Salutogenics and residential care for people with dementia

In this article, **Jan Golembiewski**, a practicing architect and neuroscience PhD, reframes the essentials of good design and care delivery for people with dementia

hen, in the early 1970s, a sociologist called Aaron Antonovsky was given the task of helping to establish the Ben-Gurion University Medical School in Israel, he had the idea that a facility itself should contribute to better health – not only the treatments that take place within its walls.

He was convinced by Frankl (1963), that some people are able to survive extreme adversity, whilst others perish quickly given the same circumstances and he wanted to understand how those factors could improve health (Vinje *et al* 2017).

And so Antonovsky developed the theory of salutogenics, which reverses the normative central question of medicine (which Antonovsky called the pathogenic model of medicine) which asks 'why do people get sick?', and instead focuses on the inverse; 'how do we manage to stay healthy?' (Antonovsky 1979). (The word 'salutogenesis', coined by Antonovsky, comes from the Latin salus meaning 'health' and the Greek genesis meaning 'source'.)

According to salutogenic theory, in some circumstances, it's more important to focus on the resources and capacity that people have to create health than on risks, ill-health and disease (Lindström & Eriksson 2005). Generally speaking, in salutogenic terms, the difference between collapsing into infirmity and remaining well (or even thriving) depends more on a person's outlook than on how they successfully avoid the stressors that we so often associate with disease and infirmity.

This makes salutogenics an ideal model for approaching the design of homes and models of care for aged and dementia care because it provides an overarching concept of passive health maintenance, rather than models that promote specific cures and treatments. This holism is useful because the problems we see in care homes are so diverse. Dementia is known to be multifactorial, and disease and infirmity



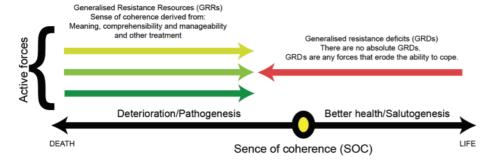
The better aged care homes are salutogenic, whether they were intended to be so or not – for example Humanitas Bergweg in Rotterdam (above) and De Hogeweyk dementia village in the Netherlands (below). Photos: Guy Luscombe (Humanitas) and Kirsty Bennett (De Hogeweyk)



are non-specific, yet ubiquitous with advancing age.

Salutogenics can be applied to any aged care home to assess the quality of the experience for residents and its

impact on health. The better places are salutogenic, whether they intended to be so or not (eg, De Hogeweyk, an excellent large care centre for people with dementia in the Netherlands).



Antonovsky's salutogenic theory (1987)

Figure 1: The basic premise of Antonovsky's theory of salutogenics is that the three generalised resistance resources (GRRs) counteract the generalised resistance deficits (GRDs), which are the generalised forces that consume energy and wear one down in one way or another. The sum of these opposing forces makes a dynamic sense of coherence (SOC). Whereas an optimistic SOC propels an individual to greater engagement in life, one overbalanced by GRDs will push the other way, toward failure, sickness, mental illness and even death

The salutogenic model

The salutogenic model describes health as a continuum, with an idealised state of perfect health, and totally engaged, meaningful, fulfilled and connected life at one end, and with illness at the other (see Figure 1 above).

The continuum of health has competing forces working in either direction. The forces driving a person toward better health are called generalised resistance resources (GRRs) – meaning, comprehensibility and manageability and those that drive toward illness and ultimately to death are generalised resistance deficits (GRDs). GRDs are anything that saps a person's energy, wears them down and erodes their ability to cope.

As different as they appear, both GRRs and GRDs are the same thing - they are life events (see Figure 1). And it's not what life's events are that really matters it's how they are dealt with that's important. A similar stressor may push one person over the edge and another may not notice the stressor at all. Take some negative news from a doctor for example. It might be a stressor for one person, essential information for another and others again may even treat it as a challenge to be overcome (Lawton & Nahemow 1973).

The sum of these opposing forces is experienced as a sense of coherence (SOC), a current admixture of relative wellbeing, empowerment and sense of purpose. Whereas an optimistic SOC propels an individual to greater engagement in life, one overbalanced by GRDs will push the person the other way, toward failure, sickness, mental illness and even death.

The GRRs (which push the SOC in the direction of better health) can be imagined as three engines that provide "the confidence that, as in the past, things by and large, work out well" (Antonovsky 1987). The engines are manageability, comprehensibility (a capacity to understand and use one's circumstances) and meaning. The GRDs are far more diverse. They reflect any maladaptivity when dealing with life and its situations.

