Green Dementia Care in Accommodation and Care Settings

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Prevalence of dementia in accommodation and care settings

• 70% of care home residents are living with dementia (Alzheimer Society, 2016).

• We found: 61% in residential care homes and 69% in care homes with nursing (diagnosed and suspected dementia).

• The prevalence of dementia among extra care residents is less clear.

• We found: 19% extra care residents living with a dementia diagnosis and 9% living with suspected but undiagnosed dementia.
Nature and dementia in accommodation and care settings

- Limited opportunities to experience the natural world
  - Concerns about safety and security (risk averse care culture)
  - Outdoor spaces are not fully accessible
- Residents living with dementia discouraged from going outdoors
- Residents quickly lose confidence to go outdoors with or without support
• Risk losing connection to nature / nature relatedness and the potential benefits to health and wellbeing
Loss of contact with nature can be sudden
“Oh, yes, yes. I like to get out. I’ve always done a lot of fishing. Not sea, I’ve done sea fishing, but I’ve also done river fishing. And that gets you into the fresh air and into the country. Because I’m a Brummy, I like to get into a bit of country.”

“I love trees and things like that because it’s all part of birds and everything.”

“I’ve had dogs myself and cats in our time. They’ve all gone now. The dog died first and then the cat died two days later, so I’ve lost the pair of them. They were both lovely and all. They used to sit with me, lie on my knee and everything.”

“Yes, oh I always used to do the garden. I used to grow tomatoes a lot.”

“I like the leaves, I like the rain and wind.”

“I’ve had two dogs. I’ve had a Labrador and a sniffer. And I’ve always enjoyed taking them for walks.”

“I like to hear the birds.”

“I’ve always had a garden ... everything ... lettuce, tomatoes.”

“Roses preferably. Rose garden. Red roses.”
Salutogenic effects of nature on people

• The evidence relating to the benefits of nature to human health and wellbeing is vast.

Direct benefits to physical health and wellbeing

• Reduction in heart rate and blood pressure from viewing nature
• Encouraging participation in physical activity and associated positive physical health outcomes such as reducing the likelihood of becoming overweight or obese
• Synthesis of Vitamin D from exposure to sunlight outdoors
• Improved absorption of vitamin D and calcium contributing to bone health and muscle function, thereby reduces falls in older people
• Faster healing and recovery from surgery and illness (thereby reducing requirements of health care services)

Reduced cardiovascular, respiratory disease and long-term illness
• Reduced headaches
• Reduced mortality rates from circulatory disease
• Improved immunity to disease
• Reduced occurrence of illness
• Reduced risk of developing type 2 diabetes
• Increased longevity
• Addiction recovery
• Reduced blood pressure
• Reduced cortisol levels
• Reduction in fatigue and tension
• Increase in vigour during exercise
• Improvement in perceived health/wellbeing
Direct benefits to mental health and wellbeing

- Improved general psychological/mental wellbeing
- Reduced risk of poor mental health
- Psychological restoration and increased recovery from mental fatigue
- Synergistic mental health benefits of exercising in nature ('green exercise') e.g. improved self-esteem and mood, reduced likelihood of developing dementia
- Reduction in depression and anxiety
- Stress reduction
- Increased patience
- Increased self-discipline
- Improved self-identity
- Improved mood
- Improved self-esteem, confidence and self-worth
- Greater ability to cope with stressful life events in childhood
- Improvement in dementia-related symptoms
- Increased attentional capacity and cognition
- Increased recovery from mental fatigue, crisis and psychophysiological imbalance
- Improved happiness, satisfaction and quality of life
- Sense of peace, calm or relaxation
- Inspiration/fulfilment of imagination
- Feelings of safety and security

Indirect benefits

- Having meaning in one’s life
- Increased social contact, interaction, inclusion, connectedness and sense of belonging
- Increased social cohesion and social support
- Development and reinforcement of sense of place
- Reduced anger and frustration
- Reduced aggression and violence (reduction in antisocial behaviour and incidence of crime in urban areas with green spaces)
- Spiritual health and wellbeing
- Improved productivity
- Improved academic performance
- Improved ability to perform tasks
- Increase in work skills, meaningful activity and personal achievement
- Facilitating nature-based activity and social engagement (by providing locations for contact with nature, physical activity and social engagement), which benefit health
- Providing a catalyst for behavioural change in terms of encouraging the adoption of healthier lifestyles, e.g. through the consumption of more fruits and vegetables and wild foods
Humans and nature

• Having spent over 95% of our evolutionary development (over 200,000 years) surviving in the natural environment, human beings have an innate affiliation with nature and other forms of life (Bird 2007).

