
<td>8 people with dementia</td>
<td>Interviews (relatives, staff) Participant</td>
<td>Modified grounded theory</td>
<td>Constant comparison analysis</td>
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<tr>
<td>Study</td>
<td>Title</td>
<td>Research Questions</td>
<td>Country</td>
<td>Setting</td>
<td>Participants</td>
<td>Data Collection</td>
<td>Analysis Method</td>
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<td>Gerdner (2005)</td>
<td>Individualised music intervention</td>
<td>What are participants’ responses to individualised music and the barriers and facilitators to implementation?</td>
<td>USA</td>
<td>81 bed intermediate skilled facility</td>
<td>8 relatives, 10 staff</td>
<td>Open ended interviews (relatives, staff)</td>
<td>Not stated</td>
<td></td>
</tr>
<tr>
<td>Gibb (1997)</td>
<td>Biographical Self Reflection</td>
<td>To understand the purpose of storytelling in people with dementia’s lives</td>
<td>Australia</td>
<td>Cottage in an extended care setting</td>
<td>9 people with dementia</td>
<td>Research sessions recorded Focus groups (people with dementia)</td>
<td>Not stated</td>
<td></td>
</tr>
<tr>
<td>Gibson (2007)</td>
<td>Nature related activities</td>
<td>To determine if and how nature was important to people with dementia and difficulties experienced in participating in such activities</td>
<td>England</td>
<td>2 x 40-bed residential homes</td>
<td>10 people with dementia, 13 relatives, 10 professionals</td>
<td>Semi-structured interviews (people with dementia, staff) Focus groups (relatives, staff)</td>
<td>Principles of grounded theory Thematic analysis</td>
<td></td>
</tr>
<tr>
<td>Gnaedinger (2003)</td>
<td>Client centered model of care</td>
<td>To examine front line workers’ experience and assessment of “resident centered” dementia care</td>
<td>Canada</td>
<td>4 long term care facilities</td>
<td>8 practice leaders, 30 front line staff</td>
<td>In-depth interviews (practice leaders) Focus groups (staff)</td>
<td>Not stated</td>
<td></td>
</tr>
<tr>
<td>Gottell (2000)</td>
<td>Music events</td>
<td>To illuminate the importance of music events and reactions and social interactions of people with dementia and caregivers before, during and after such events</td>
<td>Sweden</td>
<td>Special Care Unit ward</td>
<td>48 people with dementia, 35 staff</td>
<td>Participant observation Informal interviews (people with dementia, staff)</td>
<td>Ethnography Thematic analysis</td>
<td></td>
</tr>
<tr>
<td>Gottell (2002)</td>
<td>Music and caregiving</td>
<td>To illuminate the influence of music and singing on</td>
<td>Sweden</td>
<td>24 bed Special Care Unit</td>
<td>9 people with dementia, 5</td>
<td>Non-participant observation Interpretation theory</td>
<td>Phenomenological-hermeneutic</td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Title</td>
<td>Method</td>
<td>Country</td>
<td>Setting</td>
<td>Sample Size</td>
<td>Data Collection</td>
<td>Analysis Method</td>
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</tbody>
</table>
| Gottell (2003)<sup>43</sup>  
See above | Music and caregiver singing | verbal communication between people with dementia and caregivers | Sweden | 24 bed Special Care Unit | 9 people with dementia | Non-participant observation (video recordings) | Not stated | Content analysis |
| Gottell (2009)<sup>42</sup>  
See above | Music and caregiver singing | To illuminate the influence of music and singing on vocally expressed emotion and moods in the communication between people with dementia and caregivers | Sweden | 24 bed Special Care Unit | 9 people with dementia | Non-participant observation (video recordings) | Not stated | Content analysis |
| Hagens (2003)<sup>41</sup> | Remembering boxes | To develop and evaluate a communication tool to extend the benefits of reminiscence therapy to the entire social environment | Canada | Nursing home | 5 people with dementia | Participant observation  
Informal interviews (relatives, people with dementia, staff) | Action research | Not stated |
| Hansebo (2000)<sup>40</sup> | Supervision using resident assessment instrument | To compare patients’ life stories and current situations as told by carers before and after 1 year of supervision | Sweden | 3 nursing homes wards | 30 staff (7 registered nurses, 23 nursing assistants) | Interviews (staff) | Not stated | Content analysis |
| Hernandez (2007)<sup>39</sup> | Therapeutic gardens | What effect do therapeutic gardens have on the quality of life of residents? | USA | 2 dementia care units | 28 staff, 12 relatives, 5 architects | Interviews (relatives, staff, architects) | Not stated | Thematic analysis |
| Holthe (2007)<sup>38</sup> | Weekly programme of group activities | How can residents’ occupational patterns be described and how do they perceive the | Norway | Residential care home with 8 residents | 8 people with dementia | Interviews (people with dementia)  
Participant observation | Ethnography | Ethnography analysis |
<table>
<thead>
<tr>
<th>Study</th>
<th>Type</th>
<th>Context</th>
<th>Participants</th>
<th>Data Collection</th>
<th>Analysis Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson (1997)&lt;sup&gt;37&lt;/sup&gt;</td>
<td>Memory notebook</td>
<td>To explore the effectiveness and reasons for the effectiveness of a memory notebook in reducing problematic behaviour of persons with dementia</td>
<td>USA</td>
<td>Private personal care facility</td>
<td>4 people with dementia and their relatives</td>
</tr>
<tr>
<td>Katsinas (2000)&lt;sup&gt;36&lt;/sup&gt;</td>
<td>Canine companion</td>
<td>To report the roles that a canine companion was able to fulfil within a therapeutic day program for institutionalised nursing home residents with dementia</td>
<td>USA</td>
<td>3 wards for people with dementia in nursing home facility</td>
<td>12 people with dementia</td>
</tr>
<tr>
<td>Kawamura (2009)&lt;sup&gt;35&lt;/sup&gt;</td>
<td>Animal Assisted Activity (AAA)</td>
<td>How do institutionalised Japanese older adults, who had been participating in AAA for 2 years, perceive the activity?</td>
<td>Japan</td>
<td>Private nursing home</td>
<td>8 people with dementia</td>
</tr>
<tr>
<td>Kellet (2010)&lt;sup&gt;34&lt;/sup&gt;</td>
<td>Family Biography Workshop (FBW)</td>
<td>To assess the influence of participation in the FBW and the impact of developing biographical knowledge</td>
<td>Australia</td>
<td>Residential care</td>
<td>7 relatives, 7 people with dementia, 7 staff</td>
</tr>
<tr>
<td>Kemeny (2004)&lt;sup&gt;33&lt;/sup&gt;</td>
<td>Person centred care training and mentoring</td>
<td>To examine whether the effects of person-centered care and person-centered mentoring were sustained post-intervention from the perspective of long-term nursing staff</td>
<td>USA</td>
<td>Not stated</td>
<td>Nurses, certified nurse assistants and administrators</td>
</tr>
<tr>
<td>Study (Year)</td>
<td>Interventions</td>
<td>Objectives</td>
<td>Setting</td>
