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To promote the better health of older people through encouraging inter-disciplinary training, research and excellence in practice and services.

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# The Journal of the Institute of Ageing and Health

(West Midlands)

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## A note from the editors

Welcome to this latest edition of the Journal of Ageing and Health. This edition contains articles from different perspectives and we would like to thank all the people who have contributed providing an insight into their commitment of working with and for older people. This journal includes people from both primary and secondary care and authors from a variety of professional backgrounds.

The Institute is currently undertaking a series of study sessions relating to sensory stimulation activities for older people. Our first session in November was held at Robert Harvey House in Handsworth Wood and was well attended. It explored the use of sensory stimulation activities for older people. Leading the discussion was Marcus Fellows, Chief Executive for Broadening Choices for Older People (BCOP) in Birmingham, who introduced the work that is currently being undertaken by BCOP at their homes and centres. This was followed by a talk by Professor Eleanor Bradley, from the University of Worcester, leading into a debate in relation to its effectiveness and whether there is evidence to support sensory stimulation. It is envisaged that the series will continue with the next presentation on the 28th January at the Juniper Centre with a talk by Dr Claire Garabedian from the Association for Dementia Studies at the University of Worcester in relation to arts and dementia. We hope to see you at these events. A literature review has been included in this journal from Dr Ruth Pearce in relation to the evidence of sensory stimulation to help provide you with some background to the area.

Without people contributing to the journal we would not be able to share the research, reflections and experiences that help us to improve ageing in and around the West Midlands. At the back of the journal are guidelines on how to submit your article and we welcome new contributors to submit their work. We look forward to hearing from you.

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# Sensory stimulation activities: is there any evidence?

*Dr Ruth Pearce, Senior Lecturer, Institute of Health and Society, University of Worcester.*

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## Abstract

Sensory stimulation activities are increasing in popularity across the UK especially in the care home setting. With increasing numbers of older people being cared for in assisted living or care home settings, sensory stimulation activities are being introduced across the sector yet there appears to be a lack of robust evidence to support their benefits and effectiveness.

For this review, a literature search of the databases CINAHL and Medline was conducted to gain understanding of what evidence is available to support the ongoing use and development of sensory stimulation activities.

The findings suggest that older adults, with or without dementia, benefit in the short term from participating in sensory stimulation activities however, there is a lack of robust evidence due to methodological weaknesses to demonstrate the true impact of the activities. There is also less evidence to support the long term benefits and the majority of articles reviewed suggest that a longitudinal approach needs to be considered. Staff education and training was highlighted as important to maximise the benefits of sensory stimulation activities.

The review may not reveal robust evidence to support sensory stimulation activities however there is an overarching expression of belief that sensory stimulation activities should be employed to engage older adults in cognitive, social and emotional activities to enhance quality of life.

## Introduction

Sensory stimulation activities are increasing in popularity across the UK especially in the care home setting. Sensory activities can range from multisensory stimulation<sup>1,2,3</sup>, tactile interventions<sup>4</sup>, sensory gardens<sup>5</sup>, olfactory stimulation<sup>6</sup>, animal assisted interventions<sup>7,8</sup>, arts-based therapy<sup>9</sup>, music therapy<sup>10</sup> and exercise<sup>11</sup>.

Research into the health benefits of sensory activities has risen over the last two decades to understand more about how sensory stimulation can improve health and quality of life and in order to see how sensory stimulation can be utilised in community and healthcare settings.

The observational and anecdotal evidence suggests that different types of sensory stimulation can improve quality of life and even cognitive function of older adults with or without dementia. Further benefits purport increased concentration through improving cognitive function, increased socialisation, improved self-concept and alertness but the evidence needs to be examined.

For the purpose of this review multisensory stimulation, tactile interventions, sensory gardens, animal assisted interventions and exercise will be considered.

## Background

In the UK, 10 million people are over 65 years old which is predicted to rise by over 50% in 20 years' time and the number will have nearly doubled to around 19 million by 2050. Included within this total is 3 million people aged 80 years and over, and this is projected to double by 2030 reaching 8 million by 2050<sup>1</sup>.

Sensory stimulation can be simply defined as something that stimulates one of the five senses<sup>10</sup>. Proprioceptive stimulation is related to tactile stimulation and is the sensory feedback mechanism that informs us where the parts of our body are and how they are moving. This alongside vestibular stimulation allows us to stand, balance and move through space without falling over. Vestibular stimulation relies on feedback from the visual, auditory and tactile systems<sup>12</sup>.

The range of sensory activities outlined above aim to stimulate the senses through pleasurable sensory experiences which are organised to stimulate primary and secondary senses in an atmosphere of trust and relaxation<sup>2</sup>. For example, multi-sensory interventions are used to stimulate the primary senses of sight, smell, hearing, taste and touch and are not only used in the field of older adults but can be used as an adjunct to other therapies in fields as diverse as paediatrics, midwifery, mental health, special education and pain management<sup>1,2</sup>.

The term sensory garden refers to the idea that the garden may stimulate the senses. The therapeutic use of sensory gardens may be passive and/or active with passive referring to being in the garden or outdoors and experiencing a variety of sensory stimulations, such as fragrances, colours,

birdsong, fresh air, sunshine and various sights<sup>5</sup>. To use the gardens actively means engaging or doing activities such as gardening, picking flowers and berries, taking care of birds, socialising and walking<sup>5</sup>.

Animal assisted therapy or animal assisted activities have the primary goal and objective for the animal and human to meet to enable improvement in the human physical, social, emotional, and/or cognitive functioning<sup>7</sup>.

Exercise is widely recognised as a positive health influence across all ages however, nursing home residents spend up to 94% of their time sitting or lying down<sup>11</sup>. As with other sensory stimulating activities there is growing recognition that exercise can not only benefit physical health it can improve the cognitive, behavioural and emotional well-being of individuals.

Overall, the use of sensory stimulation activities in the management of older people are reported to capitalise on the sensori-motor capacity of older people thus reducing the demands made on their cognitive faculties<sup>1</sup>. This is especially helpful in the care of older people with dementia who may already suffer with sensory deprivation and resultant maladaptive behaviour<sup>13</sup>.

### **Literature Search**

A search for relevant literature accessed two library databases CINAHL and Medline to gather articles on sensory stimulation activities to identify whether the literature available provided evidence of the effectiveness of the interventions. The majority of literature emerged from the field of dementia care although it should be noted that sensory stimulation activities are not limited to people with dementia.

In total seven articles are reviewed in-depth to gather a picture of the research conducted across the range of sensory stimulation activities. A selection of the studies reviewed use a range of terms including multisensory stimulation, multisensory interventions and multisensory stimulation environments however, for the purpose of this article, multisensory stimulation refers to a range of sensory stimulation activities and is not limited to multisensory rooms normally associated with the registered trademark Snoezelen.

### **Review**

In Bauer et al's study they considered the use of multisensory interventions in residential aged care services (RACS) for the management of dementia-related behaviours in residential aged care in Victoria, Australia<sup>1</sup>. There was no set definition given as to what multi-sensory activities the authors were specifically researching so the study includes a wide variety of activities interpreted by the RACS as multisensory interventions including music, massage, gardens, dance, meditation and multisensory rooms (e.g. Snoezelen).

Irrespective of a lack of strong evidence to support the practice of multisensory interventions<sup>1</sup> Bauer et al acknowledge there is a lack of consensus among participating RACS as to an overall definition of what constitutes a multisensory intervention, how the use of multisensory interventions is determined, and the best approach and delivery of these interventions for people with dementia<sup>1</sup>.

The authors developed a 33-item computer-assisted telephone interview (CATI) to gather descriptive data on the use of multi-sensory interventions in the region. The tool was developed after a: review of the literature, discussion with expert colleagues and pilot study. The CATI was developed to be administered over the telephone, but could also be completed as a paper-based survey for those RACS who preferred this format<sup>1</sup>.

The sample size for the study was noteworthy and in total 416 RACS participated. The study findings highlight uptake to be associated with staff interest or assumption as opposed to hard evidence that multisensory activities are effective. The findings indicate that the interventions are often used as a form of recreation, rather than as a therapeutic intervention for the management of specific dementia-related behaviours<sup>1</sup>. The study also highlighted the lack of education or training for staff around the use of multisensory interventions. A few RACS identified that there is no supervision of residents during the administration of the interventions and no formal evaluations were undertaken. This study highlights the widespread uptake of multisensory interventions without robust evidence of their effectiveness, without the necessary staff education and training and the lack of formal evaluation to assess their impact.

In Baker et al's (2003) study<sup>14</sup> they used a randomised control trial design to assign 136 patients from the UK, Netherlands and Sweden to either a multisensory stimulation (MSS) group or another activity group (e.g. playing cards). Patients participated in eight 30-minute sessions over 4 weeks. There were short term improvements in both the MSS and activity groups immediately after sessions, and limited short-term improvements between the groups during sessions. There were no significant differences between the groups when assessing change in behaviour, mood or cognition at home/on the ward or at the day hospital<sup>14</sup>. Interestingly, they noted that behaviour was static or improved during the trial but deteriorated once the sessions had stopped.

Sanchez et al undertook a literature review to analyse the therapeutic effectiveness of multisensory stimulation in people with dementia<sup>2</sup>. They use the term multisensory stimulation environment (MSSE) and state that MSSE's developed in the early 1990's as an alternative to pharmacological treatments for older people with dementia.

In terms of effects on behaviour the review of the literature highlighted evidence of short term effects but questioned the long term benefits. Several of the studies analysed suggested improvements in the short and some in the longer term but many studies reported no significant difference between the MSSE and control groups. Studies on the effects of multisensory stimulation on the cognitive status of elderly people with dementia are scarce<sup>2</sup>. In people with moderate to severe dementia one of the studies analysed did not find significant differences in the short or long term between the intervention and the control group receiving activity sessions<sup>2</sup>.

The study goes on to consider effects on communication, interaction and functional status and again, there is no clear evidence to support the effectiveness of MSSE's as the literature contradicts itself. An interesting point made by Sanchez et al is the limitations of the methodologies employed to undertake the research reviewed. Studies are either; too small in terms of sample size, problems with randomisation, do not use control groups, do not apply appropriate statistical tests or are qualitative in nature. They conclude that MSSE opens a new non-pharmacological intervention field for people with dementia but procedures for establishing their effects need to be established.

In Mammarella et al's study they considered whether positive tactile experiences could lead to an improvement in cognitive function, emotional skills and perceived quality of life in a group of healthy community-dwelling older adults<sup>4</sup>. The study based in Central Italy recruited 45 older adults. Participants scoring less than 21/30 on the Mini-Mental State Examination (MMSE) were excluded from the study to ensure the participants had reasonable cognitive function. Participants were randomised into 3 groups and each group was matched for educational level and age. Each group was assigned a material; velvet, canvas or Velcro. Two 20 minute sessions were conducted for a total of 20 sessions over a 10 week period. A psychologist supervised each session and each participant completed a series of activities that required touching and working with the assigned material (e.g. rubbing the piece of velvet on hands and arms, folding the piece of velvet three times, etc.)

A variety of tests were conducted to assess baseline cognition, baseline affective status, verbal fluency and perceived quality of life. To avoid potential for bias the psychologists were blind as to the material the participants were handling. The results concluded that older adults in the velvet handling group seemed to have benefited from the tactile experience more than the other two groups. Working with velvet seems to have reduced the number of negative emotions, increased verbal fluency and perceived quality of life also improved<sup>4</sup>.

The authors acknowledged the gender bias within their

study stating that female participants were more willing to take part. They propose a larger scale study with even gender representation to extend knowledge in the field. They also acknowledge that there was no follow up sessions to ascertain any long term benefits. This is a critical point as other studies state there are short term benefits but the longer term results have not been significant<sup>3</sup>.

In the study by Gonzalez and Kirkevold they considered the clinical use of sensory gardens and outdoor environments for older people living in care homes. They utilised a cross sectional web-based design and distributed questionnaires to 488 nursing home managers and received 121 responses. The managers' impressions of the benefits of sensory gardens for the residents were stated as; facilitating taking residents outdoors, offered convenient topics for communication and facilitated social privacy for relatives<sup>5</sup>.

Gonzalez and Kirkevold reported the most likely group of patients to use the sensory gardens were elderly patients with dementia who were able to walk alone. They claim this highlights the need for further investigation into the amount and type of access that non or less mobile older adults in care have to the outdoors and how access and outdoor activities may be facilitated regardless of function levels<sup>5</sup>. Included in their study is that under 50% of managers were not aware of the literature available on the benefits of sensory gardens and interestingly stated even if they had this knowledge they would not improve the purposeful use of the gardens. Potentially, the notion that sensory stimulation provided by weather, wildlife, flowers, plants, and trees which gives a sense of the seasons, a chance for exercise, and a feeling of wellbeing<sup>15</sup> is lost on busy care home managers.

Morrison conducted a literature review looking into animal assisted activities. He reports the historical benefits of animal and human relationships and claims animal assisted activities are therapies that offer an integrative approach to enhance the treatment of various health concerns<sup>7</sup>.

From the literature reviewed, he points to the methodological weaknesses in the research conducted on animal assisted activities and these are consistent with the methodological weaknesses articulated by Sanchez et al when looking at multisensory activities (small sample size, lack of consistent randomization of participants, lack of designation of a control group or usual care group, inadequacy of control group, selection bias, poor generalizability, minimal reporting of reliability and validity of tools used to measure outcomes, and attrition rates). Morrison makes a further point which is that none of the studies discussed that animals have the potential to have a novelty effect on outcomes. He suggests the studies are repeated to see if the results are from the animals' being a novelty or if the effects are a result of the animal as an intervention, in which case reproducible outcomes would be apparent<sup>7</sup>.

In a more recent study Friedmann et al undertook a randomised control trial to evaluate the outcomes of pet assisted living for improving functional status in assisted living residents with mild to moderate cognitive impairment<sup>8</sup>. Forty participants were randomly assigned to the pet assisted living group or the reminiscing group. The pet assisted living group participated in 60 to 90 minute sessions with a therapy dog, twice per week for 12 weeks. The reminiscing group was an attentional control intervention with equal amount of attention from the interventionist and the same time schedule as the pet assisted living group.

Changes in physical, behavioural, and emotional functioning in the pet assisted living and reminiscing groups were described and examined for directional and statistical significance<sup>8</sup>. Friedmann goes some way to eliminate what Morrison discussed as the novelty of the dog/animal. The same interventionist was used for each group so the pet assisted living group and the reminiscing group had the same person delivering the intervention. The difference with the pet assisted group was they had the dog. The results indicate that a pet assisted living intervention does improve physical, behavioural and emotional functioning with the physical element being the least improved. Behavioural functioning improved and whilst there was no reduction in medication taking there was an increase in emotional well-being.

