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Use of the life story in the institutional care of people with dementia: a review of intervention studies

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ABSTRACT

This paper reports a systematic review of 28 evaluations of interventions that aimed to describe the benefits of the use of the life story for nursing-home residents with dementia, particularly with reference to their sense of identity. The 28 studies were published during 1990–2003. The review focuses on the methodology of the evaluations, and on how the studies contributed to our understanding of the value of using a resident's life story in care interactions. The studies were divided into three groups by the purpose of the intervention: to raise self-esteem and self-integration; to improve life quality; and to change behaviour. The features of the interventions that were associated with enhanced sense of identity were a thorough and encompassing treatment of the individual's life story, the translation of the life story into care interactions, and active encouragement of the residents' initiatives. Only one intervention had all of these features. The diverse aims and forms of the interventions were mirrored by the diverse methodologies of the evaluation studies. Recently the trend has been towards more rigorous designs that measure a few precisely-defined quantitative outcomes but at the cost of a narrower appreciation of the impacts. Given that there is still a great deal to learn about how best to deliver sensitive, individualised and effective support and care to people with dementia, it is argued that qualitative assessments have been too hastily discontinued.

KEY WORDS – life story, intervention evaluations, institutional care, dementia, systematic review.

Introduction

During the last 20 years in northwest European countries, the use of written biographies, photographs and other memory aids has increased in the care of nursing-home residents with dementia, and indeed the use of the life story has become an element of good practice in dementia care

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(Kitwood 1997). The growing interest in the therapeutic use of residents' biographies reflects changes in our conception of what it means to suffer from dementia and in the principles and aims of the care of older people with the disorder. In contemporary western societies, older people with serious cognitive impairments are rarely cared for at home by their families, and in many countries small nursing or care homes, in which both the residents and the staff came from the same neighbourhood and had shared histories and ways of life, are being replaced by larger homes in which the staff, while more highly trained, have less knowledge of the residents' backgrounds or the local social context. To compensate for the increasing 'distance' between residents and staff, knowledge about the residents' pasts must be systematically collected and assimilated to enable the staff to deliver individualised and personalised care.

Given the severely deteriorating memory and communication abilities of those with dementia, practices that are believed to be important in the care of the generality of frail and older nursing-home residents are not necessarily appropriate. The view that carers should know and use the life story in the care of people with dementia is grounded in the belief that the preservation of the self is possible. Kitwood and his colleagues and followers argued that the emphasis on personhood and subjectivity in dementia care evinces a change in the practice paradigm, from the medical model's emphasis on the deteriorating brain and impaired functions, to a humanistic emphasis on seeing the dementia sufferer as a person capable of having experiences, and on giving close attention to the physical, social and cultural contexts (Kitwood and Bredin 1992; Kitwood 1997; Sabat 1998; Woods 2001).

The change has been accompanied by advocacy for and the spread of new kinds of interventions, notably Reality Orientation (RO), Validation Therapy (VT) and Reminiscence Therapy (RT). The original aim of RO, as first developed for older people with dementia, was to reduce confusion by giving repeated orientation clues, *e.g.* the time of day, date and season, but this was only partially successful. Researchers suggested that the main benefits were the stimulation of the social group and the positive impact on staff, who acquired a better knowledge of the residents and their earlier lives and interests, through which they were able to provide more person-oriented care (Baines, Saxby and Ehlert 1987; Kasl-Godley and Gatz 2000). The premises of VT are that even confused and disoriented old people have an inner world of emotions and experiences that must be accepted as valid, and that it is important to see the person's life story behind the presenting dementia symptoms (O'Donovan 1996; Bleathman and Morton 1996). The theoretical base of the intervention has often been criticised, but VT's stress on the experiences of people with dementia and on emotional aspects of communication constituted a major change in dementia care (Kitwood 1997).

The third of the interventions, Reminiscence Therapy, has had the strongest effect on both care practice and research-into-practice, as shown in both benchmark publications (*e.g.* Bornat 1994; Haight and Webster 1995; Webster and Haight 2002) and recent papers (*e.g.* Brooker and Duce 2000; Hoerster, Hickey and Bourgeois 2001). The aim of RT is to enhance the quality of life for dementia sufferers by strengthening their sense of identity and through positive interactions with others (Dahl 1999; Gynnerstedt and Scharbau 2000). The origination of RT has been attributed to Robert Butler's pioneering paper of 1963 (republished 1964), 'The life review: an interpretation of reminiscence in the aged' (Kitwood 1997; Dahl 1999; Kasl-Godley and Gatz 2000). Butler challenged the hitherto dominant view that the process of reminiscence in older people is either a symptom of mental disease or encourages 'living in the past', *i.e.* a psychosocial dysfunction. He postulated that reminiscence and the accompanying life review are attempts to resolve or integrate old conflicts before death. Butler's ideas were later developed for the care of dementia sufferers, individually or in groups, by using prompts to reminiscence such as photographs, artefacts and music (Kitwood 1997; Dahl 1999; Spector *et al.* 2000).