<td>Sample Size</td>
<td>Data Collection Methods</td>
</tr>
<tr>
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<tr>
<td>Kolanowski (2010)</td>
<td>Non-pharmacological interventions</td>
<td>To elicit staff perceptions of barriers to the implementation of non-pharmacological interventions for behavioural and psychological symptoms of dementia</td>
<td>USA</td>
<td>6 long-term care facilities</td>
<td>35 staff members including nursing staff and recreational therapy staff</td>
</tr>
<tr>
<td>Kontos (2010)</td>
<td>Drama based educational intervention</td>
<td>To evaluate the effectiveness of a drama based education intervention to introduce dementia care practitioners to person-centred care</td>
<td>Canada</td>
<td>32-bed and 40-bed nursing homes</td>
<td>24 practitioners</td>
</tr>
<tr>
<td>Kovach (1996)</td>
<td>Therapeutic activities</td>
<td>To reflect on the experience of participating in therapeutic activities</td>
<td>USA</td>
<td>2 12-bed Special Care Units</td>
<td>23 people with dementia</td>
</tr>
<tr>
<td>Kydd (2001)</td>
<td>Music therapy</td>
<td>To examine the effects of music therapy in the transition to a long term care setting</td>
<td>Canada</td>
<td>263-bed non-profit, long-term facility</td>
<td>One person with dementia</td>
</tr>
<tr>
<td>Long Foley (2003)</td>
<td>Management of severe behavioural problems in Special Care Unit</td>
<td>To examine the management techniques of staff and family participation in the management of severe behavioral problems</td>
<td>USA</td>
<td>36 nursing homes in Special Care Units</td>
<td>36 members of staff</td>
</tr>
<tr>
<td>McAllister (1999)</td>
<td>Specialised residential Alzheimer’s facility</td>
<td>To compare the community development in a specialized residential Alzheimer’s facility with a traditional nursing home</td>
<td>USA</td>
<td>Special Care Unit and traditional nursing home</td>
<td>8 people with dementia</td>
</tr>
<tr>
<td>Study</td>
<td>Methodology</td>
<td>Research Question</td>
<td>Setting</td>
<td>Sample Size</td>
<td>Data Collection</td>
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<tr>
<td>McKeown (2010)</td>
<td>Life Story Work (LSW)</td>
<td>To investigate how life story work is understood and developed in practice, experienced by all participants and affects the delivery and outcomes of care</td>
<td>England</td>
<td>2 assessment ward, 1 intermediate care ward, 1 day centre</td>
<td>4 people with dementia</td>
</tr>
<tr>
<td>Palo-Bengtsson (1998)</td>
<td>Social dancing</td>
<td>To examine how people with dementia function in social dance sessions</td>
<td>Sweden</td>
<td>Nursing home including 3 wards for people with dementia</td>
<td>6 people with dementia</td>
</tr>
<tr>
<td>Palo-Bengtsson (2000)</td>
<td>Social dancing</td>
<td>To illuminate the phenomenon of dance events as a caregiver intervention</td>
<td>Sweden</td>
<td>Nursing home including 3 wards for people with dementia</td>
<td>7 staff members</td>
</tr>
<tr>
<td>Palo-Bengtsson (2002)</td>
<td>Social dancing</td>
<td>What is the emotional reaction shown in people with dementia during social dancing and walks?</td>
<td>Sweden</td>
<td>Nursing home including 3 wards for people with dementia</td>
<td>6 people with dementia</td>
</tr>
<tr>
<td>Patton (2006)</td>
<td>Reality orientation</td>
<td>How do psychiatric nurses use reality orientation and perceive its effectiveness?</td>
<td>Ireland</td>
<td>Older person inpatient mental health care unit</td>
<td>6 nurses</td>
</tr>
<tr>
<td>Perry (2005)</td>
<td>Communication strategies</td>
<td>To describe the communication strategies used in communicating with residents with dementia and to assess the effectiveness of these strategies in supporting</td>
<td>USA</td>
<td>3 units in extended care facility</td>
<td>8 people with dementia</td>
</tr>
<tr>
<td>Study</td>
<td>Area of Inquiry</td>
<td>Methodology</td>
<td>Setting</td>
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<tr>
<td>Sixsmith (2007)</td>
<td>Activities involving music</td>
<td>To explore the role of music in terms of: the meaning of music in everyday</td>
<td>England</td>
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<tr>
<td></td>
<td></td>
<td>life; the benefits derived from participating in music-related activities;</td>
<td>2 residential care homes</td>
<td></td>
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<td></td>
<td></td>
<td>and the problems of engaging in music</td>
<td>8 people with dementia living in care homes (plus others in community)</td>
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<td>Open-ended interviews (people with dementia)</td>
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<td>Informal interviews (staff)</td>
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<td></td>
<td>Not stated</td>
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<td></td>
<td>Content analysis</td>
<td></td>
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<tr>
<td>Skovdalh (2003)</td>
<td>Interaction styles</td>
<td>To illuminate interactions between people with dementia and aggressive</td>
<td>Sweden</td>
<td></td>
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<td></td>
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<td>behaviour and caregivers who did / did not report problems dealing with</td>
<td>Two units housing people with dementia</td>
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<td></td>
<td></td>
<td>such behaviour</td>
<td>Two people with dementia and 9 caregivers</td>
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<td>Non-participant observation (video recording)</td>
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<td>Phenomenological approach</td>
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<td></td>
<td>Phenomenological method</td>
<td></td>
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</tr>
<tr>
<td>Spalding (2010)</td>
<td>Existential and process-work approaches to</td>
<td>What do effective existential and process-work approaches to psychotherapy</td>
<td>USA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>psychotherapy</td>
<td>look like with people with dementia in a residential facility?</td>
<td>Assisted living facility consisting of 100 residents with mild –</td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td>advanced dementia</td>
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<td></td>
<td></td>
<td></td>
<td>10 therapist interns</td>
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<td></td>
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<td></td>
<td>Semi-structured interviews (staff)</td>
<td></td>
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<td></td>
<td></td>
<td>Thematic analysis</td>
<td></td>
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</tbody>
</table>
Table 2: Taxonomy of findings pertaining to implementation of psychosocial interventions in care homes