Olsen et al conducted a qualitative study into a high intensity exercise programme conducted over 10 weeks under supervision. Being qualitative in nature, the sample size is predictably small with only 9 participants. One of the objectives was to measure self-efficacy alongside physical fitness. The findings indicated that self-efficacy improved through being involved, "being invested in"<sup>11</sup> and having something expected of them resulting in the participants gaining a sense of empowerment in their everyday lives.

Several small randomized controlled trials structured physical activity interventions in individuals with dementia led to improvements or slower decline in mobility, physical function, balance, muscle strength, mood, and behaviour.<sup>16,17</sup> Successful interventions include walking programs, aerobic training, and various combinations of aerobic, resistance, and strength training.

### Conclusion

The findings suggest that older adults experience short-term improvements from participating in sensory stimulation activities. It should be acknowledged that within the literature reviews and primary research papers analysed there is concern as to the methodological soundness and rigour employed when researching these types of activities. Staff education and training was highlighted as important to maximise the benefits of sensory stimulation activities.

There is less evidence to support the long term benefits and the majority of articles reviewed suggest that a longitudinal approach needs to be considered. However, although the research conducted may not prove conclusive there is an overarching expression of belief that sensory stimulation activities should be employed to engage older adults in cognitive, social and emotional activities to enhance quality of life.

### References

1. Bauer, M., Rayner, J., Koch, S., Chenco, C. (2012) The use of multi-sensory interventions to manage dementia-related behaviours in the residential aged care setting: a survey of one Australian state. *Journal of Clinical Nursing*. 21, p.3061–3069.
2. Sanchez, A., Millan-Calenti, J.C., Lorenzo-Lopez, L., Maseda, A. (2012) Multisensory Stimulation for People With Dementia: A Review of the Literature. *American Journal of Alzheimer's Disease & Other Dementias*. 28(1), p.7-14.
3. Maseda, A., Sanchez, A., Pilar Marante, M., Gonzalez-Abraldes, I., Bujan, A., Millan-Calenti, J.C., (2014) Effects of Multisensory Stimulation on a Sample of Institutionalized Elderly People With Dementia Diagnosis: A Controlled Longitudinal Trial. *American Journal of Alzheimer's Disease & Other Dementias*. 29(5), p.463-473.
4. Mammarella, N., Fairfield, B., Di Domenico, A. (2012) When touch matters: an affective tactile intervention for older adults. *Geriatrics and Gerontology International*. 12, p722-724.
5. Gonzalez, M.T., Kirkevold, M. (2015) Clinical Use of Sensory Gardens and Outdoor Environments in Norwegian Nursing Homes: A Cross-Sectional E-mail Survey. *Issues in Mental Health Nursing*, 36(1): p.35-43.
6. Matsuda, H., Ebihara, S., Nikkuni, E., Ebihara, T., Sakamoto, Y., Freeman, S., Kohzuki, M. (2012) Effects of olfactory stimulation on gait performance in frail older adult. *Japans Geriatric Society*. p.567-568.
7. Morrison, M. (2007) Health benefits of animal-assisted interventions. *Complementary Health Practice Review*. 12(1), p.51-62.g
8. Friedmann, E., Galik, E., Thomas, S.A., Hall, S., Yoon Chung, S., McCune, S. (2015) Evaluation of a Pet-Assisted Living Intervention for Improving Functional Status in Assisted Living Residents With Mild to Moderate Cognitive Impairment: A Pilot Study. *American Journal of Alzheimer's Disease & Other Dementias*. 30(3), p.276-289
9. Burton, A. (2009) Bringing arts-based therapies in from the scientific cold. *The Lancet*. 8, p.784.
10. Music
11. Olsen, C.F., Wiken Telenius, E., Engedal, K., Bergland, A. (2015) Increased self-efficacy: the experience of high-intensity exercise of nursing home residents with dementia – a qualitative study. *BMC Health Services Research*, 15, p.379-391.
12. <http://www.best-alzheimers-products.com/sensory-stimulation-for-alzheimers.html> (accessed 03.11.15)

13. Bidewell J & Chang E (2011) Managing dementia agitation in residential aged care. *Dementia* 10, p.1–17.
14. Baker, R., Holloway, J., Holtkamp, C.C.M., Larsson, A., Hartman, L.C., Pearce, R., Sherman, B., Johansson, S., Thomas, P.W., Wareing, L.A., Owens, M., (2003) Effects of multisensory stimulation for people with dementia. *Journal of Advanced Nursing*. 43(5), p. 465–477.
15. Brawley, E. (2002) Therapeutic gardens for individuals with Alzheimer's disease. *Alzheimer's Care Quarterly*, Winter, p.7-11.
16. Rolland, Y., Pillard, F., Klapouszczak, A. (2007) Exercise program for nursing home residents with Alzheimer's disease: a 1-year randomized controlled trial. *Journal American Geriatric Society*. 55(2), p.158-165.
17. Rolland, Y., bellan van Kan, G., Vellas, B. (2008) Physical activity and Alzheimer's disease: from prevention to therapeutic perspectives. *Journal of American Medical Directors Association*. 9(6), p.390-405.

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# Exploring Themes and Best Practice in Integrated Working: The Older Adults Workforce Integration Programme (OAWIP)

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## **Abstract**

This paper reports on work undertaken on a Health Education West Midlands Innovation Programme which was established to explore the workforce aspects of integrated working in health and social care services for older people. The programme, sponsored by the HR Director at Birmingham Community Health Trust, was established in 2013 and, following completion of six pilot projects, is currently being evaluated by an external organisation. The emergent findings reveal some important learning about the barriers and enablers of effective integrated working, as well as the relationship between workforce initiatives, system leadership and organisational development. The programme has developed some new approaches and resources across several aspects of integrated working, which are now being scaled up across the West Midlands.

Key words: Workforce integration, integrated working, older adults, care navigation, falls, volunteers.

## **Introduction.**

In February 2013, Health Education West Midlands (HEWM) approved funding for the Older Adults Workforce Integration Programme (initially known as the Frail Elderly Workforce Integration Programme) as one of its Innovation Fund projects. This was in recognition of the potential improvements that could be achieved through integrated working across health and social care services, responding to the need to reduce emergency hospital admissions, reduce length of stay and facilitate the effective discharge of patients.

At this time, expenditure on older people accounted for a significant proportion of the health (43%) and social care (75%) budgets. The Centre for Workforce Intelligence (CfWI) national data in 2011<sup>1</sup> indicated that by 2033 25% of the population would be 65 or older, with 52% having a long term condition. The Operating Framework for the NHS in England 2012/13<sup>2</sup> identified the need to ensure that elderly and vulnerable patients receive dignified and compassionate care, while financial constraints across the care sectors suggested that a more collaborative approach was necessary to realise the benefits of 'integrated care' for service users and carers.

This programme, therefore, provided an opportunity to take a closer look at the workforce implications of providing integrated services for older people. The specific objectives were to:

- Scope and critically evaluate existing relevant examples of service integration and identify workforce implications
- Provide a clear understanding of the current workforce, the competencies required in the future and any gap that must be addressed to meet future needs.
- Provide team, professional and organisational development opportunities to support and drive the service transformation, particularly focusing on the reduction in silo working and supporting the required attitudinal shift.
- Develop a new approach to integrated workforce planning (across primary, community, secondary and social care) informed by system wide reform for priority care groups and build the necessary capacity and capability.
- Develop a robust evaluation framework for the programme

This programme has been led by Birmingham and Solihull Local Education and Training Council (LETC) in partnership with the Black Country LETC. A multi-agency programme board was set up in October 2013 with representation from health and social care providers across Birmingham, Solihull and the Black Country. An important initial consideration was to ensure that the Board had a mix of representatives to include those were leading service transformation as well as workforce development and education leads from provider Trusts and local authorities. Membership of the board was subsequently strengthened to formalise the link with system wide service transformations being led by the Birmingham Better Care Fund and the Integrated Care and Support Solihull (ICASS) programme.

Integrated care means different things to different people. The Kings Fund has used the integrated care definition, "care which is intended to improve the quality of care for individual patients, service users and carers by ensuring that services are well co-ordinated around their needs"<sup>3</sup>.

From the outset, the Board adopted the following definition developed by Think Local Act Personal/National Voices<sup>4</sup> in recognition that integrated care was actually another way of describing person centred co-ordinated care:

Person centred co-ordinated care: “I can plan my care with people who work together to understand me and my carer(s), allow me control and bring together services to achieve the outcomes important to me.”

### Review of Best Practice

Having established that this was a system-wide, person centred initiative, an external consultant was engaged to review best practice in workforce integration. Studies of nearly 400 national and international examples of service integration revealed that very few had initially given consideration to the specific workforce issues that needed to be addressed. From those that did recognise workforce factors, however, it was possible to identify some good examples of training programmes and competency frameworks that would support the work of multi-agency, multi-disciplinary teams. Of particular importance, however, was the recognition of the role of care co-ordinators and care navigators in supporting people, especially in their own homes, and providing a conduit to other services in both the statutory and Private, Independent and Voluntary (PIV) Sector. Learning from the best practice review was also useful in identifying both the barriers and the enablers to effective integrated working. The main findings have been distilled into nine key points:

1. Service redesign and workforce development need to go hand in hand.
2. Co-location of services is helpful but it is more important that team members align their goals and work together.
3. Knowledge of the local population and services is very important and should be included alongside skills when designing training and development programmes.
4. Care needs to be taken with recruitment to new roles: value based approaches should be used and there is a need to ensure buy-in from the rest of the team.
5. It is important to consider the wider workforce, including independent sector providers and carers as well as social care and health professionals. The Cavendish<sup>5</sup> review observed that there were benefits in training the caring workforce as one workforce.
6. While Information and Communications Technology (ICT) is an enabler it shouldn't be over relied upon; process and interpersonal communication are more important factors in achieving integrated working.
7. Public and patient engagement is required to sustain integrated services, ensuring that these services remain responsive and can adapt to the

needs of service users.

8. Multi-disciplinary teams should be built around models of continuous learning.
9. The role of the care co-ordinator is crucial to the success of integrated working.

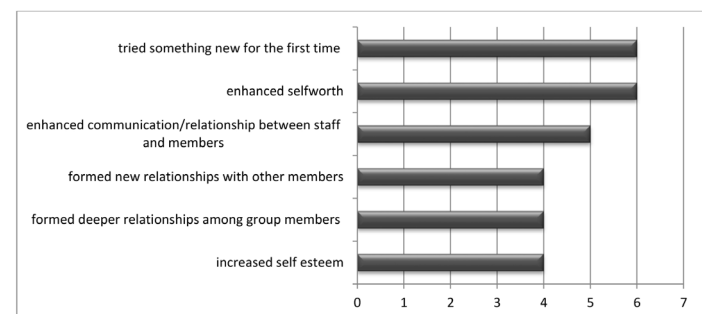
This review of best practice provided a foundation for further learning through a set of pilot projects.

### The Six Pilot Projects

The finding and recommendations from the best practice review were mapped across to the pilot projects which were approved by the Programme Board in early 2014. Each pilot provided a unique vehicle for testing out different aspects of integrated working in different settings, including communities, care homes and primary care. These pilots were selected following the application of a robust set of criteria, which included evidence of commitment to the older adult integrated care agenda and the ability to work across multiple partners in different sectors. The pilots also provided the Programme Board with access to expert clinical as well as patient/service user perspectives, as many of the lead organisations had their own established patient representative groups. This would help to keep both individual pilots and the programme grounded in practice and patient experience.

All six pilot projects had commenced by April 2014 and were substantially completed by July 2015. Although they were a diverse set of projects, they can be grouped in three main themes.

Two of the pilots focused on the workforce aspects of place based service integration, one of which was primary care based, providing an extended range of services from a



group of GP practices in Sandwell and West Birmingham; the other was based around the services provided within natural communities (known as “Healthy Villages”) in localities in Birmingham. Both of these projects had a strong focus on developing the role of those working in the voluntary and community sector to support people in their own homes. Using different approaches to workforce profiling to map these services and gain an understanding of the needs of volunteers, comprehensive recruitment and training programmes were designed and delivered.

These pilots have also provided an opportunity to gain a

greater understanding of the Care Navigator role and a recognition that this does not need to be a specific job role; care navigation functions can be undertaken by more than one worker when providing support to an individual person. This has led to the development of a function descriptor and competency framework for care navigation based on the National Occupational Standards and developed by Skills for Health<sup>6</sup>.

While the above two projects have contributed to the delivery of preventative services in communities, the second set of pilots have focused on addressing more specific reasons for emergency admissions from care homes to hospitals. Projects in Birmingham and Shropshire have recognised the importance of the care home workforce within the wider health and social care system; improving the competence and confidence of this workforce is expected to have a positive impact on patient experience and reduce the need for hospital admissions. The Birmingham project has provided training on falls awareness, which has been delivered on site to care home staff with separate sessions, including training on root cause analysis, for managers designed to develop a culture of safety within a care home setting.

In Shropshire, following analysis of the main reasons for admissions from care homes to hospital, a competency based training programme has been delivered to care home staff. This has covered topics which include falls, as well as dementia, COPD, nutrition and hydration. This approach can be sustained through training care home managers to undertake an ongoing assessment of the competencies of their staff.

In Walsall, there has been a full review of the existing training on falls prevention that is available to health and social care staff. A new programme has been developed with new training resources and an e-learning package. This has been designed and delivered as a standard programme for a multi-agency audience. Attendees have included staff working in extra care housing, volunteers, domiciliary and care home staff, as well as health and social care professionals. It will be sustained through ongoing support from the local Clinical Commissioning Group and training delivery from a network of champions with access to on line resources.

The sixth pilot project set out to raise awareness and engagement of primary care clinicians and professionals of the workforce implications of an integrated care and support system in Solihull (ICASS). Workshops were delivered by the Kings Fund; these identified the value of working together on specific topics such as dementia, and acted as a catalyst in the establishment of a network of professionals. There was valuable learning from this initiative, which led the ICASS Board to conclude that there needed to be more emphasis on exploring the cultural differences and

relationship building between primary and secondary care, working together to develop an agreed model of care. This system leadership and visioning work is continuing. The main areas of learning from the themes and activities of the Older Adults Workforce Integration Programme and its pilot projects are illustrated in the diagram below:



Figure 1: Integrated Working Themes

While some pilot projects have worked across different workforces, for example by delivering training to healthcare workers in the statutory, private and voluntary sector, other projects have recognised the value of developing specific parts of the workforce within the wider system. A good example of this is the potential role of well trained and confident care home staff and volunteers in helping to reduce emergency hospital admissions from residential/nursing homes and from the community respectively.

