Sidney De Haan
Research Centre for Arts and Health

Remember to Dance

Evaluating the impact of dance activities for people in different stages of dementia

SUMMARY REPORT

Trish Vella-Burrows and Lian Wilson

With special thanks to Georgina Birch, Alan Clarke, Flora Greig, Andrea Meredith and Leah White

green candle dance company

THE HEADLEY TRUST

Canterbury Christ Church University

Introduction

The positive effect of dance as a non-drug intervention for people affected by dementia is increasingly well documented[1 2 3 4]. The growing understanding of the precise mechanisms at play sits alongside the Government's agenda for finding cost-effective ways to manage an anticipated and unprecedented rise in the number of people with the condition over the next three decades[5].

This report outlines the findings of a two-year research study, conducted by the Sidney De Haan Research Centre for Arts and Health, Canterbury Christ Church University, on the impact on quality of life (QOL) and wellbeing of dance movement programmes, *Remember to Dance in the Community* (RtDC) and *Remember to Dance in Hospital* (RtDH), run by Green Candle Dance Company for people in different stages of dementia.

Aim

The aim of this study was twofold: i) to assess the effect of the RtD programmes on the QOL and wellbeing domains of functioning, motivation, creative and emotional expression, confidence, relationships and social competence for people in different stages of dementia and those involved in their care; and ii) to assess the potential for developing a sustainable model of dance activity that could be facilitated by healthcare staff.

Remember to Dance programmes

RtDC is an ongoing dance programme for people with early to mid-stage dementia. Participants meet weekly during school term-times in a community arts centre for 90 minutes of dance movement activities. RtDH is a rolling five-week programme delivered twice-a-week in an acute assessment unit for inpatients with dementia who are admitted in crisis. Family carers/care staff are invited to participate in the programmes, which are led by professional dance practitioners experienced in the combined field of dance and dementia. The design of the programmes takes into account people's experiences of dementia and the need to support QOL and wellbeing in a dynamic and person-centred manner.

Research methods

The programmes were evaluated by the Sidney De Haan Centre research team, with specific help from dementia specialists Georgina Birch and Alan Clarke, over a two-year period between September 2013 and September 2015. A two-cohort, repeated measures design with case studies was used to evaluate the effect of the programmes. Mixed-method data tools comprised standardised QOL, cognitive assessment and carer-burden questionnaires; the observation scales, Prosper Involvement Scale and Prosper Wellbeing Scale, (adapted from the Leuven Child Wellbeing Scale and the Leuven Involvement Scale for Young Children); film footage; interviews and focus group discussions with RtD participants, care-home and NHS staff, and dance practitioners. The triangulation of methods enabled the mapping and corroboration of participant-reported and researcher-observed patterns over time. The study was approved by South-East London NHS Research Ethics Committee in August 2013.

Analysis of quantitative data was undertaken via the Statistical Package for Social Science and Excel data software. The qualitative data was subjected to thematic analysis, with significant input from three NHS Trust doctors, Flora Greig, Andrea Meredith and Leah White, who have significant experience with dementia patients.

Main findings

A total of 37 people took part in the study. The main findings argue in favour of the RtD programmes supporting QOL, functioning, motivation, creative and emotional expression, confidence, relationships, social competence, and overall wellbeing for people in different stages of dementia and those involved in their care.

Community group results over 22 months

Quality of Life

Eleven participants completed QOLAD questionnaires as base and end points. These results relate to the questionnaire's ratings where 1 = 'poor'; 2 = 'fair'; 3 = 'good' and 4 = 'excellent'.

Mean self-rated scores for QOL across the group from base to endpoint remained unchanged at 29.7 and 29.6 respectively out of a maximum of 40 (12 questions).

