

# Gardening and growing for people with dementia

Being in a garden and taking part in horticultural activities has been shown to be of benefit for people with dementia, with structured therapeutic gardening activities having a positive impact on sense of wellbeing, cognitive abilities, communication and engagement Detweiler *et al.*, 2012 and Hewitt *et al.*, 2013.

## Background

Dementia is a long-term condition with a high impact on a person's health, personal circumstances and family life. Alzheimer's disease is the most common form of dementia and is generally diagnosed in people over 70 years of age. Early-onset dementia refers to the onset of symptoms before the age of 65. As well as having profound impact on the individual, dementia can also have high impact on family members and friends. Dementia results in a progressive decline in multiple areas of function including memory, reasoning, communication skills and those skills needed to carry out daily activities. Alongside this decline, individuals may develop behavioural and psychological symptoms such as depression, psychosis, aggression and wandering, which complicate care.

The National Dementia Strategy (2009), aims to ensure that improvements are made to dementia services across three areas: improved awareness, earlier diagnosis and intervention, and a higher quality of care (Department of Health, 2009). The Alzheimer's Society statistics show that there are currently 800,000 people living with dementia in the UK, and it is predicted that this number will rise to over

one million people by 2021. It is estimated that dementia currently costs the NHS, local authorities and families £23 billion a year and this will grow to £27 billion by 2018 (Kane and Cook 2013). The Alzheimer's Society notes that the Welsh Assembly in its framework action recognises that low-level support services such as gardening clubs are vital, and reduce the need for more intrusive and costly care solutions (Kane and Cook, 2013).

## Evidence of benefits of horticultural therapy for people with dementia

The UK National Institute for Health and Care Excellence (NICE) recommends that care plans should address activities of daily living that maximise independent activity, adapt and enhance function, and minimize need for support (NICE, 2011). The garden and the activity of gardening provides a non-pharmacological approach to address these goals and horticultural therapy can be utilized to improve the quality of life for the aging population and yielded high level patient/carer satisfaction, possibly reducing costs of long-term, assisted living and dementia unit residents (Detweiler *et al.* 2012; Gitlin *et al.*, 2012).



Sydenham garden sow and grow group

A number of studies have shown the benefits of therapeutic gardens and horticultural activities for patients with dementia. In a review of the literature of the evidence to support the use of therapeutic gardens for the elderly, Detweiler *et al* (2012) concluded that many preliminary studies have reported benefits of horticultural therapy and garden settings in reduction of pain, improvement in attention, lessening of stress, modulation of agitation, lowering of as need medications, and antipsychotics and reduction in falls.

Jarrot and Gigliotti (2010) evaluated responses to horticultural based activities for randomly assigned groups in eight care homes and compared with responses to traditional activities. They showed that horticultural activities reached groups of participants who would often be difficult to engage in activities and resulted in higher levels of adaptive behaviour and in active and passive engagement. Similarly, Yasukawa (2009) showed improvements in communication, engagement, behaviour and cognitive abilities in a group of patients with Alzheimer's who participated in horticultural activity over a period of three months.

In a study investigating the use of horticultural therapy to prevent the decline of mental abilities in patients with Alzheimer's type dementia, D'Andrea (2007) reported participation in horticultural activities resulted in maintenance of memory and sense of well-being and an overall higher functional level than the control group. Connell *et al.*, (2007) compared outdoor and indoor activity programmes on sleep and behaviour in nursing home residents with dementia and showed that the outdoor activity group experienced significant improvements in sleep patterns and also a decline in verbal agitation.

Hewitt *et al.* (2013) evaluated the impact of therapeutic gardening for people with young-onset dementia, measuring outcomes for both participants with dementia and their carers. The conclusion from their preliminary study suggested that structured gardening over a 12 months period had a positive impact on the well-being, cognition and mood of people with young-onset dementia. Specific attention was drawn to the relationship between the well-being of participants and their cognition; the results of the study suggested that well-being can be maintained despite the presence of a cognitive deterioration. Self-identity and purposeful activity were reported as common themes as benefits of the gardening group, participants felt useful and valued and had a sense of achievement.

## References

- Connell, B. R., J. A. Sanford and D. Lewis (2007) Therapeutic effect of an outdoor activity programme on nursing home residents with dementia. *Journal of housing for the elderly* 21:3/4:195-209.
- Department of Health (2009). *Living well with dementia: a national dementia strategy*. London, Department of Health.
- D'Andrea, S. (2007) Effect of horticultural therapy on preventing the decline of mental abilities of patients with Alzheimer's type dementia. *Journal of Therapeutic Horticulture* 2007-2008: XVIII.
- Detweiler, M. B., T. Sharma, J G Deteiler, P.F. Murphy, S Lane, J. Carman, A S. Chudhary, M. H. Halling and K.Y Kim (2012). What is the evidence to support the use of therapeutic gardens for the elderly. *Korean Neuropsychiatric Association. Psychiatry Investigating* 2012:9: 100-110.
- Gitlin, L. N., H. C. Kales and C. G. Lyketsos (2012). Nonpharmacological management of behavioural symptoms in dementia. *JAMA* 308:19: 2020-2029
- Hewitt, P., C. Watts, J. Hussey, K. Power and T Williams (2013). Does a structured gardening programme improve well-being in young-onset dementia? A preliminary study. *British Journal of Occupational Therapy* 76(8):355-361.
- Jarrott, S., C. Gigliotti (2010). Comparing responses to horticultural based and traditional activities in dementia care programs. *American Journal of Alzheimer's Disease and Other Dementias* 2010:25:657.
- Kane, M. and L. Cook (2013) *Dementia 2013: The hidden voice of loneliness*. [alzheimers.org.uk/dementia2013](http://alzheimers.org.uk/dementia2013)
- NICE (2011). *NICE clinical guideline 42. Dementia; supporting people with dementia and their carers in health and social care*. National Institute for Health and Clinical Excellence. London [www.nice.org.uk](http://www.nice.org.uk)
- Yasukawa, M. (2009) *Horticultural therapy for cognitive functioning of elderly people with dementia*. In: *International Handbook of occupational Therapy Interventions*. Edt by I. Soderback. Springer Dordrecht, Heidelberg.

This factsheet was produced as part of the Growing Health project, run by Garden Organic and Sustain

To sign up to the Growing Health network visit [www.growinghealth.info](http://www.growinghealth.info)