### Evaluation

The contract for Programme evaluation was awarded to an external organisation and commenced in October 2014. Since that date there has been close liaison with pilot projects to identify individual impact and learning within each pilot and how this aligns with the evaluation of the overall programme. One of the major challenges for OAWIP was in establishing reliable baseline data to measure its impact at system level. In response to this, evidence of the experiences of patients/service users and the workforce is being compiled into a set of case studies to demonstrate what has been achieved through the programme. Initial evaluation findings have been shared at meetings of the Programme Board and are outlined in the section that follows. The draft evaluation report is currently being discussed with the Board and other stakeholders.

### Findings

As well as the activities undertaken in the individual pilot sites and the identification of best practice, other observations on integrated learning have emerged from this programme. One common theme is the need to align workforce development with both organisational development and system leadership to increase the success of projects and the likelihood of sustainability.

The original rationale for this programme was that the development of the workforce is an essential element in the delivery of effective integrated services but the pilot projects have helped to illustrate the point that investment in workforce development alone will have only limited and perhaps short term impact unless it is accompanied by clear leadership and a focus on the organisational development that is required to shift mind sets and change culture both within and between organisations, for example through establishing a common baseline of understanding and common goals as a pathway to integration. If this is present at the outset and throughout the life of the project, it will help to strengthen project completion and impact; leadership and organisational development after project completion will help to embed the pilot as a mainstream activity.

Development initiatives in integrated working require effective system leadership. In the same way that there system change is unlikely to be successful without equipping the workforce to deliver that change, investment in integrated workforce development requires system leadership that promotes integrated ways of working. This was recognised by those pilot projects that were part of a much larger change initiative and/or programme of activities. The importance of the relationship between service redesign and workforce development, highlighted in the Review of Best Practice is illustrated positively in the case of the Solihull pilot project, where a small investment in workforce development provided a real stimulus for change and increased collaboration with partners in primary care. Another aspect of leadership is the close work that is required with commissioners to clarify local visions and priorities for integrated services. Where these are clearly defined, work can be undertaken to ensure the workforce have the requisite skills and knowledge to support the implementation of new models of healthcare services. The development of these service visions and local integrated system workforce plans will be a key priority for Health Education West Midlands' new work in the Integrated Care Transformation Theme. Planning at system wide level will have the advantage of providing context for the annual workforce plans that are produced by individual organisations.

The impact of the programme on services and user experience has been difficult to ascertain over the short life of the projects. All pilots experienced difficulties in base-lining their data, eg on emergency hospital admissions and effectiveness of discharge arrangements and attempts to triangulate information from different sources resulted in more discrepancies and less confidence that details had been captured accurately by different parts of the healthcare system. One project, however, was able to identify a positive impact on hospital admissions from care homes that had benefited from training, although it is always possible that the improvements were attributable to other factors. Another project has revealed positive improvements in maintaining people safely within the

community but, again, the care navigation that was provided was only part of a much wider package of support provided to people in their own homes.

In acknowledgement of the data challenges, a series of case studies is being developed which will give insight into the patient experience and help to measure impact over a shorter period.

### **Recommendations And Future**

For those elements of the programme that evaluate well, the next challenge is to ensure sustainability beyond the life of this two year programme. The best practice that has been developed will be scaled up and spread as part of HEWM's Integrated Care Transformation Programme. This will provide opportunities to test the tools and resources, eg. training programmes, workforce profiling methodology, in a wider range of care settings and geographical areas. Further work will be taken to develop the function descriptor and competency frameworks for care coordinators and navigators, as well as the development of shared core principles and functions for those working in integrated care teams. There will be a new workstream to develop the workforce to support self-care and raise awareness of the potential of digital technology in relation to both healthcare and reducing social isolation. Work will continue with commissioners to clarify the long term vision for services and the workforce priorities that need to be addressed.

The future emphasis will be on promoting best practice and supporting its adoption and adaptation in a way that is meaningful for local populations and communities. This, for example, recognises the different challenges in achieving integrated working in rural and urban environments as well as the complexities of multiple partners, commissioners and service providers, working across the boundaries of health and social care.

The summative evaluation report for the OAWIP is due to be published in November 2015. The report and resources from the programme and its pilot projects will be made available on the HEWM website. The initial best practice scoping report, undertaken in 2014, has been supplemented with further best practice examples of integrated working. These have been highlighted in a series of newsletters which are also available on this website.

<https://wm.hee.nhs.uk/our-work/our-letcs-birmingham-letc/birmingham-solihull-letc-workforce-development-plan/older-adult-workforce-integration-programme/oawip-newsletters/>

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### **References**

1. Centre for Workforce Intelligence (2011) Integrated Care for Older People. Examining Workforce and Implementation Challenges.
2. The Operating Framework for the NHS in England 2012/13. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/216590/dh\\_131428.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216590/dh_131428.pdf)
3. Goodwin N, Smith J, Davies A, Perry C, Rosen R, Dixon A, Dixon J et al (2012) Integrated care for patients and populations: Improving outcomes by working together, Kings Fund, Nuffield Trust.
4. TLAP/National Voices, 2013: <http://www.nationalvoices.org.uk/defining-integrated-care>
5. Cavendish, C. (2013) The Cavendish Review: An Independent Review into Healthcare Assistants and Support Workers in the NHS and social care settings.
6. [www.skillsforhealth.org.uk](http://www.skillsforhealth.org.uk).

# How can effective physiotherapy rehabilitation be best achieved for people living with dementia, and how can this promote such individuals' independence and quality of life?

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Dementia is a major issue facing modern healthcare systems across the globe. There are an estimated 35.6 million people living with dementia worldwide; with one new diagnosis every 4 seconds<sup>1</sup>. The impact of dementia is huge and, as the rising population ages, the demands placed on healthcare will only grow; with the number of people affected by dementia set to reach 115.4 million by 2050<sup>1</sup>. In the United Kingdom, the financial cost of dementia to the economy is £26 billion and by 2025 there will be 1 million British people living with dementia<sup>2</sup>. Therefore, it is not surprising that the government has identified dementia as a national priority and calls for an improvement in knowledge and development of services in this area<sup>3</sup>.

Due to this incidence and prevalence of dementia, it is important that people affected are consistently provided with high-quality care that is; compassionate; person focussed; and aimed at enhancing their wellbeing and quality of life (QOL)<sup>4,5,6</sup>. Taking an integrated approach has been described by the National Institute for Health and Care Excellence (NICE)<sup>6</sup> as fundamental in providing this high-quality care, with the Department of Health (DH)<sup>3</sup> stating that only through joint working and coordination; will the dementia strategy succeed. Studies supporting this statement include those by Chapman and Toseland<sup>7</sup> and Bellantonio et al<sup>8</sup> which provide evidence to suggest that effective interdisciplinary working improves health outcomes such as agitation, pain<sup>7</sup> and hospitalisation<sup>8</sup>. Both studies describe physicians, nurses and allied health professionals (including physiotherapists) as key members in their multidisciplinary teams.

This importance of physiotherapy is strengthened as it has been a key government recommendation when outlining the delivery of effective care for older people with dementia<sup>9</sup>. NICE<sup>6</sup> list physiotherapy as a service that maintains physical and mental wellbeing in these people. The positive role of physiotherapy and the effect of related interventions on physical and cognitive function in people with dementia, is supported by reviews of the literature<sup>10,11,12</sup>.

Conversely, a critical review by Burge et al<sup>13</sup> and two earlier randomised controlled trials (RCTs)<sup>14,15</sup> claimed that physical activity programmes were ineffective in improving the daily functioning<sup>13</sup>, mobility<sup>14</sup> or falls risk<sup>15</sup> of people with cognitive impairment and dementia. These inconsistencies, along with the expectation that people with dementia

are less likely to be compliant and therefore, benefit from physiotherapy intervention<sup>16</sup>, illustrate the importance of critically analysing the literature and evaluating how maximum compliance and effective physiotherapy rehabilitation can be achieved.

Two techniques involved in delivering any effective physiotherapy service are employing successful communication strategies and person-centred approaches<sup>17</sup>. These methods have not only been recommended as best practice for the delivery of quality care in people with dementia<sup>3,4,6</sup>, but recent literature reviews found that improved communication led to enhanced QOL and increased positive interactions<sup>18,19</sup>. Furthermore, utilising a person-centred approach promoted feelings of attachment and inclusion in people living with dementia<sup>20</sup>. Consequently, critical analysis of these techniques and their implementation may help to increase compliance and active participation in physiotherapy practice, which may ultimately improve outcomes and effects on individuals' independence and QOL.

This essay will critically explore the importance of physiotherapy in optimising the QOL and independence of people living with dementia and also the physiotherapist's role in relation to the wider team involved in the care of these individuals. In addition, it will critically review the literature to determine how this physiotherapy can be most effectively delivered, focussing on communication and person-centred approaches, as well as training programme characteristics.

There are many different ways that dementia affects an individual. Potocnik<sup>21</sup> describes the many sub-types of dementia and defines this 'umbrella' term as 'an acquired global impairment in memory, personality and intellect in an alert patient, that is sufficiently severe to interfere with social and/or occupational functioning' (p.141). The DH<sup>4</sup> state that dementia is a progressive disease that affects individuals' abilities to complete daily activities. Potocnik<sup>21</sup> goes on to explain that this functional deterioration can be attributed to processes such as; the development of amyloid plaques, neurofibrillary tangles and synaptic/neuronal loss in Alzheimer's disease; or from the multi-infarcts and vascular damage to the brain's deep white matter in vascular dementia. These are the two most common sub-types of dementia<sup>22</sup>.

Physical manifestations of these disease processes can lead to reduced independence and physical function as individuals with dementia demonstrate a shuffling gait, difficulties judging depth, problems with balance and poor movement initiation<sup>16</sup>. This is supported by Tangen et al<sup>23</sup> who found that individuals with Alzheimer's disease demonstrated a significant deterioration in gait and balance. Critical analysis of this cross-sectional study reveals methodological limitations, including the absence of blinding and a significant amount of missing data, which increases bias and reduces the generalisability of results. However, Tangen et al<sup>23</sup> used a balance outcome measure that has been shown to be reliable and valid<sup>24</sup>; which improves the clinical implications of their findings. Furthermore, other studies support these discoveries that dementia impairs balance<sup>25,26</sup> and reduces mobility<sup>26</sup> which suggests those with the disease may exhibit low physical functioning.

Gait and dementia were investigated in more detail by Van Lerslele et al<sup>27</sup> who, despite including some case-control studies that had a significant risk of bias, completed a high-quality systematic review. Their results were more generalisable as they included elderly participants from both the community and hospital setting. Van Lerslele et al<sup>27</sup> consistently found many alterations, such as reduced walking speed and shortened step length, in the gait patterns of people with a dementia diagnosis when compared to healthy elderly controls. These gait deficits along with the increased dependency, greater falls risk and reduced mobility of individuals with dementia<sup>26,28</sup> would affect these individuals' ability to carry out daily tasks and therefore may affect their QOL.

Measuring QOL is difficult in people with dementia but we can draw upon the body of literature to suggest that their aforementioned deficits and reductions in physical abilities can have a negative impact upon their QOL. According to The World Health Organization (WHO) QOL assessment Group, as cited by The WHOQOL group<sup>29</sup>, key to measuring QOL is how an individual perceives their position in life, which is affected by factors including their physical health and level of independence. Nikmat et al<sup>30</sup> found supporting evidence that suggested an increased ability to independently perform activities of daily living, was associated with a higher QOL in individuals with dementia. Although validity and generalisability were reduced by the small-sized convenience sample selected by Nikmat et al<sup>30</sup>, interpretation of their results is enhanced as they used the Barthel Index; an outcome measure found to have reasonable inter-rater reliability<sup>31</sup>. Contradictory to these findings, Banerjee et al<sup>32</sup> concluded that QOL was not associated with functional limitations in people with dementia. However the results of this cross-sectional design did not account for other factors of causation, such as depression, and consequently cannot be interpreted with confidence. This is reinforced by Brodet al<sup>33</sup> who,

after separating depressed and non-depressed participants, were able to design an instrument of good internal consistency that effectively measured the QOL of people living with dementia. This outcome measure stated the importance of the domains of physical functioning, daily activities, mobility and bodily wellbeing<sup>33</sup>. Therefore, it is reasonable to deduce that the physical effects of dementia may cause individuals to experience a lower QOL - this is where the role of physiotherapists become apparent.

Physiotherapy is important in improving the health, wellbeing and QOL of individuals through modalities such as exercise, movement and other physical approaches<sup>34</sup>. After considering this point alongside the previously mentioned effects that dementia can have on individuals' physical health/functioning and QOL; it is reasonable to suggest that physiotherapy has a key role in the care of these individuals. Definitions support this as the Chartered Society of Physiotherapy (CSP)<sup>34</sup> state that 'physiotherapy is a healthcare profession that works with people to identify and maximise their ability to move and function' (p.4). In addition, Kempenaar<sup>16</sup> explains that physiotherapists have long been involved in the rehabilitation of people with a range of disorders including the neurological and musculoskeletal conditions that are often displayed by people with dementia. The involvement of physiotherapists has also been outlined as a necessity in dementia care policies<sup>3,9</sup> and associated public body guidelines<sup>6</sup>. There is also a growing body of literature around the use of physiotherapy interventions and their impact on the physical function, independence and QOL of people living with dementia. Critical analysis of this evidence is imperative in realising the importance of the physiotherapy as well as how the most effective physiotherapy can be achieved with this population.

Recent literature reviews found that physiotherapy specific interventions (such as strength, balance, and gait training) improved the function<sup>10,12,35</sup>, mobility<sup>12,35</sup>, and falls risk<sup>35</sup> of people with dementia. In contrast, Suttanon et al<sup>36</sup> could make no general conclusive statements on the impact of balance exercise programmes on the physical performance of such individuals. Other literature reviews also found only limited evidence to support the use of physical activity in improving the daily functioning and QOL of individuals with dementia<sup>13,37,38,39</sup>. However, these reviews have many limitations as they included studies with; small sample sizes; low methodological quality, for example poor/absent randomisation techniques and/or blinding; and heterogeneity of interventions and outcome measures. This means that their results cannot be interpreted confidently into practice and therefore, it is important to critique individual studies to best determine the impact of different physiotherapy programmes on the independence and QOL of people living with dementia

Although a trend toward lower QOL was found in people

with dementia who had undergone a home-based exercise programme<sup>40</sup>, this intervention was not delivered by a physiotherapist. This, along with differences in the baseline characteristics of the comparison groups, means that the conclusion that exercise can reduce QOL may not be generalised or made with certainty. This is reinforced by personal experiences in physiotherapy practice and the findings of other literature around this topic. Huusko et al<sup>41</sup> found that when individuals with dementia underwent intensive multidisciplinary rehabilitation, including twice daily physiotherapy, they were able to return to independent living in their own homes; which has been found to increase QOL<sup>30</sup>. Although statistical power was reduced by a lower than planned sample size, Huusko et al<sup>41</sup> followed a high-quality RCT design with comparable intervention and control groups; making their findings valid to practice. Additionally, more recent RCTs support this finding that physiotherapy intervention may enhance the QOL of people with dementia by; improving gait and walking ability<sup>42,43</sup>; reducing the incidence of falling<sup>44</sup>; and increasing physical function and strength<sup>43</sup>.