The sense of coherence is where a state of mind finds itself in the balance between all the GRR and GRD influences. A strong sense of coherence provides motivation for action and an understanding of the situation at hand, but a weak sense of coherence is paralysing. There's no impetus to act, nor knowledge of what's at stake or what action to take in any case (Golembiewski 2017).

For this reason, very similar circumstances have very different effects on different people - some thrive and others plummet according to their personal sense of coherence.

When one is unable to adapt to circumstances and experiences, physical or mental health will 'break down' (Antonovsky 1972). But by focusing on improving the sense of coherence by reducing known GRDs and providing for the GRRs, a scaffold emerges that can be readily applied to aged care design and delivery of care for people with dementia.

The basic idea is simple – remove any overt stressors, such as invasive models of care or highly visible locked doors for example, then make changes to improve meaningfulness, comprehensibility and finally manageability, in that order. Once a care home serves these needs, one can rest assured that it is doing all that is currently possible to make the lives and circumstances as good as they can be for residents with dementia.

The Salutogenic method

In 2010, I published a method especially for addressing the salutogenesis of mental health patients to give a good basis for decision making during the facility design process, wherever the issues at stake are difficult to pin down and when relevant evidence is hard to locate or simply doesn't exist (Golembiewski 2010).

The method is every bit as relevant for dementia care homes. It aims to make every decision positively support the sense of coherence in some way – even before residents ever enter the door.

The salutogenic method involves making all decisions (however minor) only after scrutiny for how they might assist or erode the residents' ability to manage, comprehend or find meaning in their environment and life.

The hierarchy of meaning

In the salutogenic model, not all generalised resistance resources are equal. There's a distinct hierarchy, with meaningfulness (that is, better connections with society and the greater world) being most important for people, followed by comprehensibility (understanding) and finally by a provision for basic needs (manageability). This inverts the normative logic that basic needs are pivotal for maintaining human life and that self-actualisation is a final luxury once all other needs are in place.

Manageability

Manageability is a person's ability to manage day-to-day physical realities whatever they are: paying bills, staying warm, dry, clean, fit, appropriately medicated, rested and nourished and other maintenance of their physical lives. Support for manageability means providing the basics to support life; food, shelter, medication, security, activities to occupy the mind etc.

In many cases Manageability is only considered in dementia care homes as a minimal set of transactions that have to be done to keep a resident physically well. Improvements to manageability tend to be focused on staff - through centralised food and cleaning services and through programs and treatment; managing pain, managing on behalf of residents etc. This is what dementia care homes can be expected to do well.

But Manageability should always be

considered for residents also: and that means at every step, the role of the unit in managing on behalf of residents should be rolled back to the point where people with dementia are encouraged to manage on their own as best they can (Lawton & Nahemow 1973). This will shift the locus of control back onto the resident (Golembiewski 2014)

It may be impractical, but giving residents access to all the normal things of life such as a kitchen, groceries, a bath, a shed with tools, a vegetable garden etc may be an important step in maintaining independence and in preventing atrophy and maintaining happiness (Zeisel 2007).

"The feeling that a person is in control of his or her environment and life circumstances is very fortifying" (Golembiewski 2010 p107). Things that support manageability for people with dementia will include provisions for their health, security and comfort, and even more importantly, provisions for the residents to make decisions for themselves and, as far as possible, to take action accordingly.

Comprehensibility

Comprehensibility is a person's ability to make sense of one's life narrative, one's context and current circumstances, and without this fundamental knowledge, people have little capacity to make the most of circumstances or negotiate life's challenges (Golembiewski 2012). The desire to understand circumstances in order to make the most of them is more important than manageability because it's much easier to cope with adversity when you have the knowledge and tools to deal with it: when you know what is going on, why, and how to do something about it.

There is considerable evidence in the designing of environments for people with dementia literature that distracting, invasive stimuli can dominate perception and interfere with comprehensibility. Therefore it's a good idea to design spaces that absorb background sound and avoid highly salient visual stimuli.

Equally, service delivery systems should be designed to avoid distracting sounds (machines that ping, etc) and visual clutter (notes pinned to the walls etc) (Fleming & Purandare 2010).

Beyond this, residents with dementia can have a particularly difficult time understanding how a facility works and why things are like they are; often they don't know how to get what they want and are troubled by a desire to escape from an undesirable situation

Things that may improve comprehensibility for people with

dementia are well-considered resident and visitor journeys that understand the perceptual limitations of those with parietal, occipital or visual cortex dementias. This may involve imagining every detail of a resident's first visit, their orientation and how they settle into their rooms. It will also consider the routines of daily life and how these will be kept safe, engaging and meaningful.