• Carl Jung: “the nourishing soil of the soul”

• Biophilia hypothesis (Wilson, 1984):
  – Human beings have an evolutionary drive to interact with nature
  – There is a fundamental interconnectedness between human beings and the natural world
  – Interaction with nature elicits profound physical, psychological and emotional responses.

• Nature performs a crucial role in maintaining physical health and wellbeing (Kellert, 2012)
What is “green care”?

• The term “Green care” refers to a range of health-promoting interventions encompassing living organisms (plants and animals) and natural elements (e.g. the weather).

• Green care links traditional health care to:
  – Gardening (horticultural therapy)
  – Agriculture (green care farming)
  – Animals (animal assisted interventions)
  – Exercise in the natural environment.

• Green dementia care refers to a range of indoor and outdoor experiences and activities that aim to promote health and wellbeing through interaction with nature for people living with dementia.

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Green care for older people in accommodation and care settings can be:

- **indoors** (e.g. looking after indoor plants, arts and crafts using flowers, watching a film about nature, interacting with pets or visiting animals);
- **outdoors within the care setting’s garden space** (e.g. gardening, horticultural activities or outdoor exercise);
- **outdoors further afield** (e.g. visits to arboretums, botanical gardens or farms and walking, hiking or rambling trips).

Engaging with nature in such settings may can also be:

- Specifically arranged or organised by staff, volunteers or residents (e.g. walking groups or gardening clubs).
- Spontaneous and of the resident’s own volition (e.g. going out into the garden to get some fresh air or sun).
Green care in accommodation and care settings

Interaction with nature in such settings can be:

- **passive**, that is simply being in or watching nature (e.g. watching nature programmes on TV, sitting in the garden, watching and talking about nature, watching children play outdoors, watching animals or social activities such as drinking coffee and chatting with family outside);

- **active** (e.g. gardening, cooking with herbs, arts and crafts activities involving or about plants, exercise such as walking, cycling and Tai Chi, activities involving animals such as looking after farm animals, taking care of an aviary or taking care of a pet).
Green dementia care – the evidence

- Research that focuses on green dementia care in accommodation and care settings is very limited.
- There is a need for large scale, multi-site, multi-provider research to better understand the impacts of interaction with the natural environment on people living with dementia in such settings.
- To lay the foundations for such research we conducted a 1 year pilot study in 2017.
Pilot study aims and methods

- Explore existing evidence relating to nature and dementia (impacts, barriers and enablers, examples of good practice) – *literature review*

- Identify the opportunities available to people living with dementia in care homes and extra care settings in the UK to experience nature – *online survey; 144 respondents*

- Understand the benefits, barriers and enablers to interaction with nature in these settings for people living with dementia – *go-along interviews with residents with dementia at 6 case study sites, 3 care homes and 3 extra care schemes, n=19*

- Understand staff perceptions of the enablers and barriers to engagement with the natural environment for residents with dementia and the challenges and successes – *interviews with management and staff at case study sites, n=16*
Impacts on people living with dementia

- There is growing interest in the physical, mental, social and spiritual impacts of green care for people living with dementia.

- There is some emerging evidence in the literature to suggest that engagement with the outdoors and nature is important for people with dementia and can be beneficial to their health and wellbeing:
  - reduction in agitation (the most convincing evidence)
  - memory trigger and a connection with life before moving into a care setting.
  - calming, relaxing and restorative effect
  - sense of achievement, pride, self-confidence, self-esteem, self-worth, freedom, independence and a confirmation of self.
  - provides meaningful activity
  - improves social interaction and communication.
Impacts – survey and case studies

Mental and emotional benefits
• Offering a feeling of normality, peace and wellbeing
• Giving a feeling of freedom and a change from the confinement of the care setting indoor environment
• Improved mood and raised spirits
• Feeling happier and more motivated when carrying out activities
• More settled, relaxed and less stressed
• Feel-good factor, having fun and enjoyment
• Spontaneous reminiscence / triggering memories and providing a connection to the past
• Steady mental wellbeing (as measured using a wellbeing scale)
• Providing meaningful occupation and a sense of purpose
• Offering freedom from the symptoms of dementia
• Giving a sense of ownership
• Instilling a sense of pride
• Gaining comfort and companionship from animals
• Pleasure on seeing animals