Figure 1. Community group: QOLAD mean scores base to endpoint for individual domains

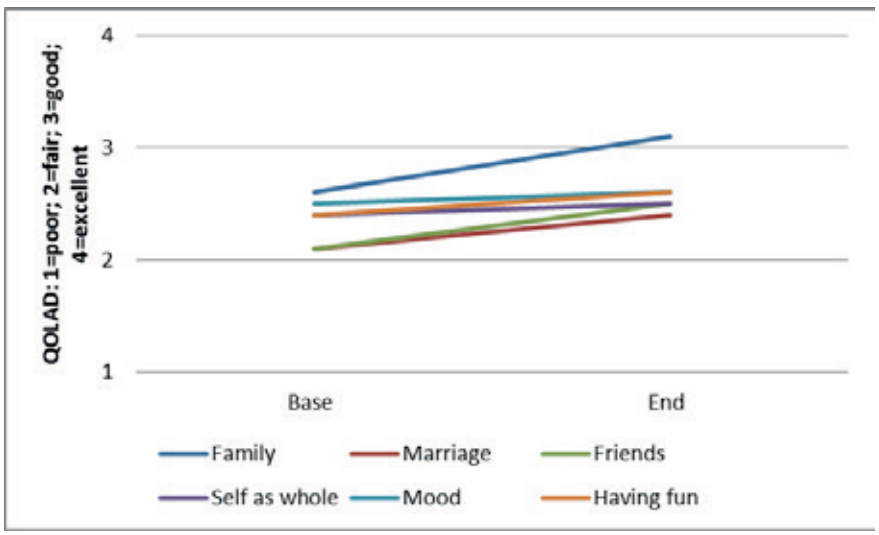


Figure 1 shows marginal rises in mean ratings from base to endpoint in:

- Family (2.6 to 3.1)
- Marriage (2.1 to 2.4)
- Friends (2.1 to 2.5)
- Self as a whole (2.4 to 2.5)
- Mood (2.5 to 2.6)
- Ability to have fun (2.4 to 2.6)

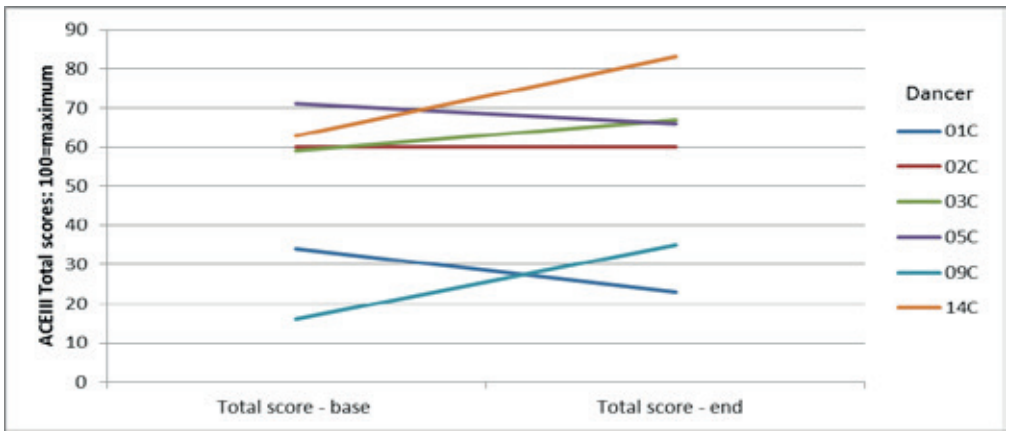
A marginal fall was seen in:

- Physical health (2.5 to 2.4)
- Energy (2.7 to 2.1)
- Memory (2.4 to 2.0)
- Ability to do chores around the house (2.5 to 2.4)
- Overall living situation (2.9 to 2.6)
- Life as a whole (2.8 to 2.5)

Cognitive functioning

Cognitive functioning was assessed via the ACEIII, where 0 = zero functionality; 100 = full functionality. Six participants completed the assessments at base and end point.

Figure 2. Community group: ACE III mean scores base to endpoint for cognitive functioning



100 = maximum; 82-88 = cut off score for probable dementia

The mean scores for cognitive function overall rose from 50.5 (with a range of 16 to 71) at basepoint, to 54.3 (with a range of 23 to 83) at endpoint (based on ACEIII cognitive assessments where scores below 83 = cognitive dysfunction). Figure 2 shows the scores for individual participants.

Findings from the Prosper Involvement and Wellbeing Scales

The Prosper Involvement and Wellbeing observation scales are rated: 1 = no signs: 2 = minimal signs: 3= moderate signs: 4 = moderate to high signs; 5 = consistently high signs.