Design for comprehensibility may involve clear way-finding, place-making and personalisation. Exits should be obscured and people's attention should be drawn to interesting stimuli that's available for them to engage with - an inward focus, into a courtyard perhaps, rather than outside the home. Providing complex and interesting loop walking tracks is a good way of doing this (Zeisel 2000; Zeisel & Raia 2000). Architectural typology is also important. A good dementia care home looks like a residence, not a facility.

De Hogeweyk has several large interlocking internal courtyards connected by circular walking paths and gardens. The home is designed to appear like a village of separate dwellings and not like a monolithic institutional building (Molenaar & Bol & VanDillen Architekten 2010).

Personal spaces should be marked by personal effects to remind residents of who they are (and were) and where their place in the home is. Some homes go no further than glazed memory boxes or photographs on residents' bedroom doors. Whilst these attempts at personalisation are better than nothing, they reek of carer-centred models of care, rather than genuine person-centredness.

Other features that are important for comprehensibility include transparency in methods of care and decision-making, so that residents understand why things happen and what they can do to achieve their desires. It also means ensuring that the home's environment and models of care have as little ambiguity as possible by avoiding language and protocols that



The atrium area at Humanitas Bergweg. **Photo: Guy Luscombe**

are unclear or open-ended. Ambiguity may be fun for healthy people, but it is generally dangerous for the vulnerable. At its most basic, things should look like people expect them to be and not be designed to be confusingly modern in looks or function or so anti-ligature that their function isn't clear – so, a doorknob should look and function like a doorknob and a showerhead like a showerhead.

Meaning

"The absence of the things that make life manageable has obvious consequences, although they are not as significant as we tend to assume. Lack of food, water and shelter will be a source of stress that will make outcomes worse, but with their meaning and comprehensibility needs looked after; people can go a long time without basics. As Frank Lloyd Wright famously said, 'give me the luxuries of life, and I'll gladly go without the necessities' " (Golembiewski 2012).

Only a rich sense of meaning will be of assistance when manageability and comprehensibility are depleted. With meaningfulness, one can face dire circumstances – starvation, pain, illness and the worst demonstrations of human antipathy and feel confident that, in the long run, everything will turn out for the best (Frankl 1963; Antonovsky 1987). In psychotherapy, it's only when meaning is established that there's ever release, resolution and recovery.

Thus it is reasonable to assert that the fostering of meaning is the single most important role of the aged care home. It's also the hardest task to accomplish because efforts cannot be quite so prescriptive. Meaning is deeply personal and the product of an individual journey.

To foster meaning, emotional connections must be provided for as far as possible – and whilst mostly this means maintaining relationships, it also may mean new ones. Anecdotes about reversal of regression in dementia abound whenever the subject finds genuinely meaningful engagement (such as being given opportunities to tend to animals, for example). Meaning is built on anything that is of greater importance than the individual self; friends, family, society, the planet, pets. Provisions to allow continuity in all these relationships should be forefront of mind when building a care home or conceiving a model of care.

Religion also fits into this group. What makes belief useful is in how it creates meaningful links with the greater society, world and the cosmos. Remember that one of the fundamental reasons why salutogenics works is because it enables

The Handbook of Salutogenesis

The Handbook of Salutogenesis was launched in January 2017 at Ben-Gurion University, Israel. It's published as an open access book and is free to download from the Springer website at https://link.springer.com/book/10.1007/978-3-319-04600-6.

The handbook offers an in-depth survey of salutogenesis, with chapters tracing the development of the salutogenic model and fleshing out the central concepts. Experts describe a range of real-world applications for the model within and outside health contexts, including geriatrics, mental health, positive psychology, small towns, corrections facilities, schools, workplaces and professional training.

It is suitable for health and medical professionals, students and instructors looking for a thorough grounding in the topic.

action rather than paralysis. If I believe that God loves me because I care for the environment, I will actively care for the environment, and those *positive* actions form the basis of an affectively positive connection with the environment. Regardless of the truth of my conviction, my belief gives me a basis for meaning.

Beyond this, there are ways that residents with dementia can connect with external reality meaningfully with little risk of failure. A couple of the most common ways of doing this are:

Encourage pet ownership

Many residents had pets before admission - and pets should be considered as more important than any contributor to manageability or comprehensibility (Beck & Katcher 1983; Gawande 2014). When designing a dementia care unit, it is wise to provide at least some rooms - separate if necessary – that welcome pets.

Chase Memorial Nursing Home in New York revolutionised the way it cared for the elderly by bringing in two dogs, four cats and 100 birds, one for every room! The result? "People who we believed weren't able to speak started speaking. People who had been completely withdrawn and nonambulatory started coming to the nurses' station and saying 'I'll take the dog for a walk'... the lights turned on in people's eyes...' " (Thomas 1996; Gawande 2014).