Contradictory to this, Eggermont et al<sup>45</sup> found no beneficial effects of a walking programme on the cognitive function of people with dementia. Although this was a single-blinded RCT, it analysed cognitive (not physical) function and only included nursing home residents who had cardiovascular disease; which reduces generalisability. Also, this intervention may have been of inadequate intensity and/or duration to observe an effect as walking speed was self-selected and the programme lasted only six weeks. This notion is supported by Netz et al<sup>46</sup> who found that only after twelve weeks of higher intensity exercise, compared to a previous period of low intensity exercises, was an improvement in functional mobility observed in people with dementia. Although this exercise programme was effective, the participant adherence rate was low (approximately 60%) and physiotherapists need to consider this when designing rehabilitation programmes for individuals with dementia.

High compliance is possible as Hauer et al<sup>43</sup> achieved an intervention adherence rate of 93.9%, when completing a double-blind RCT that compared low intensity motor training to an individualised and progressive training programme (both of a three month duration) for people living with dementia. They found that those undergoing the dementia-specific, high-intensity exercise programme, demonstrated significantly greater improvements in strength, balance, functional performance and walking ability; which are measures of QOL<sup>30,33</sup>. In a similar study by Schwenk et al<sup>42</sup> this same dementia-specific training programme, which was delivered by a qualified instructor, had a similarly high adherence rate (91.9%) and significantly improved desirable gait variables such as speed and cadence. A time-related effect on results cannot

be excluded in either study<sup>42,43</sup>, however, both have high methodological rigour and implemented established, standardised training techniques Hauer et al<sup>43</sup> also employed an intention-to-treat analysis which reduces bias and increases generalisability of results. This means that their intervention methods (twice weekly physiotherapy sessions consisting of a range of activities such as; walking; balance; and strength training) may be useful to consider when implementing physiotherapy exercise programmes for people living with dementia.

From the above critique of the literature, the importance of physiotherapy is visible as its effective implementation can improve the physical function, independence and QOL of individuals with dementia. However, physiotherapists should not consider their role in isolation. The literature reveals the wide number of professionals involved in the care of people with dementia; with effective teams consistently including physicians, nurses, physiotherapists, occupational therapists, dieticians and social workers<sup>7,8,41,44</sup>. A coordinated and multidisciplinary team approach is also consistently recommended by numerous dementia care policies/reports<sup>3,6,22</sup>. This integrated approach, which includes physiotherapists, has been shown in the literature to improve outcomes in people with dementia such as; hospitalization and death<sup>8</sup>; and agitation and pain<sup>7</sup>. Whilst clinically significant results were shown only by Chapman and Toseland<sup>7</sup>, Bellantonio et al<sup>8</sup> does bring to light promising trends and both studies used randomisation and control groups to reduce bias and increase the overall quality of their results. Furthermore, professionals have been found to learn from and complement each other when caring for people with dementia<sup>47,48</sup> and a multidisciplinary team intervention, (including physiotherapy) can reduce the number of falls experienced by dementia-inpatients<sup>44</sup>. This latter study<sup>44</sup> had a high-quality RCT design with good statistical analysis; making results more interpretable to practice. This body of evidence suggests that team working between professionals may improve the success and quality of care provided to individuals with dementia, therefore, physiotherapists must consider this approach to maximise the effectiveness of their practice. The involvement of caregivers and family is also revealed as an important part of this team approach to dementia care<sup>7,41,49</sup>.

Physiotherapists must involve the caregivers and family when rehabilitating people with dementia as they are vital team members<sup>50</sup> and an essential element in the care of these individuals<sup>36</sup>. Yao et al<sup>51</sup> supports this as they found that a Tai Chi exercise programme closely involving dementia caregivers, and using family members as emotional motivators, had high compliance rates and also improved falls related outcome measures. Despite having some good ideas on improving the effectiveness of exercise interventions, such as using longer

group sessions and reward systems rather than criticism, the results of Yao et al<sup>51</sup> must be interpreted with caution as this was only a small-scale pilot study. There are, however, other high-quality studies that found that collaborating with the caregivers and family of people with dementia improved the compliance to and outcome of physiotherapy interventions such as exercise<sup>41,49</sup>. Therefore, it appears that physiotherapists should attempt to involve caregivers and families when working to optimise their practice and the associated improvements in the independence, function and QOL of people living with dementia. However, even if this integrated approach is achieved, this is futile if physiotherapists cannot communicate effectively with the individual person.

The CSP<sup>17,52</sup> consistently outline the need for physiotherapists to communicate successfully with service users to ensure effective practice. This successful communication poses a significant challenge when working with people who have dementia; as the disease can cause disturbances in language<sup>1,21</sup>. Oddy<sup>53</sup> explains how dementia affects communication diversely as individuals not only have difficulty understanding and expressing language, but also with remembering instructions, locating sounds and responding quickly. Kempenaar<sup>16</sup> and Oddy<sup>53</sup> both describe techniques that physiotherapists can use to enhance their communication when rehabilitating these individuals. These include; verbal adaptations, for example using short, clear sentences and giving one instruction at a time; the use of touch for directional guidance and movement facilitation; visual methods, for example demonstrating the desired action; and auditory cues, such as tapping the chair that the individual is going to sit in. Personal experience supports these suggestions; as successful communication has often been achieved through employing such techniques – especially when tailored to each individual.

Person-centred approaches and effective communication are intertwined when professionals interact with individuals who have dementia. This is due to the specific physiological effects of dementia and also by the requirement for physiotherapists to consider individuals' specific needs and modify communication methods appropriately<sup>17,52</sup>. Kitwood<sup>54</sup> proposed that dementia was more than the neurological impairment of individuals and that consideration also had to be given to their personal health, life history, coping style and environment. These ideas were reinforced when Brooker<sup>55</sup> devised a person-centred care model that stated how people with dementia need to be valued and treated as individuals. This framework has since been supported by Passalacqua and Harwood<sup>56</sup> who found that its practical implementation increased empathy towards people with dementia, and reduced their depersonalisation; both important factors in maintaining personhood<sup>54</sup>. Whilst the pre/post-test study design of Passalacqua and Harwood<sup>56</sup> limits their results, the effect sizes are fairly large which makes them more clinically

significant and therefore, relevant to practice. Kempenaar<sup>16</sup> explains how physiotherapy treatment goals can only be achieved if interventions are suited to each individual with dementia; revealing the role of person-centred approaches in effective physiotherapy practice. Person-centred practice is a professional value within physiotherapy and is described as an approach to health care that has the service user at the focus of all activity<sup>17,52</sup>. Government policy reiterates the need for person-centred care not only for older people<sup>9</sup> but specifically for those living with dementia<sup>3,4</sup> and NICE<sup>6</sup> state that taking this approach is 'fundamental to delivering high-quality care for people with dementia' (p.11). Clissett et al<sup>20</sup> illustrate techniques that may be useful for physiotherapists to use in practice as they found that person-centred dementia care was achieved through; the consistency of staff; expressions of warmth; and the facilitation of important relationships, for example helping an individual to sit out in the chair when visitors were present.

Although this was a small-scale study, results were compiled from patient/caregiver feedback which considerably increases their relevance to practice. Better communication skills were also found to enhance feelings of attachment and overall person-centred care<sup>20</sup>.

The links between person-centred care and effective communication are visible as Blackhall et al<sup>57</sup> presented a dementia-specific communication frame work that calls for healthcare professionals to use a staged process to validate individuals' behaviour, make an emotional connection, provide reassurance and engage the individual in an activity that maintains their personhood. Although Blackhall et al<sup>57</sup> used evidence from previous literature to provide a solid theoretical base for their model, they did not critique the literature in any depth or present evidence that this particular framework is effective in improving the communication with and consequently care of people who have dementia. Therefore, the conclusions we can draw from this work are limited, however, in personal practice the application of these principles have been extremely useful in achieving successful communication; which has aided physiotherapy intervention. Systematic reviews investigating the effects of improved communication, on the care of people living with dementia, have had mixed results. Whilst Eggenberger et al<sup>19</sup> found that training to improve communication skills and knowledge of person-centred care led to increased positive interactions with people with dementia; another study<sup>58</sup> could make no such conclusions. Vasse et al<sup>58</sup> did, however, find singular studies that revealed beneficial effects and McGilton et al<sup>59</sup> supports this as their systematic review found improved communication skills resulted in the increased responsiveness and decreased agitation/anger of those with dementia; desirable qualities of physiotherapy participants. All three of these systematic reviews have limitations, due to the heterogeneity of included studies,

which must be considered when interpreting their results. However, the consistently suggested benefits of successful communication, along with taking a person-centred approach, may be vital in achieving effective physiotherapy rehabilitation in dementia care. Therefore, these concepts must be investigated further.

From reviewing the literature it appears that successful communication and implementing person-centred treatment plans may improve adherence rates and effectiveness of physiotherapy. This is supported by Manckoundia et al<sup>60</sup> who found that an individualised physiotherapy programme was effective in stabilising, or even improving, the physical abilities of people with Alzheimer's disease. Their findings are limited in their translation to practice due to the lack of randomisation and the volunteer bias of the control group in this study. However, there are other high-quality studies that illustrate similar discoveries. Hauer et al<sup>43</sup> and Schwenk et al<sup>42</sup> both used an RCT design to compare the use of non-specific motor activity (control) with person-centred, individually-adjusted training programmes (intervention) for people living with dementia. Both studies used dementia specific communication strategies and results revealed a greater improvement in outcomes in the intervention group for; walking ability<sup>42,43</sup>; and lower limb strength and balance<sup>43</sup>. It is also encouraging that both studies had adherence rates of over 90% which are significantly higher than in other studies that did not use such communication techniques or person-centred approaches<sup>15,40,46</sup>. Closer examination of the studies reveal that it is difficult to generalise the results of Hauer et al<sup>43</sup> and Schwenk et al<sup>42</sup>, as they did not include participants who had severe dementia. However, their conclusions are strengthened by Yao et al<sup>51</sup> who found that Tai Chi; specifically adapted for people with dementia; not only had a high rate of compliance (86.4%), but also improved balance and mobility outcomes in these individuals. Furthermore, Hoffman et al as cited by Williams<sup>50</sup> stated that the motivation of people with dementia can be improved through person-centred approaches such as the use of personally relevant activities and photographs. Therefore, after critical consideration of the relevant literature, there is arguably sufficient evidence to indicate that effective physiotherapy rehabilitation may be achieved through utilising specific communication techniques and person-centred approaches when working with people who have dementia.

This essay has highlighted the vast implications that dementia can have not only on society but on those individuals living with the disease. The literature describes how dementia has a negative impact on the functioning and independence of individuals<sup>23,26,27</sup> which subsequently affects their QOL<sup>30,33</sup>. After critically analysing the literature, it seems that physiotherapists are well placed to provide high-quality care for these individuals and are consistently recognised within effective teams<sup>7,8,41,44</sup>.

At first, the literature supporting physiotherapy interventions appears inconsistent. However, there is a growing body of high-quality evidence that has found, when employed correctly, physiotherapy is effective in improving the mobility, independence and function of people living with dementia<sup>10,12,35,42,43</sup>. Further analysis of studies reveal that effective physiotherapy can be achieved by implementing exercise programmes that are dementia-specific, high-intensity, progressive and include a variety of exercises<sup>42,43,46</sup>. There is also support for the use of person-centred approaches and specific communication techniques in the care of people with dementia<sup>19,56,59</sup>, as well as for the inclusion of caregivers/family<sup>41,49,51</sup>.

In personal experience and after critically considering the literature, it appears that physiotherapists can achieve effective practice with people who have dementia, by treating each person as an individual and using effective communication methods to help them carry out an individualised, specific exercise programme that includes; balance; strength; and gait training. If these techniques are employed, physiotherapy can improve the independence, daily functioning and QOL of people living with dementia. More research, however, needs to be completed to investigate effective physiotherapy with those who have more severe dementia and also in relation to the different sub-types of the disease.

## References

1. Alzheimer's Disease International (2009) World Alzheimer report 2009. [Online] London, Alzheimer's Disease International. Available from: <http://www.alz.co.uk/research/world-report-2009> [Accessed 16 April 2015].
2. Dowrick, A. & Southern, A. (2014) Dementia 2014: opportunity for change. [Online] Alzheimer's Society. London. Alzheimer's Society 2014. Available from: [http://www.alzheimers.org.uk/site/scripts/download\\_info.php?fileID=2317](http://www.alzheimers.org.uk/site/scripts/download_info.php?fileID=2317) [Accessed 15 April 2015].
3. Department of Health (DH) (2009) Living well with dementia: a national dementia strategy. [Online] 291591a 1p 15k. DH. Available from: <https://www.gov.uk/government/publications/living-well-with-dementia-a-national-dementia-strategy> [Accessed 13 April 2015].
4. Department of Health (DH) (2013) Dementia: A state of the nation report on dementia care and support in England. [Online] 2901498. DH. Available from: <https://www.gov.uk/government/publications/dementia-care-and-support> [Accessed 13 April 2015].
5. National Institute for Health and Care Excellence (NICE) (2010) Dementia quality standard. [Online] Report number: QS1. Available from: <https://www.nice.org.uk/guidance/qs1> [Accessed 18 April 2015].
6. National Institute for Health and Care Excellence (NICE) (2013) Quality standard for supporting people to live well with dementia. [Online] Report number:

- QS30. Available from: <https://www.nice.org.uk/guidance/qs30> [Accessed 18 April 2015].
7. Chapman, D.G. & Toseland, R.W. (2007) Effectiveness of advanced illness care teams for nursing home residents with dementia. *Social Work*, [Online] 52 (4), 321-329. Available from: MEDLINE [Accessed 13 April 2015].
  8. Bellantonio, S., Kenny, A.M., Fortinsky, R.H., Kleppinger, A., Robison, J., Gruman, C., Kuldorff, M. & Trella, P.M. (2008) Efficacy of a geriatrics team intervention for residents in dementia-specific assisted living facilities: effect on unanticipated transitions. *Journal of the American Geriatrics Society*, [Online] 56 (3), 523-528. Available from: Wiley Online Library [Accessed 13 April 2015].
  9. Department of Health (DH) (2001) National service framework for older people. [Online] 23633 1P 55k. DH. Available from: <https://www.gov.uk/government/publications/quality-standards-for-care-services-for-older-people> [Accessed 13 April 2015].
  10. Christofoletti, G., Oliani, M.M., Gobbi, S. & Stella, F. (2007) Effects of motor intervention in elderly patients with dementia: an analysis of randomized controlled trials. *Topics in Geriatric Rehabilitation*, [Online] 23 (2), 149-154. Available from: [http://www.sld.cu/galerias/pdf/sitios/rehabilitacion-adulto/effects\\_of\\_motor\\_intervention\\_in.pdf](http://www.sld.cu/galerias/pdf/sitios/rehabilitacion-adulto/effects_of_motor_intervention_in.pdf) [Accessed 13 April 2015].
  11. Heyn, P., Abreu, B.C. & Ottenbacher, K.J. (2004) The effects of exercise training on elderly persons with cognitive impairment and dementia: a meta-analysis. *Archives of Physical Medicine and Rehabilitation*, [Online] 85 (10), 1694-1704. Available from: [http://www.archives-pmr.org/article/S0003-9993\(04\)00397-1/fulltext](http://www.archives-pmr.org/article/S0003-9993(04)00397-1/fulltext) [Accessed 13 April 2015].
  12. McLaren, A.N., LaMantia, M.A. & Callahan, C.M. (2013) Systematic review of non-pharmacologic interventions to delay functional decline in community-dwelling patients with dementia. *Aging & Mental Health*, [Online] 17 (6), 655-666. Available from: <http://europepmc.org/articles/pmc3723698> [Accessed 15 April 2015].
  13. Burge, E., Kuhne, N., Berchtold, A., Maupetit, C. & von Gunten, A. (2012) Impact of physical activity on activity of daily living in moderate to severe dementia: a critical review. *European Review of Aging and Physical Activity*, [Online] 9, 27-39. Available from: <http://europepmc.org/articles/pmc3346934> [Accessed 15 April 2015].
  14. Pomeroy, V.M., Warren, C.M., Honeycombe, C., Briggs, R.S.J., Wilkinson, D.G., Pickering, R.M. & Steiner, A. (1999) Mobility and dementia: is physiotherapy treatment during respite care effective? *International Journal of Geriatric Psychiatry*, [Online] 14, 389-397. Available from: [http://www.researchgate.net/profile/David\\_Wilkinson4/publication/12910261\\_Mobility\\_and\\_dementia\\_is\\_physiotherapy\\_treatment\\_during\\_respite\\_care\\_effective/links/0046352a852c7c2a73000000.pdf](http://www.researchgate.net/profile/David_Wilkinson4/publication/12910261_Mobility_and_dementia_is_physiotherapy_treatment_during_respite_care_effective/links/0046352a852c7c2a73000000.pdf) [Accessed 13 April 2015].
  15. Shaw, F.E., Bond, J., Richardson, D.A., Dawson, P., Steen, I.N., McKeith, I.G. & Kenny, R.A. (2003) Multifactorial intervention after a fall in older people with cognitive impairment and dementia presenting to the accident and emergency department: randomised controlled trial. *British Medical Journal*, [Online] 326 (7380), 73. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC139930/> [Accessed 13 April 2015].
  16. Kempenaar, L. (2005) The role of physiotherapy in dementia rehabilitation. In: Marshall, M. (ed.) *Perspectives on rehabilitation and dementia*. [e-book] London, Jessica Kingsley Publishers, pp. 91-98. Available from: [http://scholar.google.co.uk/scholar\\_url?url=http://xa.yimg.com/kq/groups/16430064/155318349/name/1843102862\\_perspectivas\\_de\\_rehabilitacion\\_en\\_demencia.pdf%23page%3D15&hl=en&sa=X&scisig=AAGBfm1DyN\\_nuOUUlyF8tHdfF7FchWbueA&nossl=1&oi=scholar&ei=EegrVbOKAqq67gastYCwBA&ved=0CB8QgAMoADAA](http://scholar.google.co.uk/scholar_url?url=http://xa.yimg.com/kq/groups/16430064/155318349/name/1843102862_perspectivas_de_rehabilitacion_en_demencia.pdf%23page%3D15&hl=en&sa=X&scisig=AAGBfm1DyN_nuOUUlyF8tHdfF7FchWbueA&nossl=1&oi=scholar&ei=EegrVbOKAqq67gastYCwBA&ved=0CB8QgAMoADAA) [Accessed 13 April 2015].
  17. Chartered Society of Physiotherapy (2011a) Code of members' professional values and behaviour. [Online] Report number: 99781904400325. Chartered Society of Physiotherapy. Available from: <http://www.csp.org.uk/publications/code-members-professional-values-behaviour> [Accessed 13 April 2015].
  18. De Vries, K. (2013) Communicating with older people with dementia. *Nursing Older People*, [Online] 25 (4), 30-38. Available from: <http://rcnpublishing.com/doi/abs/10.7748/nop2013.05.25.4.30.e429> [Accessed 13 April 2015].
  19. Eggenberger, E., Heimer, K. & Bennett, M.I. (2013) Communication skills training in dementia care: a systematic review of effectiveness, training content, and didactic methods in different care settings. *International Psychogeriatrics*, [Online] 25 (3), 345-358. Available from: Cambridge Journals Online [Accessed 13 April 2015].
  20. Clissett, P., Porock, D., Harwood, R.H. & Gladman, J.R.F. (2013) The challenges of achieving person-centred care in acute hospitals: A qualitative study of people with dementia and their families. *International Journal of Nursing Studies*, [Online] 50, 1495-1503. Available from: [http://www.journalofnursingstudies.com/article/S0020-7489\(13\)00069-2/fulltext](http://www.journalofnursingstudies.com/article/S0020-7489(13)00069-2/fulltext) [Accessed 13 April 2015].
  21. Potocnik, F.C.V. (2013) Dementia. *South African Journal of Psychiatry*, [Online] 19 (3), 141-152. Available from: Free Medical Journals [Accessed 15 April 2015].
  22. World Health Organization (WHO) and Alzheimer's Disease International (2012) Dementia: a public health priority. [Online] WHO. Available from: [http://www.who.int/mental\\_health/publications/dementia\\_](http://www.who.int/mental_health/publications/dementia_)

- report\_2012/en/ [Accessed 16 April 2015].
23. Tangen, G.G., Engedal, K., Bergland, A., Moger, T.A. & Mengshoel, A.M. (2014) Relationships between balance and cognition in patients with subjective cognitive impairment, mild cognitive impairment, and Alzheimer disease. *Physical Therapy*, [Online] 94 (8), 1123-1133. Available from: <http://ptjournal.apta.org/content/94/8/1123.short> [Accessed 13 April 2015].
  24. Leddy, A.L., Crouner, B.E. & Earhart, G.M. (2011) Functional gait assessment and balance evaluation system test: reliability, validity, sensitivity, and specificity for identifying individuals with parkinson disease who fall. *Physical Therapy*, [Online] 91 (1), 102-113. Available from: <http://ptjournal.apta.org/content/91/1/102.short> [Accessed 15 April 2015].
  25. Leandria, M., Cammisulib, S., Cammaratac, S., Barattod, L., Campbelle, J., Simoninif, M. & Tabatong, M. (2009) Balance features in Alzheimer's disease and amnesic mild cognitive impairment. *Journal of Alzheimer's Disease*, [Online] 16, 113-120. Available from: <http://iospress.metapress.com/content/n63375r7771784t4/> [Accessed 15 April 2015].
  26. Suttanon, P., Hill, K.D., Said, C.M., LoGiudice, D., Lautenschlager, N.T. & Dodd, K. (2012) Balance and mobility dysfunction and falls risk in older people with mild to moderate Alzheimer disease. *American Journal of Physical Medicine & Rehabilitation*, [Online] 91 (1), 12-23. Available from: [http://journals.lww.com/ajpmr/Abstract/2012/01000/Balance\\_and\\_Mobility\\_Dysfunction\\_and\\_Falls\\_Risk\\_in.3.aspx](http://journals.lww.com/ajpmr/Abstract/2012/01000/Balance_and_Mobility_Dysfunction_and_Falls_Risk_in.3.aspx) [Accessed 15 April 2015].
  27. Van Lersel, M.B., Hoefsloot, W., Munneke, M., Bloem, B.R. & Rikkert, M.G.M.O. (2004) Systematic review of quantitative clinical gait analysis in patients with dementia. *Z Gerontol Geriatr*, [Online] 37, 27-32. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2515920/> [Accessed 15 April 2015].
  28. Van Dijk, P.T.M., Meulenbergh, O.G.R.M., van de Sande, H.J. & Habbema, J.D.F. (1993) Falls in dementia patients. *The Gerontological Society of America*, [Online] 33 (2), 200-204. Available from: Oxford Journals Archive – JISC (Sublicense A) [Accessed 15 April 2015].
  29. The World Health Organization Quality of Life assessment Group (1998) The World Health Organization quality of life assessment (WHOQOL): development and general psychometric properties. *Social Science and Medicine*, [Online] 46 (12), 1569-1585. Available from: <http://pdf-source.net/1248347/the-world-health-organization-quality-of-life-assessment> [Accessed 18 April 2015].
  30. Nikmat, A.W., Hawthorne, G. & Al-Mashoor, S.H. (2015) The comparison of quality of life among people with mild dementia in nursing home and home care – a preliminary report. *Dementia*, [Online] 14 (1), 114-25. Available from: SAGE Premier 2014 [Accessed 13 April 2015].
  31. Richards, S.H., Peters, T., Coast, J., Gunnell, D.J., Darlow, M.A. & Pounsford, J. (2000) Inter-rater reliability of the Barthel ADL Index: how does a researcher compare to a nurse? *Clinical Rehabilitation*, [Online] 14, 72-78. Available from: <http://cre.sagepub.com/content/14/1/72.short> [Accessed 15 April 2015].
  32. Banerjee, S., Smith, S.C., Lamping, D.L., Harwood, R.H., Foley, B., Smith, P., Murray, J., Prince, M., Levin, E., Mann, A. & Knapp, M. (2006) Quality of life in dementia: more than just cognition. An analysis of associations with quality of life in dementia. *Journal of Neurology, Neurosurgery & Psychiatry*, [Online] 77, 146-148. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2077592/> [Accessed 13 April 2015].
  33. Brod, M., Stewart, A.L., Sands, L. & Walton, P. (1999) Conceptualization and measurement of quality of life in dementia: the dementia quality of life instrument (DQoL). *The Gerontologist*, [Online] 39 (1), 25-35. Available from: <http://gerontologist.oxfordjournals.org/content/39/1/25.short> [Accessed 29 March 2015].
  34. Chartered Society of Physiotherapy (2011b) Physiotherapy framework: putting physiotherapy behaviours, values, knowledge & skills into practice. [Online] Chartered Society of Physiotherapy. Available from: <https://v3.pebblepad.co.uk/v3portfolio/csp/Asset/View/6jqbh3GzhGWrrcGqpknwmZzh8Z> [Accessed 13 April 2015].
  35. Allen, J., Koziak, A., Buddingh, S., Liang, J., Buckingham, J. & Beaupre, L.A. (2012) Rehabilitation in patients with dementia following hip fracture: a systematic review. *Physiotherapy Canada*, [Online] 64 (2), 190-201. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3321988/> [Accessed 15 April 2015].
  36. Suttanon, P., Hill, K., Said, C. & Dodd, K. (2010) Can balance exercise programmes improve balance and related physical performance measures in people with dementia? A systematic review. *European Review of Aging and Physical Activity*, [Online] 7, 13-25. Available from: <http://link.springer.com/article/10.1007/s11556-010-0055-8> [Accessed 13 April 2015].
  37. Potter, R., Ellard, D., Rees, K. & Thorogood, M. (2011) A systematic review of the effects of physical activity on physical functioning, quality of life and depression in older people with dementia. *International Journal of Geriatric Psychiatry*, [Online] 26, 1000-1011. Available from: <http://onlinelibrary.wiley.com/doi/10.1002/gps.2641/full> [Accessed 15 April 2015].
  38. Balsamo, S., Willardson, J.M., de Santana, F.S., Prestes, J., Balsamo, D.C., da Cunha Nascimento, D., dos Santos-Neto, L. & Nobrega, O.T. (2013) Effectiveness of exercise on cognitive impairment and Alzheimer's disease. *International Journal of General Medicine*, [Online] 6, 387-391. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3668090/> [Accessed 13 April 2015].
  39. Bowes, A., Dawson, A., Jepson, R. & McCabe, L.

