

Effects of Namaste Care: Pilot Study

Beverley A. Manzar, CQSW, DSW, RMA¹ and Ladislav Volicer, MD, PhD²

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Abstract

Introduction of the Namaste Care program in a nursing home improved the quality of life of residents with advanced dementia and in some of them decreased perception of pain without increasing analgesic medications. Information from family members and staff indicated that Namaste Care effect is mediated by a special environment and application of loving touch. The environment consisted of group activities in a special room that was calm and family like and resulted in decreased agitation, improved appetite, more engagement and improved communication. Loving touch was provided as foot and hand massage by the staff and resulted in decreased pain, more communication and engagement, and increased tactility resulting in decreased rejection of care. Namaste Care improved interaction between residents, staff and family members (more enjoyable visits) and increased job satisfaction of the staff who also reported that it was less challenging to provide care.

Keywords: Dementia; Quality of life; Pain; Environment; Loving touch; Rejection of care; Communication

1. Introduction

It is well documented that people with advanced dementia are less engaged with the world, and those around them, and consequently, their quality of life is often diminished (Brookes et al., 2014). These individuals experience difficulty in engaging in meaningful activities due to impaired executive function. They also cannot participate in traditional group activities because of their cognitive impairment and are frequently marginalised within care homes as most care facilities do not have the resources to provide one to one care and stimulation. Therefore, people with advanced dementia need group activities that would allow them to be involved and improve their quality of life.

A group activity specifically designed for this population is Namaste Care (Simard, 2013). Namaste

*Corresponding e-mail: beverley.manzar@btconnect.com

1 Ebury Court Care Home, Romford, Essex, RM7 0LX

2 School of Aging Studies, University of South Florida, Tampa, FL

Care is a program designed to offer meaningful activities to nursing home residents with advanced dementia or those who cannot be engaged in traditional activities. This program decreased residents' withdrawal and delirium indicators, increased social interaction (Simard and Volicer, 2010) and decreased behavioral symptoms of dementia (Stacpoole et al., 2014). One study also found that involvement in Namaste Care resulted in discontinuation of antipsychotic and hypnotic medications (Fullarton and Volicer, 2013). Relatives of residents who participated in Namaste care described better communication with the residents and some felt the overall atmosphere of the care home changed for the better. *Care staff* described Namaste as calm and enjoyable, in contrast with the culture of 'rushing about' and 'chaos and confusion' found at the outset (Stacpoole et al., 2014). Another study using focus groups found that instead of feelings of frustration and hopelessness, carers and families of residents involved in Namaste Care were able to feel more relaxed and comfortable in their interactions with the residents. Seeing the person with dementia relaxed and smiling produced a similar impact on those people close by (Nicholls et al., 2013).

Stimulated by a lecture of Joyce Simard and by reading of her book, one of us (BAM) decided to start the Namaste Care program in a Residential Home as a quality improvement initiative. We were interested to see if Namaste Care improves quality of life of residents with advanced dementia which was not measured in previous studies. In addition to quantitative data related to quality of life and pain, we also decided to survey both family members and staff regarding the impact of Namaste Care and use this qualitative data to develop grounded theory describing relationships between elements of this program.

2. Methods

2.1. Participants

The program was established at Ebury Court Residential Home, which provides care for 37 residents. Demographically, this facility is fairly typical within the UK in that almost 70% of the service users have a diagnosis of dementia of which, at any one time approximately 16% have advanced dementia.

2.2. Data sources

Demographic data and information about severity of dementia was collected from residents' records. Severity of dementia was measured using Cognitive Performance Scale (Morris et al., 1994). This scale uses 5 items from the Minimal Data Set 2.0 to determine severity of cognitive impairment (comatose, problem with short-term memory, cognitive skills for daily decision making, being understood by others, self-performance in eating). Presence and severity of pain was evaluated by the Pain Assessment in Advanced Dementia (PAINAD) (Warden et al., 2003). The PAINAD is a 5-item tool for a short bedside assessment of pain by a rater who may be unfamiliar with the person with dementia. Item scores of 0, 1 or 2 add up to a total score between 0 and 10, and a score of 2 likely reflects pain while score of 3 is specific for pain but may miss pain in some patients with a lower score (Zwakhalen et al., 2012). This scale has excellent psychometric properties, has been translated to several languages and used in many research studies (Volicer and Hurley, 2015).