The systematic literature review

Recent reviews of studies of the use of the life story as a care intervention have focused on the behaviour outcomes. Finnema *et al.* (2000) reviewed emotion-oriented care approaches and their effects on behaviour and interaction; Lou (2001) reviewed the effects of music therapy on various behaviour problems; and Spector *et al.* (2000) assessed the effectiveness of reminiscence therapy on well-defined parameters of behaviour and cognition. The present review aims, in contrast, to collate what has been learned about the use of residents' life stories during care interactions in institutional settings on the residents' sense of identity. It adopted Gibson's (2005) comprehensive definition of 'life story work' as encompassing the various ways of engaging people by reference to their personal histories and recall of the personal past, *e.g.* talk in structured-reminiscence or life-review sessions, music or artefacts.

A search for relevant publications was conducted in *Medline*, *CINAHL* and *PsychINFO*.[1] The search was limited to studies in English, German, French, Norwegian, Swedish and Danish, and completed in September 2003. The search terms *dementia* and *care/nursing* were combined with *intervention, reminiscence, life story, life-history-review, memory aids, music therapy, identity* and *self*. Because the methodological rigour and the validity of the reported outcome effects was not the focus of the review, but rather the nature of the interventions, it was inappropriate to differentiate papers in scholarly and professional journals. A conventional critique of the studies will be provided in the discussion section. The abstracts were read to decide if the life story or part of it was addressed or described in the interactions between nursing-home residents with dementia and researchers, therapists or staff. The search identified 28 studies published during 1990–2003. Through that period, the number of studies burgeoned and they gained in cogency. Not all the included studies were, strictly speaking, intervention evaluations. Jones, Zeiss and Taylor (in a study reported in Woods *et al.* 1992), for example, assessed the feasibility of compiling life stories, and concluded that the residents found the process satisfying. Most of the studies were of uses of the life story in structured sessions that were conducted by researchers or therapists for limited periods, and its uses in routine daily care were seldom involved. As a consequence, the analysis in this review assessed the extent and ways in which the interventions achieved an enhanced sense of identity for demented nursing-home residents during their interactions with staff.

Categorising the interventions

The first step was to categorise the interventions described in the 28 publications. The most striking discriminator was the purpose of the intervention, and three were identified: to raise self-esteem and self-integration, to improve life quality and, the least ambitious, to change behaviour. These three labels were synonymous with the explicitly described purposes, particularly for the second and third category studies. The stated aims of the first category interventions were more diverse, but all expressed variants of 'to improve self-esteem and self-integration'. Other attributes of the interventions, such as whether they used individual sessions or group work, the size of the group and the duration of the interventions, did not reveal important differences. Individual sessions and group work were used for widely different purposes, and with different designs. Individual work was used, for example, to enhance integrity by story telling (Gibb, Morris and Gleisberg 1997), and to decrease problematic behaviour using audio-tapes with head-phones (Woods and Ashley 1995). One group intervention used multi-sensory, collective prompts to increase the sense of self, (Jensen and Wheaton 1997), and another used music and collective themes to enhance participation

(Christie 1995). The group sizes ranged from five to 10 participants, without any apparent relation to the purpose. Two evaluations reported that larger groups (Olsen, Hutchings and Ehrenkrantz 2000), and large and unformed groups (Gibson 1994: 1), reduced the beneficial effects. The duration of the interventions varied, surprisingly, from only a few sessions for an intervention that aimed to enhance self-knowledge (Rentz 1995), to one hour a week for 30 weeks for an intervention designed to improve mood, behaviour and sociability (Morton and Bleathman 1991).

It was expected that other attributes, such as the type and stage of dementia, would have been important differentiators of the interventions and their outcomes, but eight of the 28 publications did not specify the stage of dementia, and where it was reported, the connection with the form of the intervention was seldom made clear. The most frequently mentioned type of dementia was Alzheimer's disease, but this diagnosis was established in only 14 studies. The 28 studies were therefore categorised by the three types of intended change: in self-esteem and self-integration (SE), in quality of life (LQ), and in behaviour (BE). The main features of the interventions and of the evaluation studies in the three categories are set out in Tables 1–3. The tables list the publications alphabetically by first authors and give the serial numbers that are used subsequently in this paper.

The analysis concentrates on those features of the interventions that addressed the sense of identity among the residents during their interactions with staff. If this goal was to be achieved, it was believed that the interventions needed to involve thorough and encompassing attention to the residents' individual life stories, and that the researchers would focus on the quality of routine daily care. The interventions and the evaluation studies are first considered one-by-one, after which we review the important features of the interventions and the evaluations in the three groups. The final discussion section examines recent methodological trends and the comparative merits of qualitative and quantitative evaluations.

