

**The Story of Ageism  
in the Southeast  
Asian Region**  
Dr Kanwaljit Soin

**Unpacking the  
Complexities of  
Ageing and Longevity:  
A Medical Perspective**  
An Interview with  
Dr Sara Bonnes

**Artful Ageing:  
The Unstoppable  
Creative Journey of  
the Centenarian Artist  
Lim Tze Peng**

# THINK



**THE ART, SCIENCE AND  
GOOD NEWS OF AGEING**

## Contents

PERSPECTIVE

02 **The Story of Ageism in the Southeast Asian Region**

Dr Kanwaljit Soin

FEATURE

12 **Toward Well-being in an Ageing Society**

Prof Kua Ee Heok

IN FOCUS

18 **Age Strong, Age Safely: Expert Advice from a Senior Physiotherapist**  
An Interview with Prof Celia Tan

PERSPECTIVE

26 **Holistic Health Management for Gracious Ageing**

Dr Goh Chye Tee

PERSPECTIVE

30 **Ageing, Pain, and Dying**

Prof Cheung Chan Fai

IN FOCUS

36 **Unpacking the Complexities of Ageing and Longevity: A Medical Perspective**

An Interview with Dr Sara Bonnes

FEATURE

46 **New Longevity — A New Perspective from Social Innovators**

Hae-young Lee, Sumitra Pasupathy & Todd Pavela

PERSPECTIVE

54 **Rethinking Retirement: Navigating Ageing Societies Amidst Accelerating Change**

Chris Ostereich

FEATURE

61 **From Caregiver to Global Advocate: A Journey of Empowering Lives Affected by Dementia**

DY Suharya

PERSPECTIVE

66 **Installing a Pension Floor for All Elders in Malaysia: A Case for Social Insurance Pension**

Hawati Abdul Hamid

FEATURE

74 **Artful Ageing: The Unstoppable Creative Journey of the Centenarian Artist Lim Tze Peng**

THINK Editorial Team

### THINK

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ON COVER

A senior couple floating in a calm blue sea

Photo: Aleksandar Nakic / iStock

## Editorial

Welcome to this thought-provoking issue of THINK magazine, where we explore the theme of “The Art, Science, and Good News of Ageing.” This edition takes us on a journey through the multidimensional aspects of ageing, shedding light on the challenges, insights, and inspiring stories that shape this unique phase of life.

Through her observation and research, **Dr Kanwaljit Soin** discusses the prevalent issue of ageism that is creating negative economic and social impacts across the Southeast Asia region. Her compelling narrative reminds us of the need to build integrated societies that respect and value the contributions of all ages.

**Prof Cheung Chan Fai** delves into the profound intersection of ageing, pain, and dying. Through philosophical exploration, he offers insights into the human experience of ageing and the inevitable journey of pain and mortality, encouraging us to find meaning and solace in the face of these challenges.

**Hae-young Lee, Sumitra Pasupathy** and **Todd Pavel** of Ashoka introduce us to ground-breaking social innovators who are redefining longevity. Their fresh perspectives showcase how we can foster a more holistic and supportive environment for older adults to thrive and continue to contribute to society.

As technological breakthroughs and environmental factors transform multiple aspects of our life, **Chris Ostereich** encourages us to rethink retirement and ageing in today’s fast-changing and complex society. By embracing flexibility and adaptability, we can reimagine retirement as a stage of life filled with purpose, growth, and continued engagement.

Our managing editor Xiaoqing interviewed **Prof Celia Tan** to seek valuable guidance on maintaining physical well-being and independence as we age. Dr Tan’s expertise in physiotherapy offers practical tips for older adults to avoid falls, build strength, and lead a safe and active life.

**Prof Kua Ee Heok** delves into the essential aspects of mental health while life expectancy increases in our society. His article shares the journey of his epidemiological and interventional research projects, which started in the 80s. Those efforts studied and improved the psychological and emotional well-being

of older individuals in Singapore communities, guiding them towards lifestyle changes that enhance their overall quality of life.