The quality of life (QoL) was measured by the Quality of Life In Late Stage Dementia scale (QUALID). The QUALID was designed to help assess the outcome of clinical management and treatment of QoL in persons with late-stage dementia residing in long-term care facilities (Weiner et al., 2000). The QUALID has 11 items and a one-week window of observation. The items, which are all based on observable behaviors are rated on a 5-point scale. Each point has a specific descriptor and the QUALID takes about 5 minutes to administer. The minimum (best) score is 11; the maximum (worst) is 55 points. The QUALID has excellent psychometric properties (Weiner and Hynan, 2015) and the Cronbach alpha in this study was .773 in basal study and .824 at 3 months.

2.3. Qualitative evaluations

Two questionnaires were compiled, one for relatives and one for staff, in order to gather information from them regarding their views on both the effectiveness and their experience of the Namaste Care Program. Both questionnaires contained six questions of a very similar nature asking:

- Details of any behavioral symptoms of dementia before Namaste
- Have these symptoms changed since attending Namaste? If so, how?
- What changes have you noticed in health and well-being?
- What changes have you observed in interaction and communication?
- Did it affect your visits/work? If so, how?
- What is it about the Namaste Care Program you feel is beneficial?

Since the program began, nine participants have attended Namaste Care, questionnaires were given to all nine of their relatives and a 100% return was achieved.

Eight members of staff were given questionnaires— six of whom provide hands on Namaste Care on a regular basis and two who are senior members of staff. These senior members of staff initially spent time in the Namaste room overseeing the program and routinely spend a good deal of time, around 5 hours per day, with the service users so were able to make evidenced based observations regarding how the Namaste Care Program impacted upon the users.

2.4. Intervention

A specific room was selected and furnished in a style that was comfortable and familiar for the individuals. The room is warm and welcoming with muted colours, dimmable lighting and perfumed with natural lavender oil. Each resident is welcomed to the room and given a drink of their choice. Staff then spend time talking with each person offering nutritious favourite food treats ranging from chocolate, homemade yogurt, milk shakes, jelly and ice cream.

The program takes place every day for four hours, two hours before lunch and two hours after lunch. It varies daily and uses the power of the 'loving touch' and can include hand and foot massage, hair and nail care. Picture books or pictures that are of particular relevance to the individual, including photos of where they used to live, are also used to reminisce. Other tactile items are used for example sensory aprons, to enable residents to experience a variety of textures,

lifelike dolls, which some residents connect with and derive comfort from, and lifelike animals, which when stroked appear to promote calmness and a sense of pleasure.

Before each session, the room is set up which includes putting on the lavender diffuser and the 'sense of calm' DVD, dimming the lights and gathering all the items required for the session. These items will include individual's food and drink treats, massage oil and towels, combs, nail and manicure essentials, sensory apron and other items according to the program that is going to be delivered. After breakfast, the individual is brought to the room, welcomed and made comfortable. Once everyone is in the room, the door is closed, the lights are dimmed and the carer will commence the program with one individual at a time. After about 20 minutes or so, by which time the service user is usually very relaxed or asleep, the carer will move onto the next person. On occasions, depending on the mood within the room, there maybe conversations between all participants. These sessions vary according to the demeanour of the attendees but as all the carers have a good knowledge of the service users, they will provide the Namaste Care that is most appropriate.

Towards the end of the session, the lighting is increased and the individuals are roused ready for either lunch or their evening meal and are taken to the dining room. On occasions, an individual may have their meals within the Namaste room, particularly if they eat better and thrive within a calm and peaceful environment.