- (2013) Physical activity for people with dementia: a scoping study. *BMC Geriatrics*, [Online] 13, 129. Available from: <http://www.biomedcentral.com/1471-2318/13/129/> [Accessed 13 April 2015].
40. Steinberg, M., Sheppard Leoutsakos, J.M., Podewils, L.J. & Lyketsos, C.G. (2009) Evaluation of a home-based exercise program in the treatment of Alzheimer's disease: the maximizing independence in dementia (MIND) study. *International Journal of Geriatric Psychiatry*, [Online] 24, 680-685. Available from: NESLi2 Wiley-Blackwell Full Collection [Accessed 15 April 2015].
  41. Huusko, T.M., Karppi, P., Avikainen, V., Kautianen, H. & Sulkava, R. (2000) Randomised, clinically controlled trial on intensive geriatric rehabilitation in patients with dementia. *British Medical Journal*, [Online] 321 (4), 1107-1111. Available from: <http://www.bmj.com/content/321/7269/1107>. short [Accessed 13 April 2015].
  42. Schwenk, M., Zieschang, T., Englert, S., Grewal, G., Najafi, B. & Hauer, K. (2014) Improvements in gait characteristics after intensive resistance and functional training in people with dementia: a randomised controlled trial. *BioMedical Central Geriatrics*, [Online] 14 (1), 73-81. Available from: <http://www.biomedcentral.com/1471-2318/14/73/> [Accessed 13 April 2015].
  43. Hauer, T.K., Schwenk, M., Zieschang, T., Essig, M., Becker, C. & Oster, P. (2012) Physical training improves motor performance in people with dementia: a randomized controlled trial. *Journal of the American Geriatrics Society*, [Online] 60 (1), 8-15. Available from: <http://onlinelibrary.wiley.com/doi/10.1111/j.1532-5415.2011.03778.x/full> [Accessed 15 April 2015].
  44. Stenvall, M., Olofsson, B., Lundström, M., Englund, U., Borssén, B., Svensson, O., Nyberg, L. & Gustafson, Y. (2007) A multidisciplinary, multifactorial intervention program reduced postoperative falls and injuries after femoral neck fracture. *Osteoporosis International*, [Online] 18, 167-175. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1766476/> [Accessed 15 April 2015].
  45. Eggermont, L.H.P., Swaab, D.F., Hol, E.M. & Scherder, E.J.A. (2009) Walking the line: a randomised trial on the effects of a short term walking programme on cognition in dementia. *Journal of Neurology, Neurosurgery & Psychiatry*, [Online] 80 (7), 802-804. Available from: BMJ Journals – NESLi2 [Accessed 14 April 2015].
  46. Netz, Y., Axelrad, S. & Argov, E. (2007) Group physical activity for demented older adults – feasibility and effectiveness. *Clinical Rehabilitation*, [Online] 21, 977–986. Available from: SAGE Premier 2014 [Accessed 15 April 2015].
  47. Traynor, V., Brisco, S. & Coventry, T. (2005) Developing person-centred dementia care in acute settings: findings from a study tour in Australia. *Nursing Older People*, [Online] 17 (8), 16-19. Available from: CINAHL Plus with Full Text [Accessed 15 April 2015].
  48. Gerritsen, D.L., Ettema, T.P., Boelens, E., Bos, J., Hoogeveen, F., de Lange, J., Meihuizen, L., Schlözl-Dorenbos, C.J.M. & Dröes, R.M. (2007) Quality of life in dementia: do professional caregivers focus on the significant domains? *American Journal of Alzheimer's Disease & Other Dementias*, [Online] 22 (3), 176-183. Available from: SAGE Premier 2014 [Accessed 13 April 2015].
  49. Teri, L., Logsdon, R.G. & McCurry, S.M. (2008) Exercise interventions for dementia and cognitive impairment: the Seattle protocols. *The Journal of Nutrition Health and Aging*, [Online] 12 (6), 391-394. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2518041/> [Accessed 15 April 2015].
  50. Williams, A.K. (2005) Motivation and dementia. *Topics in Geriatric Rehabilitation*, [Online] 21 (2), 123-126. Available from: CINAHL Plus with Full Text [Accessed 13 April 2015].
  51. Yao, L., Giordani, B.J., Algase, D.L., You, M. & Alexander, N.B. (2013) Fall risk-relevant functional mobility outcomes in dementia following dyadic Tai Chi Exercise. *Western Journal of Nursing Research*, [Online] 35 (3), 281-296. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3468653/> [Accessed 13 April 2015].
  52. Chartered Society of Physiotherapy (2012) Quality assurance standards for physiotherapy service delivery. [Online] Report number: 99781904400325. Chartered Society of Physiotherapy. Available from: <http://www.csp.org.uk/publications/quality-assurance-standards> [Accessed 13 April 2015].
  53. Oddy, R. (2011) Promoting mobility for people with dementia: a problem solving approach. 3rd edition. London, Alzheimer's Society.
  54. Kitwood, T (1997) Dementia reconsidered: the person comes first. 5th edition. Buckingham, Open University Press.
  55. Brooker, D. (2003) What is person-centred care in dementia? *Reviews in Clinical Gerontology*, [Online] 13 (3), 215-222. Available from: Cambridge Journals [Accessed 4 April 2015].
  56. Passalacqua, S.A. & Harwood, J. (2012) VIPS communication skills training for paraprofessional dementia caregivers: an intervention to increase person-centered dementia care. *Clinical Gerontologist*, [Online] 35, 425-445. Available from: CINAHL Plus with Full Text [Accessed 13 April 2015].
  57. Blackhall, A., Hawkes, D., Hingley, D. & Wood, S. (2011) VERA framework: communicating with people who have dementia. *Nursing Standard*, [Online] 26 (10), 35-39. Available from: CINAHL Plus with Free Text [Accessed 13 April 2015].
  58. Vasse, W., Vernooij-Dassen, M., Spijker, A., Rikkert, M.O. & Koopman, R. (2010) A systematic review of communication strategies for people with dementia in residential and nursing homes. *International Psychogeriatrics*, [Online] 22 (2), 189-200. Available

from: [http://journals.cambridge.org/abstract\\_S1041610209990615](http://journals.cambridge.org/abstract_S1041610209990615) [Accessed 16 April 2015].

59. McGilton, K.S., Boscart, V., Fox, M., Sidani, S., Rochon, E. & Sorin-Peters, R. (2009) A systematic review of the effectiveness of communication interventions for health care providers caring for patients in residential care settings. *Worldviews on Evidence-Based Nursing*, [Online] 6 (3), 149–159. Available from: <http://onlinelibrary.wiley.com/doi/10.1111/j.1741-6787.2009.00155.x/full> [Accessed 15 April 2015].
60. Manckoundia, P., Taroux, M., Kubicki, A. & Mourey, F. (2014) Impact of ambulatory physiotherapy on motor abilities of elderly subjects with Alzheimer's disease. *Geriatrics & Gerontology International*, [Online] 14, 167-175. Available from: Wiley Online Library [Accessed 13 April 2015].

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# An Audit Of Cardiac Devices (Pacemakers) Infections At Heart Of England Hospitals NHS Foundation Trust Over 5 Years (From 01/04/2006 Till 31/03/2011)

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## Introduction

Cardiac devices include pacemakers, ICD, CRTD/P and reveal implants.

These devices are implanted more and more because of their increasing indications and ageing population. Elderly patient need these devices for various indication from arrhythmias to heart failure<sup>1</sup>. Like any other foreign body they can get infected. Infections with cardiac devices are diagnosed clinically and with the help of echocardiographic evidence of vegetations and or positive blood cultures<sup>2</sup>. Cardiac devices infection are either pocket infections or deep infections whereby the lead get involved with the infective process. Cardiac devices infections Incidence are approximately 1% in the UK<sup>3</sup> and 0.8 to 5.7% across the Europe and America in different studies<sup>4,5,6,7,8</sup>.

The general risk factors which increases the risk of infection with the cardiac devices include, any manipulation of the device in the recent past (change of box and or reimplantation), Diabetsmellitus, preceding treatment with steroids and or anticoagulants, underlying malignancy, experience of the operator, need of a temporary pacing wire prior to implantation, heart failure, advanced age and renal insufficiency with the GFR <60 ml/minute<sup>9,10,11</sup>.

Treatment of cardiac devices infections involves, Antibiotics treatment, Removal of the infected device/system and Implantation of new device once the infection is treated. Extent of treatment depends on the severity of the infection and patient clinical condition<sup>12</sup>.

We studied the number of cardiac devices implanted across our trust in the last 5 years and looked at our infection rate and compared it with the infection rate known so far<sup>13</sup>.

## Aims

To Determine

1. The devices infections rate across the trust
2. The type of cardiac devices infected.
3. Age of patient who needed pacemakers
4. Bacteria involved in the cardiac devices infections locally.
5. Antibiotics most commonly used across the trust for infection Prophylaxis in Cardiac devices.

## Method

This is a retrospective study of cardiac devices implanted across the Heart of England Hospitals NHS trusts, Which includes Good Hope, Solihull and Heartland Hospitals from 1/4/2006 till 31/03/2011. Data was obtained from the cardiac database and patient's clinical letters. The parameters included age of the patient, gender, date of implantation, date of explantation, latent period from implantation to removal of the infected devise, type of infection (pocket, Lead, Septicemia), other Co-morbidities. Patient's investigations including echocardiography, blood culture and type of organisms isolated.

## Results

A total of 2900 patients underwent various cardiac devices implanted over 5 years period. 18 devices were found to be Infected. Mean Age 76 ±16. (Figure 1) The type of infected devices included Pacemakers 13, Implantable Cardio-defibrillator 4, and one Reveal device. The latent period was from 10 days to 72 months. (Figure 2) The Type of infection included device site 14 cases; Lead infection in 6, septicemia 11 and leads-vegetations were present in 2 cases. In 7 cases no organisms were found on cultures and the most common organism found was staphylococcus aureus (6 cases), (Figure 3). Patient's co-morbidities included Coronary artery By-pass surgery in 6 patients; Valvular heart disease 6, diabetes 5 and one patient had renal failure.

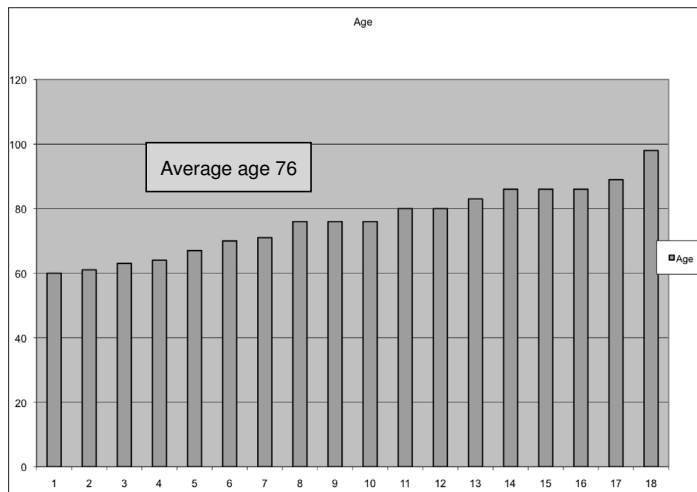
Antibiotics used across our trust for prophylaxis of cardiac devices infection included Flucloxacillin, Vancomycin, Gentamycin and Teicoplanin.

## Conclusion

- Cardiac devices infection is relatively low, but is a serious complication. Antibiotics should be used pre and post procedure to minimize the infection rate. No National or international guidelines exist on the antibiotics regimen for prophylaxis of infection in cardiac devices, however most regimen used in different centers involve antibiotics covering S Aurus which is the common pathogen
- In cases of unidentified pathogen individual case

should be discussed with microbiologist and rare organism needs to be considered in the aetiology.

- Cardiac devices infection should be considered in the differential diagnosis of pyrexia of unknown Origin, in patients who had cardiac devices implanted



Figures 1 Average age of patient who needed Pacemaker implantation.

Date of Implant	Date of readmission / Explant	Latent period form insertion to infection in months
25/04/2006	07/05/2006	0.3
05/07/2005	28/06/2006	(11)
2004	03/08/2006	24
07/06/2007	18/06/2007	0.3
03/07/2007	System explant on 11/07/2007	0.25
18/07/2007	system explant 04/09/2007	1.4
2006 QE	explant system nov 2007	12
28/04/2008	Re admission 09/05/2008	0.3
20/08/2008	SEP 2008 Explant	0.45
wallsgrave20/09/2008	explant system on 6/10/2008	0.55
18/05/2003	Re admitted 25/02/2009	72
26/08/2009	15/09/2009	0.60
Jan-09	system explant in 01/04/2010	15
28/04/2010	pm explant 12/05/2010	0.3
12/8/2010 Implanted	26/08/2010 Explanted	0.45
07/09/2010	ICD Extracted 15/10/2010	1.25
12/10/2010	PM and lead Explant 21/12/2010	2.50
28/04/2010	pm explant at 12/05/2010	0.3

Figure 2 Latent period from Implantation to infection.

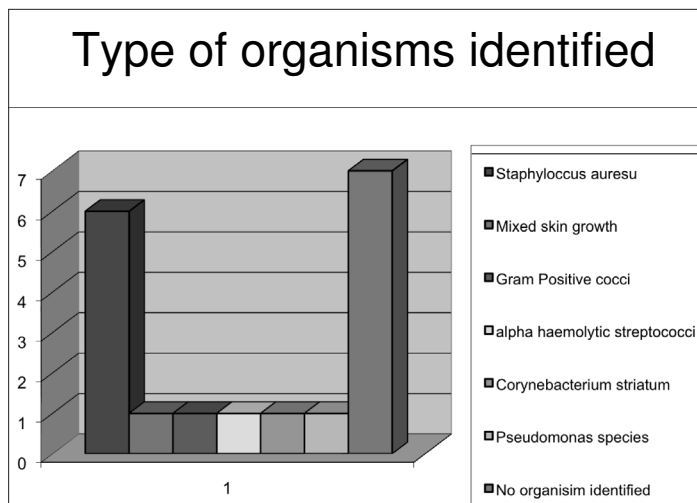


Figure 3

## References

1. JamalNasirKhan, VeeranSubramaniam, ChristopherHee, et al Antibiotic prophylaxis for permanent pacemaker implantation: an observational study of practice in England Br J Cardiol 2010;17:144-7, May 2010 Volume 17, Issue 3
2. Guidelines on the prevention, diagnosis, and treatment of infective endocarditis European Heart Journal (2009) 30, 2369–2413.
3. NICE guidance on pacemakers, Feb 2005 and HRUK council June 2010
4. Eggimann P, Waldvogel F. Pacemaker and defibrillator infections. In: Infections Associated with Indwelling Medical Devices, Waldvogel FA, Bisno AL (Eds), American Society for Microbiology Press, Washington, DC 2000. p.247
5. Arber N, Pras E, Copperman Y, et al Pacemaker endocarditis. Report of 44 cases and review of the literature. Medicine (Baltimore). 1994;73(6):299 PMID 7984081
6. Duval X, Selton-Suty C, Alla F, Endocarditis in patients with a permanent pacemaker: a 1-year epidemiological survey on infective endocarditis due to valvular and/or pacemaker infection Clin Infect Dis. 2004;39(1): 68 PMID15206055
7. Uslan DZ, Sohail MR, St Sauver JL et al . Permanent pacemaker and implantable cardioverter defibrillator infection: a population-based study, Arch Intern Med. 2007;167(7):669 PMID17420425
8. Lai KK, Fontecchio SA Infections associated with implantable cardioverter defibrillators placed transvenously and via thoracotomies: epidemiology, infection control, and management Clin Infect Dis. 1998;27(2):265 PMID9709875
9. Klug D, Balde M, Pavin D, Hidden-Lucet F et al Risk factors related to infections of implanted pacemakers and cardioverter-defibrillators: results of a large prospective study Circulation. 2007;116(12):1349 PMID 17724263
10. Bloom H, Heeke B, Leon A, Mera F, et al Renal insufficiency and the risk of infection from pacemaker or defibrillator surgery Pacing ClinElectrophysiol. 2006;29(2):142 PMID16492298
11. Lekkerkerker JC, van Nieuwkoop C, Trines SA et al Risk factors and time delay associated with cardiac device infections: Leiden device registry. Heart. 2009;95(9):715 PMID19036758
12. Contemporary management of and outcomes from cardiac device related infections Euro pace (2010) 12, 64–70
13. Victor F, De Place C, Camus C et al Pacemaker lead infection: echocardiographic features, management, and outcome Heart. 1999;81(1):82 PMID 10220550

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# I must do the post – using poetry for raising dementia awareness

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## Abstract

This paper reviews the use of a poem written by a care assistant as part of a dementia awareness course. The author of the poem went on to use the poem to help staff within the care home gain insight and to promote reflection and discussion about caring for the person living with dementia as part of a training programme. An evaluation of its use was also undertaken and staff reported that this poem was thought provoking, insightful and had helped them to reflect on how they work with people living with dementia.