Arts

Music and visual arts can be meaningful ways of linking residents with society as well as useful occupational therapy. Everything that could inspire artistic and literary endeavours should be encouraged: poetry, music, painting, drawing, sculpture, dance and performance are all wonderful for promoting a sense of meaning (Rusted et

Meaning takes time and effort to build,

but can vanish in minutes. The thing that is most damaging to meaning is meaninglessness. Meaning is incrementally destroyed by cruelty, meanness, broken promises, deception, stonewalling and contempt. Unfortunately sedation and seclusion also fit into this category. This is not to say sedatives are bad, but the use of sedation as a management tool in the care of people with dementia puts the management needs of staff before the person's need for meaning.

Conclusion

Very few recent documents describing visions, models of care or design briefs for dementia homes fail to nod toward person-centredness and design excellence, yet these words rarely make a transition into actual protocols of care or the design of buildings. As such, our care homes are rarely the excellent, person-centred places they should be. This is usually because it's difficult to turn these abstract and lofty ideals into practical realities.

Salutogenics is an easy way of understanding how person-centredness and design excellence can be promoted in the real world, to maximise the benefits for those living with the difficulties of old age and dementia.

By focusing on manageability, comprehensibility and meaningfulness, the last years of people's lives can be made happier and less troubled by the advancing of dementia and other illnesses.



Jan Golembiewski is a leading researcher in architectural design psychology and a registered architect. Contact him at jg@psychological.design

References

Antonovsky A (1972) Breakdown: A Needed Fourth Step In The Conceptual Armamentarium Of Modern Medicine. Social Science & Medicine 6(5) 537-544

Antonovsky A (1979) Health, Stress, And Coping. San Francisco: Jossey-Bass Inc. Antonovsky A (1987) Unravelling the Mystery of Health. San Francisco: Jossey-Bass Inc. Beck AM, Katcher AH (1983) Between Pets And People: The Importance Of Animal Companionship. New York: Putnam. Fleming R, Purandare N (2010) Long-Term Care For People With Dementia: Environmental Design Guidelines. International Psychogeriatrics 22(7) 1084-1096. Frankl VE (1963) Man's Search for Meaning: An Introduction to Logotherapy. New York: Pocket

Gawande A (2014) Being Mortal: Illness, Medicine and What Matters in the End. London:

Golembiewski J (2010) Start Making Sense: Applying A Salutogenic Model To Architectural Design For Psychiatric Care. Facilities 28(3/4)

Golembiewski J (2012) Psychiatric Design: Using A Salutogenic Model For The Development And Management Of Mental Health Facilities. World Health Design Scientific Review 5(2) 74-79.

Golembiewski J (2014) Mental Health Facility Design: The Case For Person-Centred Care. Australian and New Zealand Journal of Psychiatry 49(3) 203-206.

Golembiewski J (2017) Salutogenic Architecture In Health Care Settings. In: Mittelmark M, Sagy S, Eriksson M et al (Eds) Handbook Of Salutogenics: Past, Present And Future 267-276. New York: Springer Nature. Lawton MP, Nahemow L (1973) Ecology and

the Aging Process. In: Eisdorfer C, Lawton MP (Eds) The Psychology of Adult Development And Aging 619-673. US: American Psychological Association:

Lindström B, Eriksson M (2005) Salutogenesis. Journal of Epidemiology and Community Health 59(6) 440-442.

Molenaar & Bol & VanDillen Architekten (2010) De Hogeweyk. Weesp, Netherlands, Hogewey Care Centre

Rusted J, Sheppard L, Waller D (2006) A Multicentre Randomised Control Group Trial on the Use of Art Therapy for Older People with Dementia. Group Analysis 39(4) 517-536. Thomas WH (1996) A Life Worth Living: How Someone You Love Can Still Enjoy Life In A Nursing Home. Action Massachusetts, VanderWyk & Burnham.

Vinje H, Langeland FE, Bull T (2017) Aaron Antonovsky's Development of Salutogenesis, 1979 to 1994. In: Mittelmark M. Sagy S. Eriksson M et al (Eds)The Handbook of Salutogenesis 25-40. New York: Springer Nature.

Zeisel J (2000) Environmental Design Effects On Alzheimer Symptoms In Long Term Care Residences. World Hospitals and Health Services 36(3) 27-35.

Zeisel J (2007) Creating A Therapeutic Garden That Works For People Living With Alzheimer's. Journal of Housing For the Elderly 21(1-2) 13-

Zeisel J, Raia P (2000) Nonpharmacological Treatment For Alzheimer's Disease: A Mind-Brain Approach. American Journal of Alzheimer's Disease and Other Dementias 15(6) 331-340