The aims and nature of the interventions

Group SE: Interventions to raise self-esteem and self-integration

SE1. Ashida (2000) studied reminiscence sessions that were based on listening to music and followed by interchanges about related topics of mutual interest to the therapist and the participants. The outcome measures were the changes in depression and participation among the residents. It was found that the participants had reduced depressive symptoms, and that

TABLE 1. *Group SE: Interventions to change self-esteem and self-integration*

	Authors	Organisation and group size	Participants	Duration	Purpose	Prompts	Type	Evaluation
1	Ashida 2000	*c.* 5, led by therapist	D	45 mins daily for five days	Ease depression	P, C	Drumming, familiar songs,music	QL/QN/AN
2	Gibb *et al.* 1997	Individually or small groups, led by researcher	mAD and MID	Twice weekly for 7 months	Seeking integrity by story telling	P, C	Music, photos, visual and verbal prompts	QL/AN
3	Jensen and Wheaton 1997	6–10, regularly, led by researcher	AD, D	90 mins per week for 6 months	Increasing sense of self and preservation of self	C	Multi-sensory, art, movement, music	QL/AN
4	Jones *et al.* 1992	Individual, conducted by researcher	mmD	5–10 interviews over three months	Possibility of conducting life reviews	P	Collecting life stories	QL/AN
5	Kydd 2001	Individual, conducted by therapist	AD	30 mins once a week for several weeks	Adjustment to life in long term care by integration of past roles	P	Favourite personal music	QL/AN
6	Rentz 1995	Individual, conducted by researcher	AD (2s, 1m)	2 sessions, 5 sessions	Recognition of self and self-knowledge	P	Personal photographs	QL/AN
7	Tabourne 1995	10, led by therapist	AD or SCAD	Twice weekly for 12 weeks	Integration of past by life review	P, C	Themes of life progression	QL/QN
8	Wilkinson *et al.* 1998	*c.* 5, led by therapist	mmD	1 hour 45 mins per week for six months	Increased self-esteem	P, C	Character and role play group, dance and movement group	QL/QN/AN

Notes: Participants: D with dementia; AD Alzheimer's dementia; MID micro-infarct dementia; m moderate; SCAD severe cognitive or affective disorders; mm mild and moderate; s severe. Prompts: P personal; C collective, from shared, cultural past. Evaluation: QL qualitative; QN quantitative; AN anecdotal.

TABLE 2. *Group LQ: Interventions to change life quality*

	Authors	Organisation	Participants	Duration	Purpose	Prompts	Type	Evaluation
1	Brooker and Duce 2000	*c.* 8, led by therapist, staff in group	mmAD, vascular	40 mins for each of three different activities for two consecutive weeks	Wellbeing	C	Themes prompted by multi-sensory materials	QL/QN
2	Gibson 1994, 1	6–10 and 11–13, led by researchers, staff in groups	D, non-D	90 mins weekly for 10 months	Pleasure and enjoyment	P, C	Themes, prompted by multi-sensory materials	QL
3	Gibson 1994, 2	Individual, conducted by senior care assistants	D, tt	10 months	Improvement of life quality	P	Compilation of life stories	QL
4	Götell *et al.* 2000	4–8, led by researcher, staff in group	D or suspected D	2 mornings a week, up to 17 weeks	Improvement of social interaction	P, C	'Name songs', familiar songs, memories, current season	QL
5	Head *et al.* 1990	Gr.1: 6, Gr.2: 4, led by therapist, staff in groups	D day-care clients, 2 settings	1 hour a week for six weeks	Increased interaction	P, C	Gr.1: P pictures; Gr.2: C memorabilia and artefacts	QL/QN
6	Kovach and Henschel 1996	Individual and group of 8–15, conducted by researchers	mCI and D	6 activities per day observed for 6 months	Assessing attraction of activities	P, C	5 types of activities, reminiscence, interviews	QL
7	Morton and Bleathman 1991	5, led by therapist	D	1 hour a week for 6 weeks	Bettering mood, behaviour and sociability	P, C	RT: audiovisual aids VT: topics of universal feelings (also conflicts)	QL/QN
8	Olsen *et al.* 2000	Small groups <15–20. Large groups: >15–20. Led by therapist	msAD	Observation *c.* 20 hours	Meaningful and enjoyable activity	C	Nostalgic music and videos	QL/QN
9	Rentz 2002	Group size not stated, led by skilled art facilitators, staff as observers	Early to middle stages D	Weekly art programme, observed in one 60 mins session	Well being	P, C	Painting and recreating memories	QL/QN

Notes: Participants: D with dementia; AD Alzheimer's dementia; CI cognitively impaired; m moderate; mm mild and moderate; s severe; tt troubled or troubling behaviour. Prompts: P personal; C collective, from shared, cultural past; RT reminiscence therapy; VT Validation therapy. Evaluation: QL qualitative; QN quantitative.