## Introduction

As part of a dementia awareness course the poem was written in an attempt to assist staff in a care home gain an insight into the way people with dementia view their world. The poem was then used in a training programme to help carers see what they do from the residents' point of view and help them to reflect on their approach to care when working with people with dementia.

## Using a poem as a teaching tool

Collins<sup>1</sup> argues that poetry is an excellent tool that can encourage deep reflection that can arouse emotions and be more meaningful and personal than other forms of teaching. Simon and Hicks<sup>2</sup> also found that using poems can engage and empower individuals to learn in different ways. Furnam et al<sup>3</sup> notes how understanding the lived experience can help to design interventions that take into account the complexities of the people we work with. In an account by a student nurse Downton<sup>4</sup> she recalls how seeing a film version of the 'What do you see Nurses' poem had moved her and then she reported on how she found that she was able to relate this within her practice as a nurse. Motele<sup>5</sup> also reported on the same poem and how that had helped to emphasis the approach of 'person first and dementia second' for her. Other authors who have used the approach of poetry to help with the learning process have included Yeh<sup>6</sup> who included poetry as a basis of discussion and reported on how it acted as a window to understanding. Spear and Hensall<sup>7</sup>, Cowin<sup>8</sup> and Hatton and Smith<sup>9</sup> all reported on how poems can be used as tool for reflection that can demonstrate both personal and professional growth. Collins<sup>1</sup> also found that using poetry can provide the students with opportunities to make connections and highlight how they offer personal

connections that are not like any other written word. As Spear and Henshall<sup>7</sup> found they can also act as an external voice that encourages the students to venture into areas they may not have thought about before.

The following is the poem written by Terence C Tolputt as a teaching aid:

## I MUST DO THE POST

Day 1

I'm wide awake, I can't hear a sound  
Where am I? I must look around,  
I struggle and pant to put on my vest  
It's the wrong way round (I'm doing my best)  
I walk down the corridor some woman calls out  
"You go back to bed you silly old trout"  
"Its 5 in the morning go back to bed"  
But I've got to sort the post out- it goes through my head.

I'm awoken by a lady (I heard what she said)  
It's time to get up, and get out of bed.  
I'm prodded and pulled (I'm wanting to cry)  
My vest is turned round, my pants pulled up high.  
Sat on the toilet I'm washed on my face,  
But you've forgotten to wash- down there in that place.  
My hair now combed, my teeth are all clean  
But where am I going, what does this all mean?

The dining rooms full -people abound  
A lot of them here just walking around,  
"Sit down my dear, cornflakes or toast?"  
But all I can think of is – I must do the post.  
No one listens; I don't think they care,  
Who are they anyway? My son is not there.  
Breakfast is done I'm sat in a chair  
I'll sit here all day and pull out my hair.

Morning or night I really don't know  
All I want now, is simply to go  
A lady is swearing, she's driving me mad  
I get up to walk, but I stumble (I'm sad)  
I fall to the floor I'm feeling some pain,  
(Should I be quiet, or should I complain?)  
Is it my arm? Or is it my leg?  
I'm not quite sure, I'm hoisted to bed.

I've lost my dignity, it's all now but gone,  
Where am I going? Where am I from?  
My dinner is nice – now I must be fair,  
But it's not like home – with my son in his chair.  
A doctor now visits and says I'm just fine-  
I'm put in the chair for the passing of time.  
The post must be done, I will go ask my son  
I always know best, after all I'm his mum.

I'm put on the toilet stand up then sit down  
I'm not sure what to do, I'm wearing a frown.  
It's tea time I'm told- now I must go home  
I don't like it here (I'm feeling alone)  
I'm put on a clothes protector (I think it's a bib)  
The lady says its mine (I think it's a fib)  
Beans on toast or burger in a bun-  
This really doesn't sound like very much fun.

It's half past six, my nighties put on  
But it's still light, the day is not done.  
I say "close the curtains and lock the back door"  
Where is my son? (I'm not really sure)  
Who is the lady? Where is she from?  
She puts me to bed with cream on my bum  
The day is now over, I'm all now but done  
Oh I wish I was at home with my son

#### DAY 2

It's beautiful morning not gloomy or grey  
A man pops his head round, and says "are you ok?"  
He's got a friendly face but, sounding quite bold  
Says "I'm a care assistant, here to help you" I'm told  
He holds my hand and says not to worry  
I'm not going to be in too much of a hurry.  
He takes his time and tells me a joke  
I think is funny (It's not bad for a bloke).

He asks me a question that he needs to know  
Washing upstairs and then down below?  
He gives me time to choose my own clothes  
And brush my own hair and wiggle my toes.  
He says the post was ready and it has been done  
Breakfast is waiting and now would I like some?  
I choose what I like I'm given in a cup  
well now then, things are really looking up.

I'm given the choice of what to do today  
Pottery class perhaps, working with clay  
A walk in the garden, well what can I say.  
Whatever I choose, he will show me the way  
The man is so friendly and very much fun  
He really reminds me of my only son.  
He's smiling and happy and helpful all day.  
Oh I do hope he doesn't soon go away.

Baked potato (the vegetables are swell)  
Tea times much better I'm feeling so well.

A snack for supper and a nice cup of tea  
The man is still her keeping me company.  
He's caring I'm sure – and it must be said  
I will be ready soon to lay down my head.  
My dignity now restored, I'm happy again,  
I DO HOPE TOMORROW WILL BE JUST THE SAME.  
©Terence C Tolputt.

#### Evaluation of the poem.

Twenty care staff took part in using and evaluating the poem. All twenty were positive about the poem, that they were able to directly relate to the poem and that it had influenced their approach to care. Several students had included comments such as 'makes me think about people with dementia', 'what it must feel like' and 'food for thought' which is in line with Conwin<sup>8</sup> and Collins<sup>1</sup> studies where students were able to make personal connections. Others were able to respond with insight and noted that his was a 'true story' and how it had affected their practice as noted by Dowden<sup>4</sup>. Others specifically related to the care of the person with dementia and reminded them of 'how small things can make such a difference' as had been the case for Motele<sup>5</sup>.

Two students had commented on how they felt the poem was sexist, however using this in a discussion can help reflection and discussion into the complexities of care for the person with dementia and gender issues around carers as well as ethical complexities of caring for this group. As Milligan and Woodley<sup>10</sup> note poems can be a powerful vehicle to help us understand the illness and ethical issues in healthcare practices.

#### Conclusion

The degree of success of the use of the poem as a tool for raising awareness is, according to Milligan and Woodley<sup>10</sup>, if the students respond to it with empathy, rational awareness, understanding and compassion. This had come through clearly within the evaluations as the carers noted that the poem had indeed evoked empathy in them as carers and how it had raised their awareness of the needs of people with dementia when living within a care home.

#### References

1. Collins P (2008) Using Poetry throughout the Curriculum, Kappa Delta Pi Record, 44:2, 81-84, DOI: 10.1080/00228958.2008.10516500
2. Simons H and Hicks J (2006) Opening doors. Using creative arts in learning and teaching. Arts and Humanities in Higher Education. 5(1) 77-90
3. Furman R, Collins K, Langer C and Bruce EA (2006) Inside a provider's perspective: using practitioner poetry to explore the treatment of persons with mental illness. The arts in Psychology 33:331-342

4. Dowden K (2012) Enjoying an activity with a patient gave me time to see the person inside. *Nursing Standard*. 27 (15-17) 28
5. Motale T (2012) What do you see nurses? *Nursing and Residential Care* 14(5) 217
6. Yeh A (2005) Poetry from the heart. *English Today* 81,(21):45- 51
7. Spear J and Hensall A (2014) 'Did anyone this the trees were students?' using poetry as a tool for critical reflection. *Reflective Practices* 15 (6) 807-820
8. Cowin KM (2012) Enhancing student teacher reflective practice through poetry. *The New Educator* 8:308-320
9. Hatton N and Smith D (1995). Reflection in teacher education: Towards definition and implementation. *Teaching and Teacher Education*. 11, 33–49.
10. Milligan E and Woodley E (2009) Creative expressive encounters in health ethics education: teaching ethics as relational engagement. *Teaching and Learning in medicine*. 21(2) 131-139

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# Standards of care in institutional settings

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A recent series of Panorama programmes on the care of older people in institutional settings highlighted the deficient and even negligent care that older people are routinely exposed to. A particularly upsetting example<sup>1</sup> focussed upon poor practice in a nursing home, and offered a harrowing account of inadequate and even abusive care of an older person with dementia. The poor feeding and manual handling techniques and the failures in terms of dignity, respect, and communication are all too commonly reported, and are reflected in the findings of a number of recent reports, including the Health Service Ombudsman Report 'Care and compassion?'<sup>2</sup>, and the Francis report<sup>3</sup>. In a response to such 'scandals' Age UK<sup>4</sup> have called for the Government to establish a Care Quality Forum to look at all aspects of care home staffing.

The issues involved are of course complex, and include the stigmatised societal views of older people and those with dementia as 'diminished' or 'lesser' human beings, which are internalised by the carers and indeed the older people themselves<sup>5,6</sup>. However, I would suggest that there is a fundamental need to address the training and support of staff in these settings. Caring for older people with dementia is demanding, complex and highly skilled. Without the knowledge base to meet these challenges untrained staff often revert to the mother/child relationship which is the only model of care available to them, with the result that they infantilise the person they are caring for<sup>7,8</sup>. The lack of appropriate orientation or training also often results in a task orientated approach, reducing care to a series of physical tasks 'getting through the work'<sup>9</sup>, or 'minimal warehousing'<sup>10</sup>. This epitomises the care seen in the Panorama programme where the older person is washed, fed, and repositioned with minimal personal interaction, stimulation or communication, there is a comment during the programme that she is treated like "a piece of meat".

The National Institute for Clinical Excellence- Social Care Institute for Excellence guidelines for Dementia<sup>11</sup> call upon us to provide services that address the specific personal, social, mental and physical needs of people, what the recent 'Prime Minister's challenge on dementia' calls making areas dementia friendly<sup>12</sup>. A holistic, person centred and evidence based approach is more humane, more effective and can be cheaper. For example, poor practices, such as the overuse of psychotic medication to sedate older

people with dementia<sup>13</sup>, are more costly than behavioural interventions such as cognitive stimulation<sup>14</sup>.

Objective<sup>11</sup> of the National Dementia Strategy<sup>15</sup> discusses the improvement of care home care and advises the commissioning of specialist in-reach services from older peoples community health teams to work in care homes. A successful example of this is a Birmingham initiative where a team of three Doctors and four Community Psychiatric Nurses provided specialist education and support regarding caring for older people with dementia to four care homes in the area<sup>16</sup>. Following the intervention the care home staff recorded improved levels of knowledge and confidence in caring for older people with dementia.

Another local beacon of good practice is embodied by the 'Care Fit for VIPS' initiative<sup>17</sup>, an online training resource for care homes funded by NHS West Midlands. It is based on the four key elements of person centred care identified by Professor Dawn Booker; values people(V), treats people as individuals (I), looks from the perspective of the service user (P), integrates supportive social psychology(S).

The number of older people with dementia will treble over the next 40 years<sup>18</sup>, and have huge implications in terms of residential care. The Panorama programme was a painful reminder of how urgently we need to address the shortcomings in that care for the frailest and most vulnerable members of our society, many of whom, like the elderly lady featured in the programme, are unable to speak out for themselves about the inhumane and dehumanised environments in which they are expected to live out the remainder of their lives.

## References

1. British Broadcasting Corporation, Panorama; Undercover Elderly Care. 30 April 2012
2. Department of Health . Health Service Ombudsman Report: 'Care and compassion?' DH, London 2011
3. Francis, R (Chair) Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry: Executive summary. HMSO, London 2013
4. Age UK, local Government Association, NHS Confederation. Delivering Dignity. Age UK 2012
5. Goffman E. Stigma: Notes on the Management of Spoiled Identity. Englewood Cliffs, NY; Prentice Hall 1963

6. Kitwood T . Dementia Reconsidered: the person comes first. Buckingham. OUP 1997
7. Miller E.J, & Gwynne G.V. A Life Apart-A Pilot Study of residential Institutions for the Physically Handicapped and the Young Chronic Sick. Tavistock Publications, J.B. Lippincott Company 1972
8. Kitwood T . Dementia Reconsidered: the person comes first. Buckingham. OUP 1997
9. Clarke M. 'Getting Through the Work'. 9in) Dingwall R & McIntosh J (eds). Readings on the Sociology of Nursing. Churchill Livingstone, Edinburgh 1978
10. Evers H. 'Tender Loving Care?. Patients and Nurses in Geriatric Wards' (in) Copp L.A (ed) Care of the Ageing. Churchill Livingstone Edinburgh 1981
11. National Institute for Health and Clinical Excellence – Social Care Institute for Excellence update of 2007 Standard number 42. Dementia. The NICE-SCIE guideline on supporting people with dementia and their carers in health and social care. . national Collaborating Centre for Mental Health. The British Psychological Society and Gaskell. 2011
12. Department of Health . Prime Minister's challenge on dementia: Delivering major improvements in dementia care and research by 2015. DH, London 2012
13. Banerjee S. The use of antipsychotic medication for people with dementia; a call for action. Department of Health 2010
14. NHS Institute for Innovation and Improvement. An economic evaluation of alternatives to antipsychotic drugs for individuals living with dementia. NHS Institute for Innovation and Improvement, Coventry House, University of Warwick Campus, Coventry.2011
15. Department of Health . Living Well with Dementia: A National Dementia Strategy. DH, London 2009.
16. Khan F, Curtice M. Non-pharmacological management of behavioural symptoms of dementia. British Journal Of Community Nursing 2011,Vol 16 no 9; 441-449
17. Equip 4 change, University of Worcester; Association for Dementia Studies. Care Fit for VIPS; Achieving excellence in dementia care- the tools for change 2012. Accessed at; <http://www.carefitforvips.co.uk/>
18. Alzheimer's Disease International. World Alzheimer Report 2011: the Benefits of Early Diagnosis and Intervention, Alzheimer's Disease International, London 2011.

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# Physical State of Old People Living at Home.

## Chapter 5, Domestic Structure

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204	<i>Housework and domestic care</i>
209	<i>Other employment of relatives looking after old people</i>
210	<i>Unsuitable houses</i>
211	<i>Difficulties of domestic work for old people: shopping and washing</i>
212	<i>Old people looking after grandchildren</i>

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### Housework And Domestic Care

204. One of the principal objects of the survey was to investigate the mutual stresses and strains existing between old people and the rest of the community and the contribution made by each towards the welfare of the other. Housework is obviously a matter of prime importance to those living at home and a question was therefore asked as to whether this was done by the subject alone, by the subject and others together or entirely by others.