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Social benefits
- Encouraging social interaction and cohesion among residents
- More interaction and participation
- Improved socialisation
- Feeling like a part of the community
- Triggering memories, spontaneous communication and subjects for conversation
- Improved/increased use of language
- Involving family

Behavioural benefits
- Residents are busier and more engaged during the day
- Reducing agitation
- More motivated
- More alert

Physical health and wellbeing benefits
- Improved sleep patterns
- Improved core strength and balance
- Less medication required
- Fewer falls
- Improves motor skills when participate regularly

Benefits of engaging with nature may be sustained for hours or for the rest of the day
I’m always out there. I do a little bit of tidying up. I’m not asked to, but I just mess about, keep myself busy.

You forget everything else.

I like being out there, unless it is ridiculously inclement, I like being out there.

I love to sit here for hours. I love the sun. It’s like out the back of my house.

You feel a bit more freedom than when I’m in here.

I love walking, Love walking. Always have done.

I think anything to do with nature, to me, is a fascination. OK. I love people and all the rest of it, but when you look at just little things ... there was a good 5 blossoms out together and it was lovely.

I’m not an inside person. That’s where I like to be.

Well, I like to hear the birds.
Key quotes - staff

It’s a change of scenery more than anything.

They love coming out in the summer, the flowers. Love seeing the flowers.

It has a massive calming effect because it’s giving them something to do.

It means that the children are more happy to come and visit grandma or great-grandpa or whatever because there’s something for the children to do.

It’s meaningful occupation.

At that moment in time you can see that they are engaged and they're really enjoying it. And some will remember and some will not. But it doesn't matter whether they remember or not, because as long as we can see it...

It’s almost like they go into another space in their mind, where they remember being at home, they remember being in their garden.

The animals have a massive impact because it’s giving them a purpose every single day. It’s giving them something to look after. It’s giving them responsibility again.

It makes them think like they haven’t got dementia. So, you can see them, what they used to be like before they had dementia.

I just think it gives people a sense of freedom they’re not in a care home.

He’s going to have a settled afternoon and probably a very good night’s sleep tonight.

It makes them bring back memories.
Impacts on family members

• Literature review:
  – Improved quality of life for family carers
  – Improved communication between residents and their family when collaborating on outdoor group activities
  – Can be concerned about the risks of more time spent outside for residents living with dementia.

• Survey:
  – Improved engagement with resident and staff
  – Improved emotional wellbeing

• Case studies:
  – Pleasure at seeing their relative engaging in activities they enjoy;
  – Improved quality of visits.
**Impacts on staff**

- The survey and case studies found that being involved in green dementia care activities appears to have strong positive impacts on staff in terms of:
  - morale
  - job satisfaction
  - Confidence
  - feelings of empowerment
  - staff retention and sickness/absence.

- All of these factors have potential financial benefits for accommodation and care settings in terms of staff retention and turnover.
Opportunities to engage with nature
Opportunities to engage with nature

Survey:
• most common means of engaging with nature outdoors was walking in the care setting’s garden, followed by passive interaction with nature, and gardening.
• most common indoor activity was arts and crafts related to nature.

Case studies:
• The residents who took part in the interviews engaged in a wide variety of nature-based activities, both passive and active, indoors and outdoors.
Indoors

• Passive engagement primarily of observing nature through windows.
• Active indoor engagement included gardening activities, feeding wild birds, looking after indoor plants and petting and feeding pets.
Passive engagement was primarily observing and listening to nature while sitting in the garden or being pushed in a wheelchair.

Active outdoor engagement usually entailed gardening activities, walking in the garden or, at one care home, caring for pet farm animals.
Spontaneous engagement

• The vast majority of survey respondents stated that spontaneous engagement with nature outside of organised activities was possible for residents with dementia.

• At the case study sites, all residents were able to go outdoors into the garden of their own volition, if they were physically able to. Reasons:
  – to get fresh air and sun, walk around, look at the flowers, listen to and watch the birds, ‘potter about’, feed and talk to pet farm animals, watch others doing gardening, or to just sit and be in the garden.
Barriers and enablers

Garden at case study extra care scheme
Literature review

• Providing access to the outdoors is:
  – good person-centred practice in dementia care;
  – central to the promotion of the human rights and social inclusion of people with dementia.