TABLE 3. *Group BE: Interventions to change behaviour*

	Authors	Organisation	Participants	Duration	Purpose	Prompts	Type	Evaluation
1	Bourgeois 1993	Dyads of residents with dementia	msD	Conversations about memory aids with researcher, followed by probes of 5 mins conversations in dyads, 3 times a week for 4–6 weeks	Improved conversational and social skills	P	Memory aids: picture and sentence stimuli about past life, family and current activities	QL/QN
2	Bourgeois *et al.* 2001	Dyads of residents with dementia and staff	msD	Conversations about past life, followed by 5 mins observation of communication in dyads using memory books, conducted twice	Improved conversational skills	P	Memory books: picture and sentence stimuli about past life, family and current activities	QL/QN
3	Burgio *et al.* 2001	Dyads of residents with dementia and staff	D, mCI and some communication skills	Daily observations for four weeks during care routines using memory books	Increased positive verbal interaction	P	Memory books: picture and sentence stimuli about past life and current activities	QL/QN
4	Camberg *et al.* 1999	Individual, little interaction	msAD and related with agitated or withdrawn behaviour	Audio-tapes applied in headphones when problem behaviour occurred over four weeks, twice a day	Enhanced wellbeing, decrease of problem behaviour	P	Personalised simulated presence therapy audio-tapes, prepared by family	QL/QN
5	Christie 1995	8, one a highly participatory peer, led by therapist	AD and related with sCI	30 mins twice weekly for 21 weeks	Enhanced participation	C	Themes prompted by music, and multi-sensory materials	QL/QN
6	Moniz-Cook *et al.* 2003	Individual	msAD, VD and ns, with difficult behaviour	Daily for three months	Decrease of difficult behaviour	P	Individual care plans, including use of biographical history	QL/QN

7	Hoerster *et al.* 2001	Dyads of residents with dementia and staff	mD with some verbal skills	Residents trained in using memory books by researchers, followed by observations in dyads for 5 mins once weekly, done twice	Improved conversational skills	P	Memory books: picture and sentence stimuli about the past, family and current activities	QL/QN
8	McPherson *et al.* 2001	Dyads of residents with dementia and staff	sD (AD + VD)	Brief introduction of memory aids to demented and staff followed by observations of at least3 conversations lasting app. 10 min	Enhanched quality of communication	P	Memory books: picture and sentence stimuli about the past, family and current activities	QL/QN
9	Moss *et al.* 2002	3–5, co-led by therapists and staff	mmAD	One of several sessions described, sessions lasting 60–90 mins	Improvement of conversational and narrative discourse skills	C	Multi-sensory programme materials	QL/QN
10	Namazi and Haynes 1994	Led by therapist	msAD	30 mins three times a week for four weeks	Examine effect of reminiscence work with sensory stimuli package	C	12 photos with corresponding sounds and questions about former life	QL/QN
11	Woods and Ashley 1995	Individual, little interaction	mAD with problematic behaviour	Audio-tapes applied in headphones when displaying problem behaviour, twice a day for two months	Decrease of aggression (verbal and physical), social isolation and agitation	P	Simulated presence therapy audio-tapes of cherished memoires, prepared by family	QL/QN

Notes: Participants: D with dementia; AD Alzheimer's dementia; CI cognitively impaired; VD vascular dementia; m moderate; mm mild and moderate; ms mild and severe; ns not specified; s severe. Prompts: P personal; C collective, from shared, cultural past. Evaluation: QL qualitative; QN quantitative.

there was an increase of social interaction in groups when the activity was new to the participants.

SE2. Gibb, Morris and Gleisberg (1997) studied a programme of structured reminiscence about life values and examined the extent to which it raised the participants' sense of integrity. They found that the interactions between participants and group leaders were intense, that the story telling was tied to themes with emotional significance, and that the sessions furthered insightful, focused thinking and the recasting of values.

SE3. Jensen and Wheaton (1997) described an intervention that combined art, movement and music with the aim of improving the sense of self and preservation of the self. Remote memories were stimulated in talk, and sad memories were not avoided. An increased activity level was found for most participants, and there was much close and intense interaction with the therapist.

SE4. Jones, Zeiss and Taylor (reported in Woods *et al.* 1992) assessed the practicability of conducting life reviews. Both pleasant and traumatic aspects of life stories were included in the descriptions of historical events and the personal lives of the participants. Collecting the life stories in interviews was found to be pleasurable for the participants, relatives and researchers. Life stories were used in the planning of daily care and routines as triggers for talk about the past.

SE5. Kydd (2001) described the ways in which music therapy helped a resident to adjust to long-term care. In individual sessions, the resident was encouraged to talk about pleasurable aspects of his past, *i.e.* a successful working life. His mood and relation to others improved, and after a while he was able to take part in group sessions.

SE6. Rentz (1995) sought to establish if individual reminiscence facilitated self-recognition, as shown by both positive and negative affect. The researcher's knowledge of the personal histories of the participants was used in talk about the past. The moderately-demented participants found the sessions enjoyable, and displayed consistent self-knowledge and an enhanced ability to express positive and negative affect. The two severely-demented participants showed only negative affect, but the author suggested that this might have indicated enhanced self-recognition.

SE7. Tabourne (1995) studied the effects of talk about life progression from birth to death during which conflicts were not avoided. The participants showed improved social interaction within and beyond the group, and followed the progression through the life review. No change was found in self-esteem, but there was some improvement in orientation.

SE8. Wilkinson *et al.* (1998) investigated the effect of drama and movement therapy on self-esteem, cognition, depression, daily-living skills and social interaction. When the participants enacted real or imagined roles, both positive and problematic feelings were dealt with. The authors reported beneficial effects on self-esteem and on social interaction within and outside the group.