At the end of each session, the carer completes a short document giving details of the activity that took place with each individual. They may also complete a PAINAD form if there are concerns about the stability of an individual's pain. These are completed at the end of both the morning and afternoon sessions. At the end of the week, the carer completes a QUALID and PAINAD form for each individual who is attending the program.

2.5. Data analysis

Quantitative data were analysed by paired t-test, by Pearson correlation, and by analysis of variance using IBM SPSS Statistics version 22 (IBM Corporation, New York, USA). Qualitative data were analysed by QDA Miner Lite v1.4.1 (Provalis Research, Montreal, Canada). Responses to the questionnaires were transcribed and analysed by open coding which defined the basic categories of information followed by axial coding exploring relationships of informations and their relationship to the central phenomenon – Namaste Care (Corbin and Strauss, 2008). On the basis of coding information we performed memoing, that included writing up ideas about relationships between different categories of information, and between categories and the central phenomenon (Savin-Baden and Major, 2013). Finally, the informations were integrated and a diagram describing the theory was constructed.

3. Results

3.1. Subjects

Participants in this study were 6 females and 3 males, with mean age of 88.1 ± 3.7 years. Two of them started Namaste Care program immediately after admission, for the rest of them the mean

duration institutionalization before starting the program was 39 ± 19 months. According to MDS Cognitive Performance Scale (Morris et al., 1994) one subject was moderately impaired, four subjects were severely impaired and four subjects were very severely impaired. Two subjects were receiving antidepressants (citalopram and amitriptyline) before they were enrolled in Namaste Care but these antidepressants were stopped after being enrolled in Namaste Care for 14 and 9 months respectively. One subject was administered chlorpromazine 25mg twice a day for the duration of the study. Another subject received chlorpromazine 25 mg every other day but this dose was reduced and stopped 10 months after starting Namaste Care.

3.2. Pain presence and treatment

Five subjects had very low PAINAD scores (mean score = 1.6) (Stable group). Three of them did not receive any analgesics and two were on a stable regimen of 325mg of paracetamol twice a day. The remaining four subjects received decreasing doses of paracetamol after they were participating in Namaste Care (Decreasing group). All of them were able to stop taking paracetamol while having no pain symptoms. The fourth subject started on 325 mg of paracetamol four times a day with PAINAD score of 4 and was gradually reduced to 2 – 6 doses/week with a PAINAD score of 2.

3.3. Quality of life

Quality of life gradually improved in all subjects (Fig. 1). There was a significant decrease of QUALID score when baseline scores were compared by a paired t-test with scores at week 3 (23 ± 7.9 vs. 15 ± 6.4 , $t = 3.52$, $p = .008$) and at week 7 (13 ± 4.7 , $t = 5.44$, $p = .001$). Scores at week 3 and 7 were not significantly different from each other. Scores at all three periods were similar in Stable group and Decreasing group and analysis of variance did not show any significant differences between decreases in QUALID scores in these two groups (Table 1). Comparison of individual