In a touching account, **DY Suharya** takes us on a transformative journey of how she founded Alzheimer’s Indonesia and went on to advocate dementia care in other parts of Asia Pacific. Her advocacy work empowers individuals and families dealing with dementia, creating a support network covering 20 countries.

Our guest interviewer Dr Maleena Suppiah interviewed **Dr Sara Bonnes** of Mayo Clinic who offers a comprehensive understanding of ageing from a medical standpoint. Dr Bonnes sheds light on the latest advancements in longevity research and anti-ageing therapies.

**Dr Goh Chye Tee**, with his decades of experience as a TCM practitioner and educator, shares how traditional Chinese medicine can play a role in healthy ageing. By integrating TCM practices, he presents a holistic approach to ageing, fostering a sense of balance and harmony in geriatric healthcare.

**Hawati Abdul Hamid’s** article uses the Malaysian system as an example to help us see the importance of social security and financial stability for elders, and how they can help the elderly lead dignified lives.

Finally, the THINK editorial team celebrates the creative spirit of centenarian artist **Lim Tze Peng** by showcasing his work and inviting Terrence Teo, the President of the Singapore Art Society, to share stories from Lim Tze Peng’s unstoppable creative journey. Lim’s artistic tenacity and bravery show us that age should never be a barrier to creativity and self-expression.

Through these articles, we hope to foster meaningful discussions and broaden our perspectives on ageing, recognising it as a period of wisdom, growth, and profound contributions to society. May this issue of THINK encourage all of us to approach ageing with empathy, appreciation, and a sense of wonder for the beauty it brings to our lives.

**C. D. Liang**  
Chief Editor  
August 2023

## PERSPECTIVE

**DR KANWALJIT SOIN** is a well-respected orthopaedic and hand surgeon. She is also a former and Singapore's first female Nominated Member of Parliament, from 1992-1996. Dr Soin, who was inducted into the Singapore Women's Hall of Fame in 2014, is actively involved in welfare and advocacy organisations. She became a founding member of the Association of Women for Action and Research (AWARE) in 1985 and was AWARE's president between 1991-1993. Her other credentials include being the founding chair of the Singapore

chapter of the United Nations Development Fund for Women (UNIFEM) and the founding president of the Society for Women's Initiative for Ageing Successfully (WINGS). Dr Soin has received accolades such as the Singapore Medical Association Merit Award, Singapore's Woman of the Year, the International Women's Forum's Women Who Make a Difference Award and a UNIFEM Lifetime Achievement Award. She is also the author of *Silver Shades of Grey: Memos for Successful Ageing in the 21st Century*.

DR KANWALJIT SOIN

# The Story of Ageism in the Southeast Asian Region

**S**outheast Asia is home to some of the world's most rapidly ageing countries. This is the result of increased life expectancy and falling fertility rates.

In 1970, women in Southeast Asia had an average of 5.5 children. By 2017, that number was down to 2.1, and the total fertility rate dropped below the replacement level in Brunei, Malaysia, Singapore and Thailand.<sup>1</sup>

Countries with slow population growth tend to be ageing ones. This has held true throughout the ASEAN region as every nation has experienced an increase in median age since 1970. By 2035, it is projected that 26.6% of Singapore's population will be 65 or older, while the same group is expected to reach 22.8% in Thailand. In Vietnam, the proportion of those over 80 will rise to 20% by 2038.<sup>2</sup>

An ageing population shifts the narrative for the region's economic growth prospects, as a declining working-age population pairs with an increasing old-age dependency ratio.