Summary

In all these eight reports, it was reported that the aims of the intervention had been achieved. The researchers found positive changes in integration of the self, in affective functioning and in social interaction. Many or some personal memories were used in all the interventions, and talk about positive and problematic aspects of people's lives was encouraged, except in one study (5) which used only positive aspects. A distinction emerged between the five interventions (2, 3, 4, 6, 7) that aimed primarily to improve integration of the self, and the three (1, 5, 8) that aimed to improve self-esteem, as expressed in affective functioning. Memories from the whole life of the demented participants were encouraged in the former, but limited to past roles in the latter. There was a tendency for the enhancement of self-integration to be most marked in the interventions with participants who suffered from no more than mild to moderate dementia (2, 4, 6, 8). Because most studies gave sparse information about the type and stage of dementia, it was unclear whether severity generally associated with the strength of the change effects. In all eight interventions, the residents' initiatives in recalling the past were limited by the themes and organisation of the sessions. None of the studies reported whether the residents were encouraged by the researchers or the therapists that led the groups to recall unprompted or alternative aspects of their pasts.

Six of the interventions were conducted individually or in groups of no more than five people. In two (3 and 7), the interventions were conducted in larger groups but for longer, which may have compensated for the dilution of the facilitator's ability to attend to individuals. Given the purpose of the interventions, some were of surprisingly limited duration, down to as little as a few days (1, 6). Overall, it was unclear whether beneficial changes were best achieved in individual work, in small groups or in larger groups of longer duration.

Most studies found enhanced interaction during the sessions with the group leaders, *i.e.* researchers or therapists, but in three studies there was also enhanced interaction with the other participants (1, 7, 8), while studies 4, 7 and 8 reported enhanced interaction in routine care-interactions. None of the eight interventions met our expectations of an all-encompassing treatment of individual life stories and a systematic evaluation of the changes in routine care. Two interventions (4 and 7) that conducted life reviews included several features that are important for enhancing the sense of identity in interactions with staff, namely the introduction of many personal memories (both positive and problematic), and also evaluated routine care-interactions.

Group LQ: Interventions to raise life quality

LQ1. Brooker and Duce (2000) studied levels of wellbeing during three types of group activity, the first being reminiscence. Trained staff structured talk around eight cultural themes from a shared past. The results indicated that the participants experienced raised wellbeing during the reminiscence, and that interaction was enhanced both among the group members and with the participating staff.

LQ2. Gibson (1994, study 1) evaluated the participants' pleasure and enjoyment of group reminiscence sessions that were co-led by staff. The initial themes and prompts were based on the participants' background interests. It was found that small groups generated pleasure and enjoyment, but that large, informal groups produced only transitory pleasure.

LQ3. Gibson (1994, 2) also conducted individual reminiscence with people with dementia who were described as troubled or having troubling behaviour, and examined whether the sessions raised the quality of life of the participants and of the people around them. Detailed life stories that included life crises were gathered from the participants and their families in both planned and spontaneous reminiscence, and this knowledge was used in daily care. The sessions resulted in enhanced sociability, increased staff motivation and an improved quality of care.

LQ4. Götell, Brown and Ekman (2000) studied the effect of care-giver assisted group musical sessions, during which singing and playing instruments preceded talk about pleasurable aspects of participants' lives and of the time of year. It was found that the sessions produced pleasure from distant memories and stronger bonds with the care-givers.

LQ5. Head, Portnoy and Woods (1990) examined two reminiscence groups that aimed to be enjoyable and to increase communication and involvement. In one group, which had already been involved in reminiscence, personal photographs acted as prompts for talking about and re-enacting enjoyable past experiences. In the second group, memorabilia of general interest stimulated talk about the past. It was found that this group resulted in enhanced social interaction among the participants and with the staff.

LQ6. Kovach and Henschel (1996) studied the involvement and behaviour of the participants during five types of activities: art and music therapy, physical exercise, functional household activities, and a cognitive activity that included reminiscence. During the last, it was found that when a cognitive tie was made to personally-significant past experiences, the participants' involvement increased.

LQ7. Morton and Bleathman (1991) studied the effects of validation therapy (VT) followed by reminiscence therapy (RT) on mood, behaviour and sociability in one group of five participants. During the VT, the topics were chosen to facilitate life review, not avoiding sad and problematic subjects, while during the RT, materials from the shared, cultural past encouraged talk. With complete data from only three participants, the researchers found some increase in participation.

LQ8. Olsen, Hutchings and Ehrenkrantz (2000) evaluated the impact of two interventions that presented nostalgic music and videos on engagement and interaction to groups, and found enhanced engagement, positive affect and activity-related talk, especially in the smaller groups.

LQ9. Rentz (2002) studied the enhancement of wellbeing for participants in an art programme. While painting pictures, the participants were encouraged to relate memorable past experiences. Their data suggested that participation contributed to the group members' sense of wellbeing.