<table>
<thead>
<tr>
<th>Beneficial elements of a psychosocial intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Focus on people with dementia</strong></td>
</tr>
<tr>
<td>1.1 Connecting with others</td>
</tr>
<tr>
<td>▪ Line of communication 20 29 35-37 41 49 52</td>
</tr>
<tr>
<td>▪ Bringing the world in 35 36 50</td>
</tr>
<tr>
<td>▪ Mutual understanding 20 23 25 44</td>
</tr>
<tr>
<td>▪ Social inclusion 38 52 56</td>
</tr>
<tr>
<td>1.2 Meaningful contribution 48 50 52 56</td>
</tr>
<tr>
<td>1.3 Opportunity to reminisce 20 25 29 35-37 41 45 48 52</td>
</tr>
<tr>
<td><strong>2. Focus on staff</strong></td>
</tr>
<tr>
<td>2.1 Seeing beyond the illness</td>
</tr>
<tr>
<td>▪ Learning personal histories 26 32 40 41</td>
</tr>
<tr>
<td>▪ Seeing the person in a family context 28 31 34 32 36</td>
</tr>
<tr>
<td>▪ Dismantling “us” and “them” 19 23 27 31 32 56</td>
</tr>
<tr>
<td>2.2 Examining approach to care</td>
</tr>
<tr>
<td>▪ Awareness of approach to care 31 40 41</td>
</tr>
<tr>
<td>▪ Opportunities for reflection 26 33 40 53 55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conditions required for successful implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Reliance on staff</strong></td>
</tr>
<tr>
<td>1.1 Providing access 20 38 39 47</td>
</tr>
<tr>
<td>1.2 Knowing the person</td>
</tr>
<tr>
<td>▪ Provide appropriate encouragement 30 34 38 47 51</td>
</tr>
<tr>
<td>▪ Provide appropriate reassurance 20 24 25 33 45 48</td>
</tr>
<tr>
<td>▪ Tailor the intervention to preferences 29 38 42 49</td>
</tr>
<tr>
<td>▪ Tailor the intervention to abilities 23 25 37 40 48 54</td>
</tr>
</tbody>
</table>
2. **Active involvement of the family**