1. The region's Total Fertility Rate (TFR) is an estimate of the number of children an average woman will have in her lifetime.  
<https://www.oecd-ilibrary.org/sites/c416afed-en/index.html?itemId=/content/component/c416afed-en>;  
<https://theaseanpost.com/article/declining-fertility-rates-asean>

2. <https://theaseanpost.com/article/southeast-asias-rapidly-ageing-population>

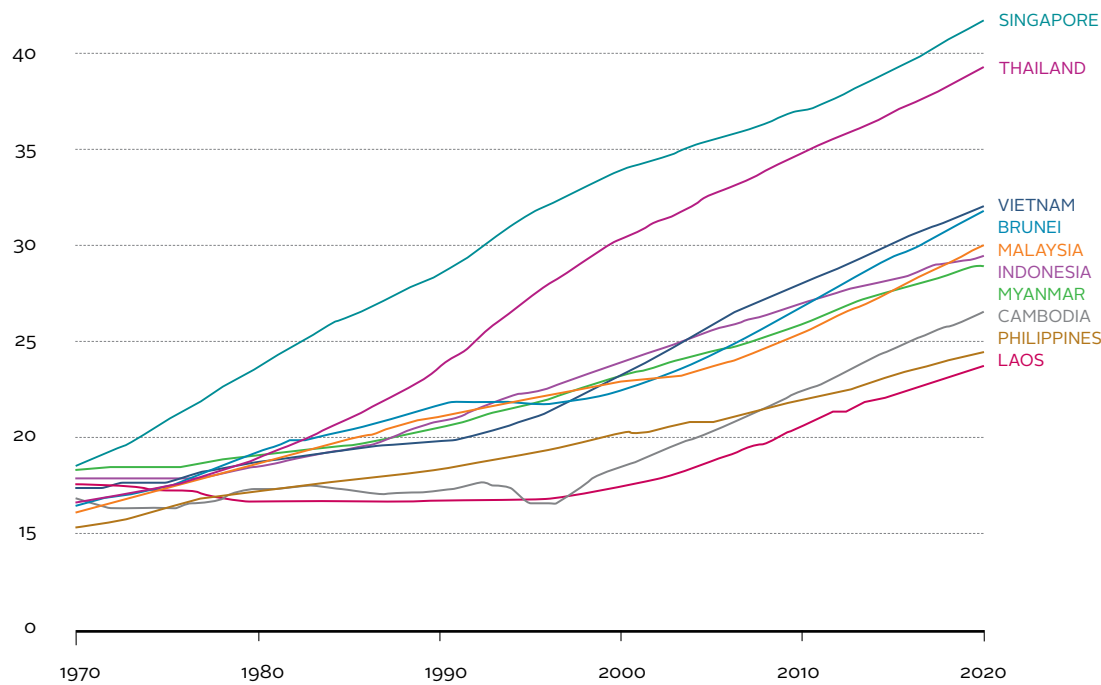


### The complexities of elder abuse

Elder abuse is on the rise in Singapore, with over 90% of perpetrators being family members, including children and spouses, who also serve as caregivers. Factors such as caregiver stress and a history of family violence can complicate this issue.

Photo: Ellis Lee / Unsplash

### MEDIAN AGE OF ASEAN NATIONS, 1970 TO 2022<sup>3</sup>



Note: 1950 to 2021 show historical estimates. From 2022 the UN projections (medium variant) are shown.  
Source: United Nations – Population Division (2022)

On a cultural scale, two factors tend to make a society more ageist — scarce resources and a growing percentage of older people in the population. More older people will need health and social care and financial security for retirement needs.<sup>4</sup>

The World Health Organization's *Global Report on Ageism*<sup>5</sup> reports that one out of every two people on earth may harbour ageist attitudes.

Ageism is everywhere and it impacts everyone. We need to recognise it in our part of the world and take measures to reduce it. Compared to racism and sexism, ageism is the most socially

normalised 'prejudice'. Its consequences affect us deeply as individuals and the societies we live in.