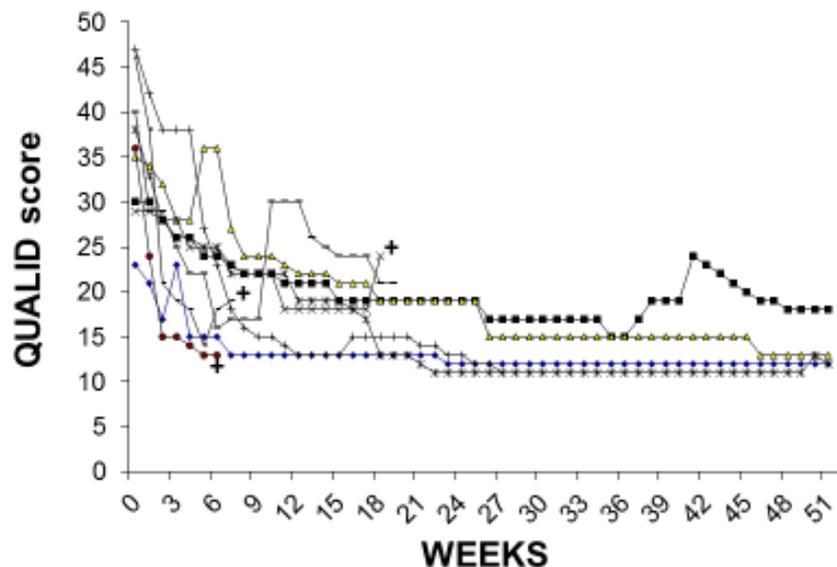


Fig.1. Quality of life changes after initiation of Namaste Care

QUALID items at basal evaluation and at 3 months showed that 8 out of 11 items were significantly

different (Table 2). Three items were not different and that was most likely due to very low scores for these items at basal evaluation because there was a significant correlation between basal values of all items and their level of significance ($r = -.884, p < .001$).

Table 1 QUALID scores in Namaste Care participants exhibiting different pain patterns (numbers are means \pm SD).

Time of measurement	Pain group	QUALID score	F	p
Baseline	Stable	39.0 \pm 11.1	1.05	.339
	Decreasing	33.6 \pm 3.9		
3 weeks	Stable	26.2 \pm 8.2	0.13	.728
	Decreasing	24.6 \pm 5.4		
7 weeks	Stable	16.7 \pm 2.6	2.86	.135
	Decreasing	21.6 \pm 5.2		

Table 2 Comparison of individual QUALID items at basal evaluation and at 3 months.

Item	Mean		t	p
	Basal	3 months		
Smiles	3.88	2.38	3.55	.009
Appears sad	3.38	2.00	2.99	.020
Cries	1.63	1.00	1.26	.250
Has facial expression of discomfort	2.88	1.63	2.12	.072
Appears physically uncomfortable	3.38	1.50	4.25	.004
Verbalizations express discomfort	3.50	1.88	3.53	.010
Is irritable or aggressive	2.50	1.13	2.02	.083
Enjoys eating	2.63	1.75	2.97	.021
Enjoys touching/being touched	3.50	2.13	3.27	.014
Enjoys interacting with others	3.63	2.38	3.99	.005
Appears calm and comfortable	3.88	1.75	5.34	.001

3.4. Qualitative results

Two principles of Namaste Care were mentioned by all respondents, both staff and family members: environment and loving touch. Environmental characteristics were:

Sense of calm:

It gives a feeling of calm and serenity. It allows for one-to-one pampering and for the service user to feel special and important (staff)

As a family, we felt that the atmosphere was peaceful and to see mum content made our visits a pleasure (family member)

The service users are in a warm calm atmosphere with one on one care that has a personal touch that is individual and unique to each person (staff)

More individual attention, very good environment that service users find peaceful and calm (staff)

Small group setting:

The resident is shy and so Namaste is fine for her as it is not overcrowded but has enough residents for it (staff)

It has enabled her to be part of community again (staff)

The overall level of additional care and vital attention due to the privacy and lower percentage of persons within the room itself (family member)

Family likes:

It allowed him to have home comforts which is so important (family member)

In general I feel she has regained an element of the normal life she had prior to dementia (family member)

Consequences of care in this environment resulted in decreased agitation which was present before initiation of Namaste Care program:

Very calm and restful, not hitting his head against wall (staff)

Much calmer, she is no longer shouts out as much as she used to (staff)

The symptoms have changed significantly as there is an evident calmness in the attitude and overall wellbeing (family member)

Before Namaste care, most of the residents had only inconsistent meaningful verbal communication and some of them did not maintain eye contact. Respondents' reports indicate that involvement in Namaste Care improved verbal and non-verbal communication.