Summary

The studies of these nine interventions all found that the life quality of the participants with dementia was enhanced. Seven studies (1, 2, 3, 4, 6, 8, 9) described the participants' pleasure and enjoyment, and all reported increased engagement during interactions. In three of the interventions (1, 5, 8), the talk was organised around a few, fixed details of the participants' past life, and in 1 and 8 it was limited to cultural themes from a shared past. In five interventions that used RT (2, 4, 6, 7, 9), some details of the participants' personal life story were brought into the conversations, with an emphasis on positive aspects. Two interventions (3 and the VT element of 7) differed in that both positive and problematic biographical details were used during the conversations. Most of the interventions were conducted in groups of fewer than 15 participants (1, 2, 4, 5, 6, 7). Intervention 8 had some groups with larger numbers, but the reported effect was diminished. Group size was not stated for Intervention 9, and Intervention 3 was only with individuals.

The type and stage of dementia were not stated for all the interventions but when they were stated, as in Intervention 8, the researchers did not state if this was the basis for the organisation of the groups or influenced the results. Enhanced interaction was found during sessions with researchers or therapists in three studies (6, 7, 8). The care staff participated in or co-led groups in five interventions (1, 2, 4, 5, 9), and changes were assessed in routine daily care in two studies (2, 3). Within the limits of the themes and organisation of the group sessions, the participants' initiatives were sought in eight of the nine interventions. One (3) actively encouraged the participants to talk about alternative aspects of the personal life story in routine care. In eight of the nine interventions (except in the VT element of 7), talk was organised mainly around limited positive aspects of the personal and shared cultural past. Most of the interventions were conducted in groups, which were sometimes large. Two notable features of six of the nine LQ interventions and their evaluations were that caring staff were involved in the group work, and that changes were assessed in routine care. Intervention 3 used the most all-encompassing treatment of individual life stories. Both positive and problematic memories were the subjects of talk and the residents' initiatives were actively sought. Gained knowledge was used, and changes were assessed in daily care.

Group BE: Interventions to change behaviour

BE1. Bourgeois (1993) studied the effect of personal memory books, that contained personally-relevant picture and sentence stimuli, on the content of conversations and social skills among dyads of participants with dementia. In the dyads, one person was the subject of the memory book that she or he was encouraged to use in conversation with the partner. The results indicated that the quality of the subjects' conversations improved, while the partners demonstrated social awareness of appropriate conversational behaviour.

BE2. Bourgeois *et al.* (2001) evaluated the use of memory books, that contained autobiographical, daily-schedule and problem-resolution information on verbal interaction, in dyads of a participant with dementia and a nurse-aide during care routines. The results revealed improvements in both the quantity and quality of the exchanges.

BE3. Burgio *et al.* (2001) examined the effects of both communication-skills training and of the use during care routines of memory books with biographical and daily-schedule information on conversations, in dyads of a resident with dementia and a nurse-assistant. An increase in positive verbal interactions was found, and the nurse-assistants talked more, used positive statements more frequently, and gave more personalised and explicit instructions to the residents.

BE4. Camberg *et al.* (1999) evaluated the efficacy of Simulated Presence (SP), an intervention similar to that described below by Woods and Ashley (1995), on the enhancement of wellbeing and the decrease of problematic behaviour of the participants with dementia. SP elicited happy facial expressions, as was the effect of routine care, but in addition it reduced agitation and withdrawn behaviour.

BE5. Christie (1995) sought to determine how a highly participatory peer influenced the level of participation in music-therapy group sessions that were structured around shared cultural themes. The author found increased participation when the highly participatory peer was present, especially in the second period of the intervention (which could have been the result of the growing familiarity among the group members and the therapist).

BE6. Moniz-Cook, Stokes and Agar (2003) assessed the impact on difficult behaviour of individual care-plans that used biographies to understand and meet the residents' needs for respect and security. The paper reports a decrease in the participants' difficult behaviour.

BE7. Hoerster, Hickey and Bourgeois (2001) assessed the effects of the personalised memory books, as developed by Bourgeois (1993) on the content of conversations, in dyads of a nurse-assistant and a resident with dementia. The results showed a greater frequency of topic-relevant statements by the residents, and decreased non-facilitative staff behaviour. The effects of the intervention were weaker for residents with severe dementia.

BE8. McPherson *et al.* (2001) replicated the intervention of Bourgeois *et al.* (2001) with five severely-demented participants, and found that for three of them, the use of memory books did not increase the time spent on the topics, while it did for the other two. The authors concluded that memory aids were useful for some but not all of those with severe dementia.

BE9. Moss *et al.* (2002) assessed differences in conversational and narrative discourse for participants in both a reminiscence and a diagnostic-language group. Using multi-sensory material with familiar topics from the shared, cultural past in the reminiscence group, they found that the participants' social interactions and conversational skills improved.

BE10. Namazi and Haynes (1994) used structured group-reminiscence with a sensory-stimuli package that was designed to stimulate thoughts, emotions and memories from the shared, cultural past. They found some sharing of memories among participants but, contrary to expectations, an increase of aberrant behaviour.

