

Mind Over Matter

The Brains Behind It All

Salutogenesis is not just a ground-breaking solution to a health issue, but a social one as well. This solution does not have a prescription for a wonder drug, or any semblance of a mass immunisation scheme. Yet, it is set to transform the world's thinking on health.

Though disease is ubiquitous, not all suffer. Some people equip themselves with coping resources to prevent suffering, much like a cyclist wears a helmet to prevent brain injury. Cultivating this capacity to cope stands as the backbone of the salutogenic model, which ultimately aims to optimise overall health. Highlighting the importance of moving towards health, salutogenesis deviates from, yet also compliments, the pathogenic model which gives importance to disease and its origins.

Founder of the salutogenic model, Aaron Antonovsky, saw that the pathogenic model was optimistic in assuming that we would be healthy if it were not for disease or stress (Becker *et al* 2010). Years later, upon meeting holocaust survivors who thrived in respectable social roles, Antonovsky was surprised that despite desperation, people managed to conjure up a ladder out of the quicksand (Becker *et al* 2010). It was this realisation that led him to establish the existence of health-causing factors.

Reflecting these findings, Antonovsky's model is centred around a person's sense of coherence (SOC) or resourcefulness. Patients who have a strong SOC display 1) health literacy (comprehensibility), 2) self-management skills (manageability) and 3) a desire to live (meaningfulness) (Kalra *et al* 2018).

Dementia patients are a prime focus group due to the perplexing nature of cognitive decline making dementia difficult to treat and mostly incurable. Not to mention, the condition globally affected 50 million people and costed US\$818 billion in 2015 (Prince *et al* 2015). Faced with the challenges of memory loss and confusion, dementia patients should indeed be encouraged to conjure up their own salutogenic ladders.

Fit as A Fiddle

From Plato to Tolstoy, the greats have argued that art is integral to human life. Without it, one often feels betrayed, lost and purposeless. This has contemporary resonance in dementia care where art is routinely infused into salutogenic approaches.

Take music therapy – a salutogenic approach that reigns above all others (Marshall & Hutchinson 2001). While we often describe the phenomenon of losing ourselves in musical rhythms, music is a province where the elderly find themselves, enhancing their SOC and ontological security (Batt-Rawden 2012). Music has been shown to significantly improve speech and fluency through verbalisation, reminiscence, song lyric recall and singing (Brotons & Koger 2000). Exercising the right cerebral hemisphere and subcortical brain regions, music taps into and protects areas that are only affected in dementia's later stages (Butterfield-Whitcomb 1994). Active singing, drumming and instrumental improvisation also lead to calmness that is possibly linked to boosted melatonin production - a hormone dictating sleep and mood (Kumar *et al* 1999).

A World of Difference

There's no denying that music is a globally accepted artform; however, the development of culturally sensitive salutogenic practices is also underway.

In one community of interest, dementia occurs at five times the rate of the general population and develops at a younger age of onset (Lindeman *et al* 2017). These people are faced with social, economic and geographic disadvantages which have seen mainstream health-promoting services hit-and-miss too many times. But, even here, in the depths of remote Aboriginal Australian communities, Antonovsky's model thrives through community-organised, government-funded art centres. Whether it be wood carving or sculpting, Indigenous art fosters the cultural and spiritual significance of being 'on country' and interacting with community, which remain important determinants of personal identity and ultimately, health (Lindeman *et al* 2017).

Likewise, the 9.5 million people in China with dementia have also found a coping mechanism: Tai Chi (Wu *et al* 2018). Gentle physical movements, breathing exercises and cognitive tests form the diet of the traditional Chinese martial art. Widely practiced by many, Tai Chi increases regional cerebral perfusion in the contralateral motor sensory cortex to enhance memory and stimulate self-awareness (Sun *et al* 2015). It follows that Tai Chi participants showed significantly increased mental performance on the Mini-Mental State Examination (MMSE) compared with non-participants (Sun *et al* 2015).

Switching gears, in an age of virtual games and smartphones, traditional board games have lost their allure and been relegated to the attic. However, India's elderly population have wiped off the dust and reconnected with old favourites such as Ali Guli Mane and Pagade. By doing so, India's 4.1 million people living with dementia exercise both neural and motor skills ranging from mathematical calculations to dexterity (Dartigues *et al* 2013). Not surprisingly, board game players are 15 per cent less likely to develop dementia compared to non-players (Dartigues *et al* 2013).

Today's Thinking, Tomorrow's Tradition

So, what does the future have in store for salutogenic dementia care? Perhaps the world will take note from Hogewey, Netherlands, informally dubbed 'dementia-ville' (Notter *et al* 2004). The \$A23.4 million experimental community includes features such as a café, restaurant, salon, theatre, garden, pond and mini-market. It's 167 residents with advanced dementia live in an environment encouraging familiarity and purpose in line with Antonovsky's model.

Residents are allocated to homes based on seven lifestyle types including Gooise (aristocracy) and Amsterdamse (crowded, urban lifestyle e.g. Amsterdam citizens). Moods are evoked through thoughtful furnishing, decoration, music and food. For instance, in Gooise homes, lace tablecloths, chandeliers and pre-meal sherries are the norm.

Hogewey is often compared to Jim Carrey's 'The Truman Show' where the protagonist's reality doubles as one massive television show. Sometimes, the illusion of 'dementia-ville' breaks down, such as when residents try to pay at the hairdresser

but end up confused. Nevertheless, having won several prizes for its ingenuity, the unassuming Dutch simulation inspired similar models from Canada's Georgian Bay Retirement Home to Australia's upcoming Korongee Village.

Power to The Carers

Upskilling the aged care workforce is key to providing salutogenic care. Leading the way, Norman Wang, the founder of Opaque MultiMedia, launched The Virtual Dementia Experience in 2013 (Gilmartin-Thomas *et al* 2018). The technology simulates common symptoms of dementia such as the inability to distinguish between objects and the presence of poor motor skills. Such progress allows staff to not only understand dementia at the intellectual level but also at the visceral level.

Doctors are also major players in salutogenic dementia care. Today, the pathogenic model is still in full force. Like widgets on a conveyor belt, patients are often tested for every ache and lab abnormality in an increasingly impersonal and transactional system. Unsurprisingly, the fundamentals of doctoring – healing, caring and listening – are on the decline.

Promoting salutogenesis begins with training. Most medical education worships the nuts and bolts of the medical sciences and the minutiae about rare diseases. Of course, there is a slow shift towards salutogenesis as faculties curtail coursework in physiology and anatomy; while, encouraging training in communication and multidisciplinary dynamics. It is this training that will go a long way with dementia patients who require encouragement and full attention from their doctors to achieve stability in mind and health.

Salutogenesis is more than just a utopic dream or naive optimism. Antonovsky's novel approach harnesses the capacity to cope and thrive with the greater aim of creating a meaningful and healthy future. With dementia set to take residence in the minds of millions more people, now is the time to plant fertile seeds so that we may soon reap a fruitful harvest.

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