Verbal:

She has a conversation with one of the other lady's in the room which is joy to watch (staff)

She enjoys reminiscing about when she was a young girl growing up in East London, something she never did before the Namaste program (staff)

More engaged with others (staff)

Communication says her daughter's name for the first time in years (staff)

We have longer and better quality conversations than before. She enjoys conversations more and we are able to broach a more varied topic base whereas previously topics were limited to only a few (dull) ones (family member)

Improved communication, now able to say my name (family member)

Non-verbal

Blows kisses to me with her hand, offers her biscuits to you, holds my hands (staff)

I feel that I have achieved a good rapport with him ... I use the thumbs up sign and he has on

occasion responded with the same (staff)

She is more calm and more trusting of people, she is more expressive in her facial and body language giving staff the ability to read her emotions if she can not find the words to express herself (staff)

She now smiles a lot more when you speak to her, she is now tactile and she looks at you (staff)

Namaste Care improved the nutritional status of most users. Although two users lost weight before they died, three users continuing in the Namaste Care gained weight (on the average 1.65 kg) and one maintained the same weight. Staff respondents reported that involvement in Namaste Care improved appetite of the users.

Eats much better and maintains a steady weight (staff)

Started to eat with assistance and not refuse (staff)

Food and fluid increased, became interested in books read to him (staff)

Meals in Namaste Care room which is very tranquil as she dislikes a noisy environment (staff)

Namaste Care users were generally withdrawn, not engaging with others before inclusion in the Namaste Care Program. Engagement with both their surroundings, other users and staff increased after beginning Namaste Care:

The service user takes an interest in what is going on around her and will make eye contact

Used to cover her head with blanket, stopped doing that (staff)

The resident is happier as she smiles, eyes move to look at you, she is aware of surroundings and engaging in communication with you by murmuring (staff)

She is now part of a group and is no longer isolated by other residents as she often was because of her aggression. She now feels a sense of belonging making her a happier person.

She has regained her social skills and interacts well (staff)

A lot more one to one interaction which I feel has stimulated her mind, this has I feel made her feel a lot better in herself (family member)

The second main principle of Namaste Care, mentioned by most respondents was loving touch. Most of the residents before Namaste Care were reported by staff to be “non tactile” and “won’t be touched”. The Namaste Care program exposed all users to loving massage of hands and feet which they not only enjoyed but also then attempted to reach out and touch others:

Enjoys hand or foot massage, something she would never have permitted before and communicates in a calm manner (staff)

Will allow touch and on occasions talk to others first (staff)

Will try to massage my hands (staff)

Reaches out to touch others , smiles more (staff)

Both engagement and massage resulted in decreased perception and complaints of pain:

Her aches and pain have reduced, with the help from massage/relaxation (staff)
She suffers from arthritis and used to concentrate on her pain, since being part of the Namaste program, she does not mention her pain as her attention is diverted away from it (staff)
She suffered from eczema on her legs which she used to scratch and infect. Since Namaste Care she no longer does this and her legs have healed (staff)
Rarely complains about pain, seems happier, appears more involved with other residents and staff (family member)

Loving touch increased tactility, i.e. tolerance of being touched resulted in decreased resistance to care (rejection of care) by Namaste Care users:

Challenging behavior has reduced, is now cooperative in helping to get dressed (staff)
No longer on antipsychotic medication (staff)
He is less resistant to care delivered by female carers, easier to care for, does not complain of pain during care (staff)
He preferred male carers and male company and was uncomfortable around females. He is no longer reluctant to accept assistance from female carers as he is now used to them delivering Namaste Care (staff)

Family and staff were positively impacted by all consequences of Namaste Care. The family members commented on improved visiting experience:

My visits with her now are much better and have longer lengths were she is alert and communicating with me (family member)
It certainly gave me as his son more confidence in visiting knowing that he would be happier and calm (family member)
Recognizing me, which also made easier to communicate and my visits easier (family member)

Overall comments by the family members about the Namaste Care program were positive, i.e.:

Very inventive program which allows service users gentle engagement through to the end of their lives (family member)
This care program in my opinion is extremely positive and commendation to the care home for putting in place (family member)
He went from no quality of life to a good quality of life. He had a look in his eye that told me he was happy (family member)
Having Namaste Care program I feel that mother would have died earlier than her time which has been prolonged considerably (family member)