BE11. Woods and Ashley (1995) conducted a pilot study to assess the effect of Simulated Presence Therapy (SPT) on problematic behaviour. Whenever this occurred, the residents were played an audio-tape of a family member talking about cherished memories and lifetime experiences; this had pauses to allow for and prompt responses from the resident. SPT appeared to be most effective in treating social isolation.

Summary

Unlike the SE and LQ interventions, several in the BE group replicated and extended insights from earlier studies. The use of personalised memory books was described in five studies (1, 2, 3, 7, 8), and Simulated Presence Therapy in two studies (4, 11). In the five interventions that used memory books, the quantity and quality of verbal interaction were enhanced for the participants with dementia, and the participating staff members improved their interactive communication. Memory books are structured and contain limited and always positive details of the residents' pasts. In four of these interventions, staff were involved (2, 3, 7, 8), and in two (2, 3), changes in routine daily care were assessed. In five interventions, the initiatives of the participants, while encouraged to some extent, were restricted to reactions to the photographs and statements in the memory books.

In the two Simulated Presence interventions, the participants with dementia seemed to have increased satisfaction, and displayed reduced agitation and withdrawn behaviour. The topics in the conversations were happy memories pre-selected by family members. The initiative of the participants, if encouraged at all, might have been recorded as aberrant behaviour, *e.g.* 'wrong' responses to the recorded speech. Interactions with others were mainly with people who were not actually present. None of the researchers commented upon the suitability and ethical implications of 'artificial conversations', which might increase the confusion of a participant with dementia. Two of the remaining studies (5, 10) found an increase of participation. The unexpected increase in aberrant behaviour reported in study 10 could have resulted from the highly-structured picture and sentence stimuli that provided very little room for spontaneous reactions. Intervention 5 was less structured, but as in 10, few and only positive personal details were encouraged in conversations. Interventions 6 and 9 also employed a few positive details of the participants' lives. In intervention 9, the staff participated in the group, and in study 6, the effects were assessed in routine care.

Most of the interventions in group BE were conducted with individuals, in dyads or in small groups of fewer than five participants. Intervention 5 was exceptional in that there were eight in the group, but then it was scheduled twice-weekly for 21 weeks. All the BE studies stated the stage of dementia and some reported the type. In two studies (7, 8), the impact of the severity of dementia on the outcomes was reported. None of the 11 interventions in this group met the expectation of an all-encompassing treatment of individual life stories. All used

TABLE 4. *Aims, content and assessment of the interventions*

	Aim of intervention		
Attribute of the intervention or the evaluation	Raise self-esteem and self-integration	Change life quality	Change behaviour
Use of details from personal life			
Many	2–4, 6, 7	3, 7 (in VT part)	0
Some	1, 5, 8	2, 4, 6, 7 (in RT part), 9	0
Few and fixed	0	1, 5, 8	1–11
Reference to different aspects of life			
Both positive and problematic	1–4, 6–8	3, 7 (in VT part), 9	0
Only positive	5	1, 2, 4–6, 7 (in RT part), 8	1–11
Assessment of changes			
In routine or daily care	4, 7, 8	2, 3	2, 3, 6
Among care staff during intervention	0	1, 2, 4, 5, 9	2, 3, 7–9
Of resident during intervention	1–3, 5, 6	6–8	1, 4, 5, 10, 11
Participants' initiative			
Actively sought	0	3	0
Sought within limits	1–8	1, 2, 4–9	1–3, 5–9
Not sought	–	–	4, 10, 11

Notes: The serial numbers refer to the reviewed studies in the three groups. RT reminiscence therapy; VT Validation therapy.

structured material that prompted positive memories, but it is notable that in five of the interventions, the staff participated in the group work, and in three of the evaluations, changes were also assessed in routine care. The measures of outcomes were limited to easily observable and well-defined changes.

The effective features of the intervention designs

Table 4 sets out the features of the interventions that this review indicates are important for enhancing the sense of identity among nursing home residents with dementia during care interactions. They include making use of many positive and problematic memories of the participants' personal lives, actively encouraging the participants' initiatives, and assessing changes in routine daily care. The role of these attributes is now examined more fully in each of the three groups of interventions.

The use of both positive and problematic personal life story details not surprisingly was especially marked in the interventions that sought to raise self-esteem and self-integration, and much less consistently employed in the interventions that sought to raise life quality. The concept 'quality of life' is of course broad, and the usage in the studies ranged from providing pleasurable and enjoyable activities to promoting the greater involvement of the residents. The interventions that sought to change behaviour were accompanied by evaluations that focused on a limited set of rigorous measures, so it is not surprising that all these BE evaluations involved the use of only a few standard and positive biographical events.

In only one intervention (LQ 3) was the initiative of the participants with dementia actively sought. Given the fundamental change intended in group SE, and to some extent in group LQ, this was unexpected, but it was not surprising that there was little room for the participants' initiatives in the BE interventions. When interventions were highly structured, as in BE4, BE10 and BE11, either the result was adverse (10), or the procedure could be questioned (4, 11). A focus on enhanced interaction in routine care was evident in only eight evaluations: three from group SE, two from group LQ, and three from group BE. The search for rigour in a relatively new and expanding research field may explain this narrowing focus. In 10 interventions (five LQ and five BE), the care staff participated as group leaders, members or individually as conversational partners.