Ageism can change us in many ways. It can alter our perceptions of ourselves and negatively impact our health, longevity and well-being. It can create generational divides, thereby limiting the benefits of interaction between those groups. Ageism can also foster serious economic consequences.<sup>6</sup>

Our thoughts create stereotypes, beliefs and misconceptions that cloud our perspectives and judgment. These give rise to feelings that create prejudice against others. From there, our actions lead to discrimination.

**Of the three categories of 'isms' — sex, race and age — age is the only one in which the members of the in-group (the young) are destined to join the out-group (the old).**



#### Healthy, active and productive ageing

Adopted in 2015, the Kuala Lumpur Declaration on Ageing: 'Empowering Older Persons in ASEAN' focuses on empowering older persons by mainstreaming older persons' rights into public policies and programmes, raising awareness of the needs of older persons, and eliminating discrimination.

Photo: Vasily Gureev / Alamy Stock Photo

Like the racist and the sexist, the ageist relies on the concept of 'othering' — where we see a group of people as being unlike ourselves. That perceived difference leads to bias and prejudice.

Ageism exists because of fear and denial that we will become the other person — the older person whom we see as an unwelcome stereotype. All of us are exposed to negative images and messages about older people from society at large, the media, movies and negative stories about older people. Through these experiences, our brains become wired to implicitly believe that becoming old means going downhill both cognitively and physically. Thus, we might consider ageism to be a coping mechanism that allows people to avoid thinking about their own mortality.

All 'isms' are socially constructed ideas that pit us against one another, but ageism's target makes it a singular and strange phenomenon. Of the three categories of 'isms' — sex, race and age — age is the only one in which the members of the in-group (the young) are destined to join the out-group (the old). Ageism is therefore prejudiced against our future self — our feared future self. That is why I find it strange that although ageism can compromise the quality of our own life into old age, many of us become ageists.

#### AGEISM IN THE WORKPLACE

New data from ADP's Global Workforce View 2020 report shows that Singaporean workplaces have some of the highest incidences of age discrimination in the Asia-Pacific region, with 17% of workers saying they have experienced such discrimination in their current role. The survey found the regional average to be 12% and Asia-Pacific has the highest regional incidence of perceived discrimination.<sup>7</sup>

Embracing today's greater longevity requires policymakers and employers to reject yesterday's preconceptions about ageing. Chronological age

3. <https://ourworldindata.org/grapher/median-age?time=1970..2022&country=KHM~BRN~MYS~MMR~LAO~IDN~PHL~SGP~THA~VNM>

4. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7178234/>

5. <https://www.who.int/teams/social-determinants-of-health/demographic-change-and-healthy-ageing/combating-ageism/global-report-on-ageism>

6. <https://www.who.int/ageing/features/faq-ageism/en/>

7. <https://www.peoplemattersglobal.com/news/diversity/singapore-has-most-age-discrimination-in-apac-27840>

Employers have to face the reality that the workforce is ageing, and it would be to their benefit to continue to upskill and retain their older workers. Practising ageism is not a productive way to go.



**#AWorld4AllAges**  
World Health Organization (WHO) works together with key partners on a global campaign to combat ageism — an initiative supported by WHO's 194 member states. The campaign aims to change the narrative around age and ageing and help create a world for all ages.

Source: Global Campaign to Combat Ageism toolkit



does not equate with function and does not equate with cognition. Ageing is also very heterogenous and so it should not be used as a proxy for capability. As such, we should do away with our practices of fixed retirement and re-employment age, as is the practice in Singapore.

Despite reported ageism in the workplace, the Philippines is the only country in our region that has any legislation which expressly prohibits age discrimination. In Singapore, there are only guidelines regarding fair treatment in the workplace by the Tripartite Alliance for Fair & Progressive Employment Practices (TAFEP). This

is not enough. Fortunately, Singapore is working to codify the current workplace anti-discrimination guidelines into law.

Employers have to face the reality that the workforce is ageing, and it would be to their benefit to continue to upskill and retain their older workers. Practising ageism is not a productive way to go.