Community group

An overall rise from base to endpoint was seen across participants (n=11) in three of the five Prosper Involvement Scale domains:

- Commitment to tasks - 3.8 to 4.9
- Embodiment/emotional expression - 2.5 to 4.6
- Non-verbal communication - 3.8 to 4.3

No change was seen between base and endpoint in the mean score for creative expression but within each session a consistent ascending pattern emerged from an average of 2.3 at the first ten-minutes of each session (observation time-points T1, T6, T11) to a peak of 4.0 in the last quarter of the session (T5, T10, T15). Levels of verbal communication also remained unchanged at 1.8 at both base and end point.

Hospital group over an average of seven weeks

Mean scores for the hospital group (n=5) from base to endpoint showed little change:

- Commitment - 3.3 to 3
- Creative expression - 3.1 to 2.6
- Embodiment - 3.4 to 3
- Non-verbal communication - 3.2 to 3.1
- Verbal communication - 1.8 to 1.4

Wellbeing – both groups

Wellbeing was measured via the Prosper Wellbeing Scale in terms of liveliness, self-confidence, enjoyment, tension, listlessness and aggression/disruption.

Figure 3. RtDC (n=11) and RtDH (n=5) groups: wellbeing scores from base to endpoint

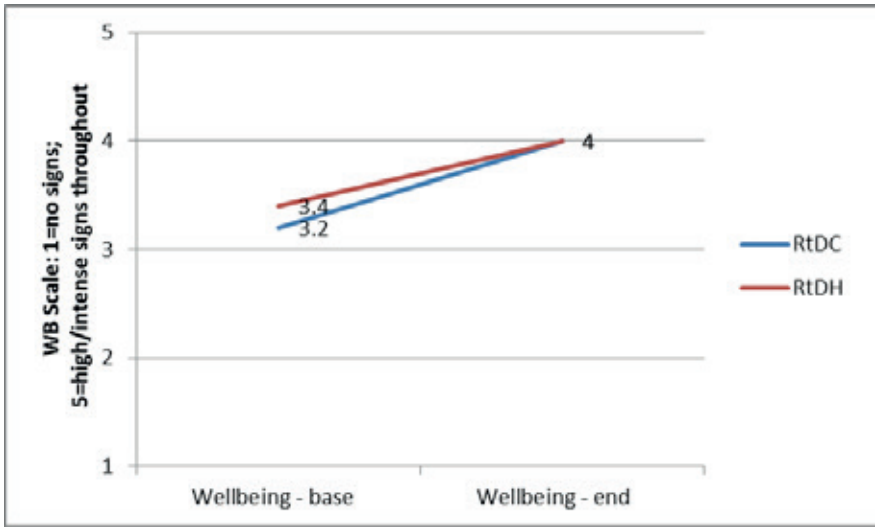


Figure 3 shows that the overall scores for wellbeing rose over an average of seven weeks in the hospital group from 3.4 to 4 and over 22 months in the community group 3.2 to 4.

Observations

Across both the community and hospital groups (n=16), researcher notes and film-footage analysis over the evaluation periods confirmed evidence of:

- Enjoyment related to movement and music
- Maintained levels of involvement (commitment, verbal/non-verbal communication)
- Improved vitality
- Progressively freer and more fluid physical movements
- Supported (hospital group) and improved (community group) co-ordination and sequencing skills
- Creative expression relating to types of activities

- Manifestations of self in the here-and-now (embodiment; abandonment of conscious self – more evident in the hospital group)
- Embodiment/ entrainment more apparent across the groups during certain activities (e.g. rhythmic bouncing of small balls)
- Positive social interactions and social bonding (in-the-moment in the hospital group and progressive in the community group)
- Positive relationships between carers and their cared-for
- Improved or supported wellbeing /positive mood
- Nurtured issues of choice and confidence
- States of prolonged satisfaction/achievement/confidence
- Reduction of listlessness/distress (hospital group).

In focus group discussions and interviews, people with dementia and family carers tended to express wellbeing in terms of enjoyment, a sense of achievement and/or physical improvement, and making friends. Family carers also referred to affirming a positive relationship with their cared-for.

Hospital and care home staff generally perceived RtD activities as beneficial to the participating patients (hospital) and residents (care homes). The most commonly expressed benefits were participants' enjoyment, physical exercise, relief of boredom, mental stimulation, relaxation, motivation and social interactions.