To summarise, we found that most of the interventions in all three groups contained some but not all of the features that are important for achieving an enhanced sense of identity among nursing-home residents with dementia during interactions with staff. Intervention LQ 3 contained all the features (Gibson 1994, intervention 2): it gathered detailed life stories from the participants and their family members in both planned and spontaneous reminiscence, thereby drawing on a wide range of important personal memories and experiences, and these were used in routine care. This intervention and its evaluation can be seen as a good practice model, but it appears that this line of practice innovation and evaluation has not been pursued.

All the evaluations reported enhanced interaction regardless of whether the evidence was qualitative, quantitative or anecdotal. This accords with the conclusion of the previous reviews, mentioned in the introduction, that the main effects of Reality Orientation (and, we suggest, of all interventions) arise from the stimulus received from the inter-personal and group interactions and from the associated positive changes in staff behaviour. It is difficult to draw firm conclusions about the influence of particular attributes of the interventions and participants, such as the way the intervention is conducted, the type and stage of the participants' dementia, the use of individual or group work, and group size and duration. The heterogeneous designs and reporting inconsistencies prevent generalisation.

Discussion and conclusions

The 28 published evaluations had two clear designs distinguished by their approach to establishing the validity of the findings. Most of the SE and LQ interventions used the individual life story to engage with the participants' feelings and experiences, and the evaluations of the effects were developed from qualitative and anecdotal evidence. In contrast, most of the BE interventions were more specific and the evaluations explicitly sought to be more rigorous by using a few well-defined outcome measures. The recent trend has been for a growth of the second, more quantitative approach. Their authors claim that the use of randomised-control designs provides authoritative evidence of the effects of various interventions, as of reminiscence therapy (Spector *et al.* 2000), psycho-social interventions (Opie, Rosewarne and O'Connor 1999; Bates, Boote and Beverley 2004), and non-drug therapies (Snowden, Sato and Roy-Byrne 2003; Gräsel, Wiltfang and Kornhuber 2003). To demonstrate the effect of the interventions, these evaluations have restricted their interest to measurable behaviours, as exemplified by the most recent published studies that we have found (Lai, Chi and Kayser-Jones 2004; Wang 2004; Bourgeois *et al.* 2004). When the interest is behaviour change, this is a promising way forward, but the restricted scope of the evaluations is not well suited to understanding how one best enhances the residents' sense of identity in routine care.

Few authors have reviewed or proposed improvements in the methodology of evaluations based on qualitative or anecdotal evidence. Woodrow (1998) said that anecdotal evidence was supportive of the effectiveness of planned or structured reminiscence, but others have argued that more rigorous qualitative studies are needed. From a critique of the literature published during 1960–90, Haight (1991) argued that researchers should give more attention to the definition of concepts and the precise description of the processes of reminiscence and life review. Gibson (1994) recommended stricter congruence between the aim of an evaluation and its methodology, and closer attention to the attributes of the subjects. Finnema *et al.* (2000) reviewed emotion-oriented approaches in care, among them reminiscence, but found it difficult to make generalisations because of the methodological limitations of the studies. Marshall and Hutchinson (2001) reviewed research on the use of activities, among them reminiscence, and criticised both the lack of attention to theoretical frameworks and the lack of rigorous design and sampling in both quantitative and qualitative research. Webster and Haight (2002) advocated increased rigour in evaluations of reminiscence, by tailoring the methods to the intended purpose. On the other hand, the value of qualitative evidence in understanding the use of the life story with people with dementia in daily care has been affirmed by several researchers (Gibson 1994, 1998; Fuchs 1995; Finnema *et al.* 2000; Heap 2002). New evaluations along these lines are few, however, probably because researchers are concerned about the validity of their findings.

Our overall conclusion is that qualitative analyses of the use of the life story in daily care have been discontinued too hastily and prematurely. Haight (1991), Gibson (1994), Finnema *et al.* (2000), Marshall and Hutchinson (2001) and Webster and Haight (2002) have all argued that the demand for more rigour can be met in qualitative studies. More attention to the theoretical framework and to group size, the type and stage of dementia, and the duration and content of the interventions would improve the specification of a qualitative evaluation. And as we argued earlier, when the focus of interest is self-identity, there is a need for interventions that employ many positive and problematic biographical details, that encourage the participants' initiatives, and assess the impact of the interventions on routine daily care. These basic attributes have been deployed in few interventions, and their potential for enhancing the sense of identity is not therefore yet known.

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NOTE

1 *Medline* is an electronic database that indexes journals in medicine and health. *CINAHL* is the *Cumulated Index for Nursing and Allied Health Literature* and covers the nursing and allied health literature from 1982 to the present. *PsychINFO* is an electronic bibliographic database which provides abstracts and citations of interest for psychologists and allied health professions. The databases are in English, but monitor literature in several languages.

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