The Namaste Care program was also reported to make the delivery of care easier because of decreased agitation and resistiveness to care. Staff also reported increased job satisfaction because of Namaste Care:

It has enabled me to meet the resident's needs in a very positive way and a way that shows good results which can be noticed easily (staff)

It has allowed me to make someone's life more pleasurable and given me great satisfaction that I, in some small way, improved their wellbeing (staff)

I feel Namaste has greatly improved this residents life style by communication and massage and it makes me happy that I have helped this to happen (staff)

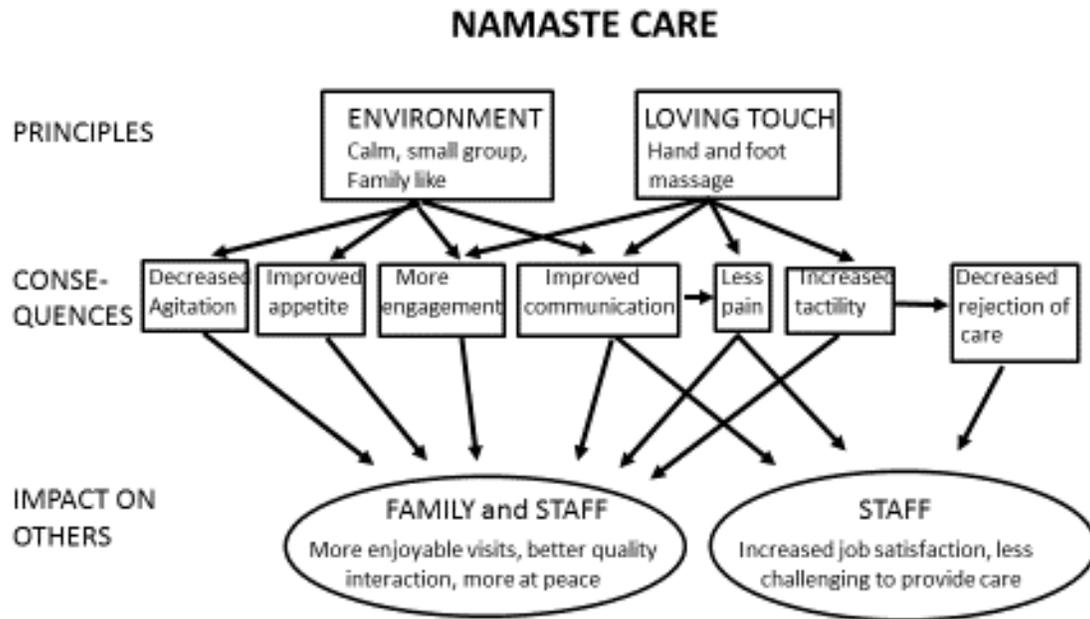


Fig.2. Grounded theory model of Namaste Care

I was very happy that Namaste had enhanced resident's life (staff)

I feel a sense of achievement in being part of positive change (staff)

I feel more satisfied with my job to know that more improvements can be made for service users (staff)

Relationships between Namaste Care principles, consequences and impact on family and staff that resulted from analysis of participants' reports, are depicted on Fig. 2

4. Discussion

Results of this study demonstrate that the Namaste Care Program improves the quality of life and sense of well being for individuals with advanced dementia. Reports by staff and family members indicate that this effect is mediated by providing a comfortable environment and by loving touch. Features that were listed for making the environment comfortable were calmness, being part of a small group of others and family-like atmosphere. There is very little research concerning effects of environment on persons with dementia. Calm may be important because environmental noise was found to be related to agitation (Joosse, 2012). Improved appetite, reported in Namaste Care users, could be also related to calm environment because it was reported that a pleasurable physical and

social environment for eating is improving eating ability (Lee and Song, 2015). Zeisel and his coworkers (Zeisel et al., 2003) found associations between behavioral health measures and particular environmental design features, as well as between behavioral health measures and both resident and nonenvironmental facility variables. They reported the residential character, which included small group or residents resulting in low perceived crowding, homelike non-institutional qualities of staff dress, décor, linen, wall accessories, furniture and lighting, were related in decreased behavioral symptoms of dementia. Several of these features are integral part of Namaste Care room (Simard, 2013). A metaanalysis of an impact of built in environment on people with dementia found that specific design interventions are beneficial to several outcomes of people with dementia (Marquardt et al., 2014).