Companies must ensure that their employees — including their leadership — attend sessions to be aware of unconscious biases directed towards older workers. This needs to be part of their diversity, equality and inclusion (DEI) agenda. We are living longer, so each new cohort of the older

population is effectively younger and should not be discriminated against because of chronological age. Their ability to do the work is what is important. Leaders must recognise the value of the experience and institutional memory of older workers. They should also organise the transfer of skills between generations and teach younger leaders about reverse mentoring.

In addition, older workers have to rid themselves of the negative perceptions of ageing. They should engage in lifelong learning and try to build allies with younger co-workers throughout their working careers. Doing so will deliver individual and collective benefits.

### AGEISM AND GENDER

Outside of the workplace, ageism also impacts our daily lives and the gender dimension of ageism is a double blow for women. In our culture and elsewhere, youth and beauty are greatly prized, especially for women. Women become 'older earlier' and are more often judged by their physical appearance, rather than their accomplishments.

Grey hair and facial lines are seen as making men look distinguished and experienced whereas they merely make women look 'old'. Therefore, women often disguise the fact that they are ageing. That is one reason why many women do not like to tell their age. Old age seems

### Mirror, mirror on the wall, who's the fairest of them all?

Research conducted by the Royal Society for Public Health (RSPH), titled 'How attitudes to ageing affect our health and well-being,' found that almost half of women and a quarter of men feel immense pressure to stay looking young. The RSPH has called for the term 'anti-ageing' to be banned across the beauty and cosmetics industry.

Photo: Sipa USA / Alamy Live News





**“Ladies, don’t let anybody tell you you’re ever past your prime.”**

In her acceptance speech for the Academy Award for Best Actress for ‘Everything Everywhere All at Once’, the Malaysia-born 60-year-old Michelle Yeoh made a point to call out gendered ageism and encourage those who want to follow in her path.

*Photo: Buy my stock picture / Alamy Stock Photo*

## Being the target of ageism during the crisis negatively affects older adults’ self-perceptions of ageing and this impact may be felt beyond the current crisis.

to make women invisible and therefore, many women want to avoid looking old so that they are not overlooked in their attempt to remain socially and professionally engaged. This is one reason why the aesthetic industry is so successful and so many of its clients are women. We should work toward a genderless outlook on ageing in which everyone is recognised and appreciated for the experience their years have given them.

### AGEISM AND COVID-19

The COVID-19 pandemic has helped expose ageism and age discrimination in society. In a statement published during the pandemic, Claudia Mahler, the UN Independent Expert on the enjoyment of all human rights by older persons, called for urgent action against ageism. As she noted, “Ageist comments and hate speech were ripe with older persons being blamed as the reasons for lockdowns and labelled as vulnerable and burdens to societies.” In reality, society placed greater burdens on older people during that time as our ageist assumptions made it “more difficult for older persons to get equal access to medical care.”<sup>8</sup>

One study found the pandemic compounded the impact of ageism and that those effects might outlast the challenging circumstances in which they arose.

As the researchers noted<sup>9</sup>, “Being the target of ageism during the crisis negatively affects older adults’ self-perceptions of ageing and this impact may be felt beyond the current crisis.” The same study noted that while we develop subjective perceptions of ageing early in life, they “can change over the life span as a function of experiences.”

8. <https://www.ohchr.org/en/press-releases/2021/09/pandemic-exposes-ageism-and-age-discrimination-society-says-un-expert#:~:text=During%20the%20pandemic%2C%20ageist%20comments,vulnerable%20and%20burdens%20to%20societies>

9. <https://www.frontiersin.org/articles/10.3389/fpubh.2021.679711/full>

10. Levy, Slade, Kunkel, & Kasl, 2002

### Attitudes matter in a graying world

Orb Media compiled data from 150,000 people in 101 countries to learn about their levels of respect for older people in 2018. The data show that the level of respect varies significantly from country to country with Hungary and Uzbekistan scoring the highest, and Japan and Ukraine at the bottom. Orb Media suggested that older people in countries with low levels of respect for the elderly are at risk of poorer mental and physical health, and higher levels of relative poverty.