3. **Flexibility**

**Challenges to successful implementation**

1. **Pressures on time and staffing**

2. **Institutional philosophy**
   - Focus on “priority needs”
   - Avoidance of risk

3. **Attitudes of staff**
   - Uncomfortable with intervention
   - General resistance
References


50. George DR. Intergenerational volunteering and quality of life: mixed methods evaluation of a randomized control trial involving persons with mild to moderate dementia. *Quality of Life Research* 2011;Jan 9 [Epub ahead of print]
51. Galik E, M., Resnick B, Pretzer-Aboff I. 'Knowing what makes them tick':
Motivating cognitively impaired older adults to participate in restorative care.

52. Fraser F, James I. Why does doll therapy improve the well-being of some older

53. Emilsson UM. Supervision as pedagogy and support in the Swedish eldercare - A
developmental project. *Journal of Gerontological Social Work* 2006;47(3-4)
(pp 83-102):ate of Pubaton: 2006.

54. Eggers T, Norberg A, Ekman S. Counteracting fragmentation in the care of people
with moderate and severe dementia. *Clinical nursing research*

55. Aveyard B, Davies S. Moving forward together: evaluation of an action group
involving staff and relatives within a nursing home for older people with

56. Dupuis M, Dobbelsteyn J, Ericson P. Special care units for residents with
Alzheimer's (investigating the perceptions of families and staff). *Canadian

57. Barbour R, S. Checklists for improving rigour in qualitative research: a case of the

58. Kitwood T. *Dementia Reconsidered: The Person Comes First.* Buckingham: Open

Nursing home staff training in dementia care: a systematic review of evaluated

60. Lawrence V, Banerjee S. Improving care in care homes: a qualitative evaluation
of the Croydon care home support team. *Aging & Mental Health*

61. Cohen-Mansfield J. Nonpharmacological interventions for inappropriate
behaviours in dementia. A review, summary, and critique. *American Journal

62. Cohen-Mansfield J, Libin A, Marx M, S. Nonpharmacological treatment of
agitation: a controlled trial of systematic individualized intervention. *Journal

63. Aylward S, Stolee P, Keat N, Johncox V. Effectiveness of continuing education in

64. Manthorpe J, Moriarty J. 'Nothing ventured, nothing gained: risk guidance for


66. Banerjee S. The use of antipsychotic medication for people with dementia: Time
for action