The second main feature of Namaste Care program was reported to be loving touch provided by hand and foot massage, hair and nail care. A recent review of 25 papers found that hand massage or gentle touch is effective in decreasing behavioral symptoms of dementia (Hulme et al., 2010). Hand massage was also found to be an intervention with highest impact on behavioral symptoms of dementia (Cohen-Mansfield et al., 2015). The possible mechanism of the effect of massage on agitation in nursing home residents with cognitive impairment was discussed by Holliday-Welsh (Holliday-Welsh et al., 2009). They discounted possible physiological effect and stressed the importance of one-on-one interaction that may decrease isolation and improve communication. This is what we found in the current study, where Namaste Care improved verbal and non-verbal communication.

However, we believe that loving touch is not just a “pampering” as one of the staff member stated but real therapeutic intervention. Several staff members stated that before Namaste Care many residents were not “tactile” meaning that they did not tolerate touch. This condition may lead to rejection of needed care resulting in combative behavior which is the most common reason for psychoactive medications (Cohen-Mansfield and Jensen, 2008). We believe that loving touch provided during Namaste Care decreased avoidance behavior also during regular care and facilitated its provision. The staff commented that the residents were less resistant to care and actually accepted caregivers of a different sex that they originally rejected. Namaste Care resulted in discontinuation of antipsychotics in only one resident, however, it was reported that Namaste Care allowed discontinuation of antipsychotics in all residents in another study (Fullarton and Volicer, 2013).

Another mechanism by which Namaste Care improved quality of life was possibly decreased pain. There was an overall reduction in pain for four service users who exhibited pain symptoms at the beginning of the study. This pain reduction was not due to increased administration of analgesics because the analgesic doses were actually reduced. Improvement in pain symptoms could be due to the way in which Namaste care is provided which promotes relaxation and includes massage. Massage may ease and reduce arthritic or rheumatic pain and also promote a sense of calm (Rodríguez-Mansilla et al., 2014). Another mechanism could be distraction by activities and the environment which was mentioned by both staff members and family.

Namaste Care had also beneficial effect on family members and staff. Family members enjoyed improved communication and better quality interaction with their loved ones that made visits more enjoyable. They were also happy to find their loved one more at peace because their agitation

was decreased. Staff reported increased job satisfaction mediated by improved communication and decreased difficulty in providing care. Our results are in agreement with another study which reported that tactile stimulation given to residents with dementia showing aggressive and restless tendencies made caregivers more able to interact with the residents and made them feel a warmer relationship with them (Skovdahl et al., 2007). Another study reported that providing massage to residents decreased caregiver stress indicated by decreased blood pressure and decreased anxiety (Moyle et al., 2013). Thus both environment and loving touch had beneficial effects on family members and staff.

Whilst the data presented are promising, a limitation of this study is the small sample size. However, despite the small number of subjects, the differences in QUALID scores were highly significant. The QUALID and PAINAD tools are widely implemented as a tools for measurement of QoL and pain, respectively, and currently provides the most practical method for objectively evaluating QoL and pain in a care setting. Whilst symptoms measured by these tools are open to interpretation and thus a potential source of interpreter bias, to minimise inter-observer variation, the same carers were used throughout the duration of the study and all of them received the same training.

In summary, the Namaste Care program prevents marginalisation of individuals with dementia through its inclusive one to one approach combining special environment and loving touch, and through the constancy of staff delivering this program. The data we present provides a promising foundation for wider implementation of the Namaste Care program within care settings.

Funding Source

None

Conflict of Interest

Joyce Simard who designed Namaste Care program and published a book about it is wife of Ladislav Volicer

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