*Photo: Lee Hudson / Alamy Stock Photo*



### THE INTERNALISATION OF AGEISM BY OLDER PEOPLE

One of the most insidious effects of ageism is that older people internalise negative attitudes which become self-relevant and self-fulfilling prophecies. The older person then feels that it is not worth trying to age actively, not worth doing routine health screening, not worth living a healthy lifestyle and that nothing can be done about frailty and disease as they are part of getting old. It is crucial that we consider the effects of ageism as we develop and enact policies to keep older people healthy via beneficial efforts like age-friendly housing, affordable health care and senior centres.

It is interesting to note that credible scientific research has shown that negative and positive self-perceptions of ageing can have profound effects on health and longevity.

One study found that older people with more positive self-perceptions of ageing, measured up to 23 years earlier, lived 7.5 years longer than those with less positive self-perceptions of ageing. This advantage remained after age, gender, socioeconomic status, loneliness, and functional health were included as covariates.<sup>10</sup>

This study shows how positive self-perceptions of ageing trump other social determinants of health and how important it is to instil this factor into our health and social policies.

The results of another study suggest that positive age beliefs — which are modifiable and have been found to reduce stress — can act as a protective factor. It further found that these benefits occur even for older individuals at high risk of dementia. This is the first study to link the brain changes

## Older people can also benefit when adult children allow their elderly parents to live as independently as possible and accomplish certain activities by themselves. In the long run, tough love tactics can help the older person.

related to Alzheimer's disease — a devastating neurodegenerative disorder that causes dementia in millions of people worldwide — to a culturally-based psychosocial risk factor. Ageism increases our risk of disease.<sup>11</sup> This last study suggests that combatting negative beliefs about ageing could potentially offer a way to reduce the rapidly rising rate of Alzheimer's disease.

In Singapore, the statistics for dementia are worrying — one in 10 people over the age of 60 and one in two over the age of 85 have dementia. Over 100,000 are estimated to be diagnosed with dementia in Singapore.<sup>12</sup> Therefore, our health strategy must prioritise combatting negative beliefs about ageing.

### MANAGING AGEISM

Ageism exists in our institutions, our relationships and ourselves, and so we have to work at all these levels to reduce ageism.

On an individual level, we should explore and explode our own unconscious biases. A common example is when an older person forgets



#### The ageless beauty

Tattoo artist Apo Whang-Od, 106, has graced the cover of Vogue Philippines on its beauty issue, becoming the oldest-ever cover star of the global fashion magazine. The decision to forgo common fashion publication templates and span beyond mere style and beauty standards hopefully marks a new era in the industry.

Source: Vogue Philippines

something, he or she will say apologetically, "I'm having a senior moment?" Younger people also forget things, but they do not say, "I am having a junior moment."

On the family level, some young people here and in other Asian societies have a misplaced sense of filial piety. They show their love and devotion by putting too many restraints on their elderly parents.

While moderate shows of affection elevate the mood of the older person, too much support can reinforce feelings of inadequacy. This can make older people feel powerless and vulnerable, which can lead to depression.

Tough love is a concept that is familiar to many. The phrase commonly applies to raising youth. However, older people can also benefit when adult children allow their elderly parents to live as independently as possible and accomplish certain activities by themselves. In the long run, tough love tactics can help the older person.

On a societal level, we should work towards an age-integrated society. The old and young can study together. Senior care centres can also be student care centres where there is interdependency and mutual support. Such age-integration could bring

about a positive change in our thinking, behaviour, policies and institutions.