205. Housework is mainly the province of the woman, and Table 40 provides a magnificent testimony to the vital part that the ageing woman plays in the life of the community. Up to the age of 74 half the women in the sample were entirely responsible for the domestic work of the house, and a glance at Table XXXVI will show that in the majority of instances this includes the domestic care of others in addition to the subject, chiefly that of husbands and children. Not till the age of 75 is reached do these women begin to flag and feel the effect of age, but even by the age of 79 no less than 40 per cent are entirely responsible for the house. By that age 70 per cent are widows, but Table XXXVI shows that only 16 per cent of widows are living alone, so that even at this age many of the women are looking after others as well as themselves.

After 80, years tell their tale with increasing rapidity, so that only 4.5 per cent of those over 85 are entirely responsible for the housework. Further evidence of the determination shown by the ageing woman is provided by the cases where the housework is shared by the subject with others. The figure remains more or less steady around 40 per cent up to the age of 79, when it increases to over 50 per cent the increment being due to those who have had to retire from sole charge of the house but nevertheless continue to give a hand. Even after 85, though only 4.5 per cent are strong enough to be in sole charge, no less than 40 per cent do what they can to help. In the early age groups only a small proportion of the women are dependent on the care of others, and this is almost invariably due to illness and it is for this reason that the figure is higher at 60 than at 65.

Women do not tend to become dependent on others until after the age of 79, when age really begins to tell, and after 85 more than half are entirely dependent. The essential

feature brought out by Table 40 is that, where health and other circumstances permit, women play a major part in the running of their households up to the age of 75<sup>9</sup>, and, though their contribution afterwards inevitably tends to diminish, nearly half are taking some share even after the age of 85. Old age undoubtedly places great strains on the younger generation, but this is only part of the picture, and it is well to remember the debt owed by the community to the domestic work done by the older women. Their grit and determination is all the more remarkable in view of their liability to all sorts of physical defects, which have already been described in detail, and to many of which it was found that women were more prone than men.

206. It is inevitable that but few of the men will be wholly concerned in housework, but up to the age of 79 some are entirely responsible, the rise in the age group 75<sup>9</sup> being due to the increase in widowers living alone. It was, however, a surprise in the conduct of the survey to find how many men were taking a share in the housework, and this is borne out by Table 40 which shows that (apart from the drop in the period 80-4 years) some 35 per cent of the older men assist in running the house. This is due in part to the present shortage of domestic help, but even more to the expenditure of time and energy required for shopping under present conditions—so that, when men retire from their occupations, another one is quickly found for them at home.

A precise study of the partition of domestic work between the man and the woman would be of great interest: the usual feature is for the man to make the morning cup of tea, light the fire, and do the washing up. He frequently makes himself responsible for the heavy work in the house such as scrubbing and cleaning, getting the coal in, etc. The shopping is usually done by the woman, if her health is sufficiently good, but several men were encountered who made a speciality of shopping, doing it for several households. The cooking is done by the woman in most cases, but not all — some of the men being particularly skilled and enjoying it. The others — those without great natural aptitude — are usually allowed to practise on the vegetables, but not the weekly joint! Almost every division of labour was found, but except where the woman was physically incapable the man was virtually never trusted to make the beds. In spite of these efforts — which parallel

those of the woman, and indicate the determination of old people to keep their homes going—in every age group in the sample more than half the men are dependent on the domestic care of others.

### Partition of housework

207. It is of interest to discover who helps the old people to run their houses when they are no longer physically capable of taking the entire responsibility themselves. Details are shown in Table 41. The answers are, of course, not mutually exclusive, either as between the same or the younger generation, or between different members of the same generation. For this reason, the 185 subjects recorded in Table 40 as sharing their housework are represented in Table 41 by 202 entries.

The following circumstances occur with those old people who can only assist in running the house:

Men: 35.4 per cent of old men are concerned, and of these 62.3 per cent share it with the same generation, in the great majority of cases with the wife (84.4 per cent), though men do at times share the housework with other relatives (e.g. sister) or a housekeeper 37.7 per cent of that part of the male sample sharing housework share it with the younger generation, and the great majority of these share it with a daughter (73.9 per cent).

Women show the reverse state of affairs: of those sharing the housework, the majority (68 per cent) share it with the younger generation against only 32 per cent who share it with the same generation. Of those who share it with the same generation it is noticeable that in only one third of the cases is it shared with the husband—owing to the preponderance of widows in old age; in most cases it is shared either with a relative such as a sister or with another person such as a friend. (This applies mainly to the widows shown in Table XXXVI, as sharing a house.) Of those who share the housework with the younger generation, women resemble men in that they mostly share it with a daughter.

### Partition of domestic care

208. It has been shown that the majority of the old people in the sample were taking an active part in running their homes — either alone or with assistance. But as the years increase they become more and more dependent on others. Table 42 shows how many old people in the sample were looking after themselves and how far their care is undertaken by others.

Details were taken from 471 subjects (98.7 per cent of the sample). Multiple ringing was necessary in many of the cases, since more than one person might be concerned with the care of the old person: the 471 subjects were represented by 658 entries — which illustrates the complexity of the domestic life of the old people. The difference between the findings in this table and the two previous ones is partly

accounted for by the action of relatives living near. An old person living alone clearly has domestic care of himself or herself, but may, nevertheless, share the housework with children living close or may do his or her own housework while others do the shopping. Another common mode of existence is that of the daughter in employment who is looked after by her parents during the week, but does the housework over the week end. The entries in Table 42 are therefore not mutually exclusive, but give an overall picture of the degree of participation by various categories of people in the domestic care of the aged.

61.5 per cent of the domestic care of the women and 23.6 per cent of that of the men is undertaken by themselves (though they may obtain—or give—assistance in the housework). Where old people are dependent on the younger generation, the daughter takes the strain in the majority of cases and other relatives are concerned to a much smaller extent. (No inquiry was made into the important question of the extent to which the care of aged parents may have an unequal distribution among their daughters.)

Existing social conditions are reflected in the smaller number of subjects who have the assistance of paid servants a total of only 27 subjects in the whole survey.

### Other Employment Of Relatives Looking After Old People

209. Although more of the old people are looking after themselves than are being cared for by the younger generation, the strain imposed on the latter may at times be considerable. This is dealt with later, after the problem of illness has been discussed, since in many instances the younger relatives are having to combine domestic with nursing care. It is of interest, however, to find how many of the younger generation are losing employment owing to their responsibilities at home. The following table shows the state of affairs:

**Table XXXVII**  
**State Of Employment In Younger Relatives Looking After Old People**

Relatives	Subjects		
	Men	Women	Total
1. Employed	18	52	70
2. Employed—on account of subject	3	5	8
3. Unemployed—for other reasons . .	25	57	82

Eight subjects (1.67 per cent of the sample) were being cared for by younger relatives who had been forced to give up work on their account. Since the 8 cases constitute only 5 per cent of the younger relatives looking after old people,

it might appear at first sight that the care of aged parents is only rarely so exacting as to cause loss of employment. This is, however, by no means the whole truth, for it leaves two important facts out of account. A younger relative is often able to cease work, for this purpose, only when she has brothers or sisters who remain at work and whose earnings help to make up the family budget. She then undergoes a particular hardship by becoming dependent on others for her pocket money. Alternatively, where this is not possible, a daughter may, by having to remain at work, become almost a slave — at work all day, and doing the housework and nursing that may be required in the early mornings and the evenings.

No less than 43 per cent of the younger generation concerned in the care of the old people were in employment, and there were instances of severe hardship in this group. A typical example has already been referred to (see last case report on page 27), and the matter is discussed further in Chapter 6. The great majority of those unemployed, for reasons other than the care of the subject, were married daughters or daughters in law. Although the majority of old people are re-sponsible for their own care, when the strain falls on the younger generation it is clear that it is apt to be heavy, owing to the other responsibilities they have to carry in addition.

### Unsuitable Houses

210. It was impossible within the limits of the medical survey to give the attention to housing that the matter deserves. Nevertheless, in view of the physical difficulties that have been already described, the extent to which old people find the houses they have been accus-tomed to in earlier life a handicap, when physical strength begins to fail, is of importance. This matter was dealt with by the social survey and the following section is based on the findings of the social investigators; they obtained the following results:

	Numer	%
Wishing to move	308	60.0
Not wishing to move	208	40.0

Those wishing to move gave the following reasons:

	Numer	%
Dislike house	120	53.5%
Dislike district	29	12.9%
Dislike town	1	0.4%
Family troubles	5	2.0%
Too expensive	15	6.0%
Other reasons	54	23.2%

Dislike of the present house is by far the most usual reason. In the social survey (see Old People, Table VI) it was found that 44 per cent of the old people visited in

Wolverhampton had lived in their present houses for more than 20 years. It is clear therefore that in the majority of cases the house has become too large and inconvenient for the old people to run — especially after the children have married and left. In fact the investigators made special notes in 44 cases (8 per cent of social survey sample) who were very discontented with their houses and wanted to move. The majority of these (28 subjects — 5 per cent) were finding the housework too much for them in the old home, and wanted either a smaller house or a bungalow. The remainder had various reasons for wanting to leave, the most usual ones being that the house was in bad repair or that it was overcrowded, with the old people never able to escape from the general turmoil caused by small children. The fact that at least 5 per cent of the sample of old people were anxious to move into smaller dwellings is a fact of some importance under present day conditions.

### Difficulties Of Domestic Work For Old People: Shopping And Washing

211. Thirty five instances were met with in the survey (7.3 per cent) where the domestic work they were actually doing was clearly beyond the capacity of the old people apart from the size of the house. Of these, 22 were of subnormal physique, so that the most frequent cause was physical defect in the old person; the 13 normal subjects were having the care of a household too large for them. Domestic work offers many problems to the man or woman of subnormal physique, but it should be mentioned that the three biggest problems are those of the stairs, shopping, and the washing. The question of stairs has already been discussed.

The extent to which old people depend for their catering on small shops in their immediate neighbourhood has already been stressed and it is desirable to reiterate the statement that their replacement by large and more central establishments would lay a great and unnecessary burden on many old people. The weekly wash, with all its accessories of mangling and ironing, demands a heavier output of muscular energy than any other domestic activity, and with advancing years old people find this an increasing problem, so that, when younger relatives are near, this is often the first task they assume for their parents. Those who have no such possibilities of help have often to face the unwelcome expense of sending the washing away. There is little doubt that help over the washing is a form of domestic assistance that would be greatly welcomed by many of the old people.

### Old People Looking After Grandchildren

212. Where the younger generation have to lose their economic independence to look after old people, age is clearly a burden on youth. The opposite side of the picture is to be seen in those of the older women who are engaged in bringing up grandchildren. Ten instances were encountered in the survey (2.1 per cent), which is

nearly equal to the percentage of younger women who were looking after their parents and had lost employment on that account. On balance, therefore, so far as the community as a whole is concerned, the old people are giving the younger generation almost as much as they are receiving. In 3 cases the care of the grandchildren was only temporary—in the sense of a period of months while the parents were away—but in the other 7 the old woman had the sole task of rearing a family of grandchildren.

A woman aged 65 was classed as subnormal in physique on account of varicose veins, oedema of the feet, and dyspnoea. Nevertheless she was bringing up 4 grandchildren of early school age and was obviously under considerable strain.

A woman of 75 of normal plus physique had reared 5 grandchildren from childhood, and had only just got the last off her hands.

These cases are in addition to the numerous instances where an old woman, whether married or widowed, assists her children in the care of the grandchildren. 11.9 per cent of married subjects and 35.4 per cent of widows were living in the same houses as grandchildren and in many of these the grandmother would be concerned in this partial care.



# Contributors' Guidelines

*The Journal of the Institute of Ageing and Health (West Midlands):*

A well written appropriately constructed paper makes the editors' job simpler and hastens publication. To this end the following should be considered, but where doubts remain enquires, prior to submission, as to suitability, styles etc., are welcomed.

Submissions can cover any topic related to ageing or health in later life. Preferably manuscripts should be submitted electronically via email to Jeanette.lane@bhamcommunity.nhs.uk or post to the Institute of Ageing and Health- West Midlands at the address below.

## Presentation

Manuscripts should be prepared using Microsoft word in double spaced format with ample margins.

## Title page

A separate page should include:

- Title of the article
- To include authors name, qualifications, designations and place of work

## For non-research articles

The journal welcomes original articles relating to health care from carers, older people and any health care worker involved with caring for older people.

When submitting these papers please include a separate title page with the title of the paper with the authors name(s), qualifications, designations and place of work (if appropriate).

The format should include an introduction, main body and conclusion. Any references, if used, should also follow the Vancouver system of referencing as set out below.

There is no minimum word limit for these articles however they should not exceed 4,000 words.

## For original research include:

Key words - Up to six essential key words

Abstract - No more than 200 words to include a short resume of the research aims, major findings and conclusions.

Main text - To include an introduction, methodology used, results, discussion, any related limitations and future recommendations, ethical considerations and conclusion.

Length of article -This should be between 3 - 4,000 words in length (minus references)

## References

These should be numbered in the order in which they appear in the text. At the end of the article the full list of references should follow the Vancouver style (see examples below).

Please give the names and initials of all authors (unless there are more than seven, when only the first seven should be given followed with et al.)

## Examples:

Book references

1. Sheldon JH. The Social Medicine of Old Age: Report of an inquiry in Wolverhampton. Oxford University Press, 1948.

Chapters in books

1. Mountain G Assessment and dementia In Downs M and Bowers B (eds) Excellence in Dementia Care Research into Practice.Berkshire. Open University Press.2010

Journal references

The authors' names are followed by the title of the article; the title of the journal abbreviated according to the style of Index Medicus; the year of the publication; the volume number; and the first and last page numbers.

1. Holmes C, Hopkins V, Hensford C, MacLaughlin V, Wilkinson D, Rosenvinge H. Lavender oil as a treatment for agitated behaviour in severe dementia: a placebo controlled study. Int J Geriatr Psychiatry 2002; 17: 305-308

Electronic references

1. British Geriatric Society. Population and Projections. 2012 <http://www.bgs.org.uk/index.php> [accessed on 3/3/12]

Authors should get permission from the source to cite personal communications. Authors must verify references against the original documents before submission.

## Illustrations

Clinical photographs of people or their lesions must be accompanied by written consent from the subject.

Tables should be short, plain and should not repeat information contained in the body of the text.

If printed charts are included these should be original figures, diagrams and tables. These should all be referred to in the text.

If using already published figures, tables, diagrams and/or tables these must be acknowledged and it is the authors responsibly to gain permission for their use.

Publication is at the discretion of the editor who may seek external peer review.

Proofs maybe sent for consideration to :

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