• Literature review: strong evidence base on the barriers and enablers to accessing nature for people living with dementia in accommodation and care settings.

• Many such settings have gardens but these are often underused by the residents, particularly those living with dementia.
Literature review - crucial factors in underuse of outdoor space

- Risk aversion
  - lack of awareness and understanding among staff of the health and safety aspects of garden use for people living with dementia
  - care culture of the organisation.

- Design of outdoor space
  - easy to visually and physically access and safe for residents with dementia to use on their own
  - best achieved by considering the outdoor space together with the indoor space during the design of the setting as a whole
Survey and case studies – common barriers

• The most common reasons given in the survey for not being able to offer more activities were:
  – availability of staff / time constraints;
  – availability of volunteers;
  – financial constraints.

• Some of the case study sites were also struggling with these barriers, particularly the extra care housing settings.

• Individual barriers related to residents’ personal preference, lack of confidence or belief in their ability, and fear of aggravating a physical condition.
Care culture

• The literature review found that a crucial factor in the successful use of a care setting’s outdoor space is an organisational ethos or care culture that is:
  – person-centred;
  – promotes residents’ independence;
  – has a positive attitude towards risk-taking;
  – is supportive of residents going outdoors.

• The case studies also revealed how crucial the care culture of the setting is to maintaining a connection to nature for residents living with dementia. The more person-centred the care culture, the more contact with nature (both spontaneous and arranged) was integrated into daily life.
Determinants of successful green dementia care

- The most crucial determinants of successful green dementia care are:
  - a positive approach to risk-taking;
  - having a team of staff dedicated to activities and meaningful occupation;
  - management buy-in and support;
  - management and staff training in green dementia care;
  - good availability of trained volunteers;
  - finding appropriate approaches to encouraging individual residents living with dementia to engage;
  - reducing staff costs;
  - fundraising for green dementia care activities;
  - design of the outdoor space so that it is easy to visually and physically access and safe to use for residents living with dementia.

*It is literally a case of, this is the end of their journey, let’s make it the best of their journey, and if we’ve got to have a little bit of risk out there then that’s fine, we can work round it.*
Successful green dementia care

Person centred care culture

Approach
- Management buy-in and support
- Positive risk-taking
- Appropriate nature-based experiences and activities at the care setting that can be easily integrated into the day
- Gradually introduce activities
- Flexible and realistic
- Awareness of and links with useful local organisations
- Encourage wider engagement

Encouraging residents living with dementia
- Plan for variety and individuality
- Be flexible and adaptable
- Be persistent
- Include residents with concurrent physical, mobility or sensory issues

Staff and volunteers
- Dedicated activities team
- Management and staff training in green dementia care and its potential benefits
- High staff morale, empowerment and job satisfaction
- Good availability of trained volunteers

Finance
- Fundraising can help with providing necessary funds
- Reduce staff turnover and recruitment costs
- Recruit and train volunteers to help with activities

Design of outdoor environment
- Visually and physically accessible
- Safe for residents living with dementia to use on their own
- Best achieved by considering the outdoor space together with the indoor space during the design of the setting as a whole
- Consider implications for maintenance costs
- Make use of local programmes and organisations
Summary

• The natural environment has a salutogenic effect on people.  
  — Why shouldn’t this also apply to people living with dementia?  

• Residents living with dementia in accommodation and care settings risk losing their connection to nature and nature relatedness.  

• There is emerging evidence in the literature to suggest that engagement with nature can be beneficial to people living with dementia, particularly in terms of reduction in agitation.  

• The survey and case studies found evidence of numerous benefits (mental/emotional, behavioural, social, physical).  

• There is a strong evidence base in the literature on the barriers and enablers to accessing nature for people living with dementia in accommodation and care settings.  
  — Risk aversion / care culture  
  — Design of the outdoor space  

• The survey and case studies also found evidence of barriers and challenges to providing green dementia care, many of which could be considered symptoms of the underlying care culture. Recommendations were made for overcoming these.  

• This was a small-scale pilot study – large-scale research, involving interventions, is necessary in order to inform policy and practice concerning green dementia care.