It is worth pointing out that the establishment of an age-integrated society will spur the formation of an inclusive society because older people are from different genders, races, religions and abilities and if we accept them for themselves and feel no prejudice against them and our future selves, then the other 'isms' will melt away from our consciousness. Getting there will require things like policy shifts and changes to the way we run businesses, as well as the outlooks and actions of individuals and society as a whole. ∞

#### Intergenerational experiences in community

St Joseph's Home was the first in Singapore to launch an infant and childcare centre in a nursing home in 2017. They introduced an intergenerational curriculum where children and the elderly interact in activities such as singing and doing arts and crafts, and develop mutual respect and understanding for one another.

Source: St Joseph's Home



11. Levy, Slade, Pietrzak, & Ferrucci, 2018  
12. <https://dementia.org.sg/dementia/>

## FEATURE

**PROF KUA EE HEOK** MBBS (UM), MD (NUS), FRCPsych (UK), PBM, BBM is an Emeritus Consultant and Tan Geok Yin Professor in Psychiatry and Neuroscience at the National University of Singapore (NUS). He practises at Mind Care Clinic at Farrer Park Medical Centre. Prof Kua was a member of the World Health Organization (WHO) Research Team for the Global Study of Dementia and has published

30 books on ageing, addiction and mental health. He is Editor-in-Chief (with Norman Sartorius) of the new 7-book series *Mental Health and Illness Worldwide*. His novel, *Listening to Letter from America* is used in a course on anthropology at Harvard. He has been invited by the United Nations in New York to address the World Assembly on 'Depression — the hidden illness'.



### Laughter is no joke

Laughter enhances the intake of oxygen-rich air, stimulates the heart, lungs and muscles, and increases the endorphins that are released by the brain. It plays a critical role in strengthening the immune system and maintaining health and wellness.

Photo: Edgar Su / REUTERS

**PROF KUA EE HEOK**

# Toward Well-being in an Ageing Society

**We must now adapt to our changing circumstances, while recognising that 'there is no health without mental health'.**

**G**rowing old is often associated with the 3Ds — decrepitude, dementia and depression. Related pessimism is pervasive in the community and even at home. When the Chinese Women's Association opened the first day-care centre for dementia in the Henderson district in Singapore in November 1986, Mrs May Wong, the President, suggested naming it a Social Centre to eschew the stigma.

With the social transformation of Singapore medicine, there are now more research publications on ageing and mental health.<sup>1</sup> Starting at the old, crowded flats around Chinatown, the research has expanded to include many new housing estates around the island. For our team, it has been an odyssey, beginning with epidemiological surveys, then interventional studies and now translational research.

40 years ago, the retirement age in Singapore was 60 years and life expectancy at birth was 74 years. Today, the retirement age is 67 and life expectancy at birth is 84 years. The increase in life expectancy places Singapore ahead of the United States and the United Kingdom. While the increase in life expectancy is evidence of good healthcare policy that any country should be proud of, the number of elderly people today is a phenomenon never seen in the short history of Singapore. We must now adapt to our changing circumstances, while recognising that 'there is no health without mental health'.<sup>2</sup>

1. Kua EH, Kua PHJ (2016). The social transformation of Singapore medicine from 55 years of the SMJ. *Singapore Medical Journal* (in press).

2. Kua EH (1992). A community study of mental disorders in elderly Singaporean Chinese using the GMS-AGECAT package. *Australia and New Zealand Journal of Psychiatry*, 26: 502-506.

3. <https://www.who.int/data/gho/data/major-themes/health-and-well-being>



### Be an ageless senior

NTUC Health's Active Ageing Centres provide a range of community-based activities that help seniors stay active, learn new things, make friends and give life to old passions. Seniors are also encouraged to give back with their time, experience and skills. Mdm Chu Siu Lin, 83, volunteers as a dance instructor at the centre and brings her passion for Chinese dance to her fellow seniors.