Staff training to facilitate dance activities

The key findings relating to care staff training were:

- Staff generally advocated dance as a positive intervention for people with dementia
- Around half of the staff interviewed believed that training to use dance in their health/care setting would enhance their portfolio of practice tools and their patients' experiences
- No member of staff referred to themselves being intended recipients of the benefits of dance in their place of work

Perceived barriers to dance training for care staff included:

- Busy care schedules
- Lack of perceived skill and/or confidence to dance
- Lack of personal interest
- 'Art' facilitation not regarded a necessary tool for health professionals

Implications

These findings support the growing evidence that regular, dementia-focused dance activities delivered by specialist practitioners can improve and prolong good QOL relating to physical and mental wellbeing for people affected by dementia, and to help to maintain and even improve function for those with the condition. Regular and – importantly – long-term activity programmes can also develop a strongly bonded group that engenders peer support and social cohesion. Further, they can provide a platform for creative and embodied expression for people for whom such opportunities are vitally important mechanisms for ongoing wellbeing.

Whilst conjecture supports the likelihood of cost savings to the health and social care budget in – for example – reducing acute crises, psychotropic drug prescription and premature admission

into long-term care settings, future research with a health-economics focus is needed to ascertain the true fiscal value of commissioning dance services as part of an integrated programme of care for people with dementia.

More research is needed into developing a model of training for healthcare staff to facilitate dance activities in the place of work. Initial findings indicate that the model should:

- Disseminate among healthcare staff research evidence that shows the benefits of dance and other arts activities that goes beyond pleasant recreation
- Build capacity and opportunities for dance to be used routinely in acute and long-stay settings for people with dementia, in groups and spontaneously in one-to-one care situations that call for non-verbal interactions
- Provide opportunities for care staff to explore their own creative spirit and to transfer newly realised and/or rekindled creative skills into a wider remit of their work

---

[1] Violets-Gibson, M (2004) 'Dance and movement for people with severe dementia'. In : Evans, S and Garner, J (eds) *Talking over the Years: A handbook of dynamic psychotherapy with older adults.* Brunner-Routledge, Hove, pp 195-213

[2] Jerome, D (2002) 'Circles of the Mind: the use of therapeutic circle dance with older people with dementia'. In: Waller, D (ed) *Arts Therapies and Progressive Illness: Nameless Dread,* Brunner-Routledge, Hove. p. 173

[3] Van de Winckel., A, Feys, H., De Weerdt, W. and Dom, R. (2004) Cognitive and behavioural effects of music-based exercises in patients with dementia. *Clinical Rehabilitation,* 18, 3, 253-60

[4] Coaten, R. and Newman-Bluestien, D. (2013) Embodiment and dementia – Dance movement psychotherapists respond. *Dementia,* 12, 6, 677–681.

[5] APPG (2014) Building on the National Dementia Strategy: Change, progress and priorities. All Party Preliminary Group on Dementia. Online at file:///C:/Users/acer/Downloads/APPG_on_Dementia_-_2014_report_-_Building_on_the_NDSE.pdf. Accessed 11 October 2015.

[6] Laevers, F. (1994). The innovative project Experiential Education and the definition of quality in education. In: Laevers F. (Ed.). *Defining and assessing quality in early childhood education. Studia Paedagogica.* Leuven: Leuven University Press, pp. 159-172.

All photographs by kind permission of Green candle Dance Company and the RtD participants

'Some participants would come to life even more with the props towards the end of the session. They would often engage here more with the facilitators and other participants and by themselves' (Researcher observation)

'Gets you meeting with people and being sociable' (Remember to Dance in the Community dancer)

'I made friends in here' (Remember to Dance in the Community dancer)

'Coming along to something like this, it is a safety valve, you can relax and enjoy the class.' (Family carer)

'I enjoy people talking, laughing, asking questions' (Family carer)

'You never know what you are going to do. [I like] not knowing what is going to come next; the variety.' (Family carer).

'The way to it is just music. Dancing and jigging. I remember that. We all did it'. (Remember to Dance in Hospital dancer)

Produced by Canterbury Christ Church University, January 2016.

Thanks go to The Headley Trust for funding the Remember to Dance programmes and this research study

For full report contact Rebecca Collier. Email: rebecca.collier@canterbury.ac.uk.
Telephone 01303 220870