Source: NTUC Health website

## EPIDEMIOLOGICAL RESEARCH

In 1986, the National University of Singapore's (NUS) Department of Psychological Medicine conducted the first of four epidemiological studies on the mental health of elderly people in Singapore as part of the World Health Organization's (WHO) Global Study of Dementia. Before this study, we knew very little about dementia in Singapore and misconceptions were common. The first study conducted in Chinatown made it evident that not all elderly people above 65 years old will have dementia. Less than 3% of people had dementia, while the prevalence of depression was much higher at 5.7%. This was highlighted in a lecture I delivered at the United Nations' World Forum on Mental Health in New York on 8 October 1999.<sup>3</sup>



After the completion of the WHO study, we started the first Memory Clinic in Asia at the National University Hospital (NUH) in 1990, comprising a team of a psychiatrist, neurologist, geriatrician, nurse and psychologist. Studies on caregivers' stress, health cost and the natural history of dementia were carried out at the NUH Memory Clinic.<sup>4</sup>

The second epidemiological study was conducted at Toa Payoh in 1995 with the collaboration of the Singapore Action Group of Elders (SAGE). This was the vision of Dr Lim Chan Yong, President of SAGE.<sup>5</sup> Together with Mr Henry Lim, President of the Gerontological Society, we formed a research enterprise at the SAGE Centre for the Study of Ageing (SAGE-CENSA). Most of the elderly in this central district were locally born and their forebears came to Singapore much earlier, unlike the Chinatown cohort who emigrated after the Second World War. They were financially more comfortable and lived in bigger apartments compared to the crowded flats in Chinatown.

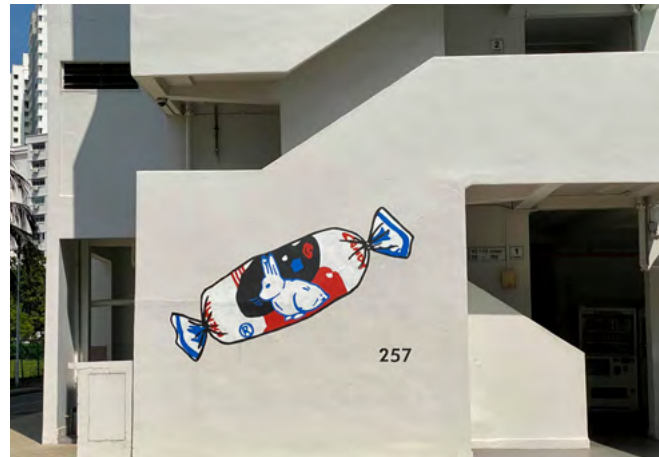
#### Finding the way home

As part of the Alzheimer's Disease Association's Wayfinding Project, Kebun Baru community comes together to paint dementia-friendly murals of *ang ku kueh*, White Rabbit candy, satay, *tangyuan* and other retro household items on HDB void deck walls to help elderly find their way home.

Source: Joyce Sim / Facebook

4. Kua EH, Tan CH, Tan SL, Ko SM, Lee KS (1997). The NUH Memory Clinic. *Singapore Medical Journal*, 38: 112-115.

5. Kua EH, Ng TP, Goh LG (2004). *Long Lives*. Armour Publishing, Singapore.



#### What age is too old to keep working?

At 92, Mdm Leong Yuet Meng of Nam Seng Wonton Noodle House is one of Singapore's oldest hawkers. Although she is no longer cooking at the stall, she still plays an active role by sourcing the ingredients, making the wantons and taking orders.

Photo: Edgar Su / REUTERS

In 1995, I was on sabbatical leave at the National Institute of Mental Health (NIMH), in the US. While there, I was invited to write a chapter for an NIMH book on elderly suicide. When we conducted research on data from Singapore, we were surprised to discover that the suicide rate for Chinese men was very high.<sup>6</sup> In response to this, the Gerontological Society and SAGE-CENSA started a series of public seminars in both English and Chinese on depression and suicide prevention. More day-care centres were also initiated by the Ministry of Community Development, the Ministry of Health and the National Council of Social Service. With greater awareness and more human resources available for eldercare, we noticed a gradual fall in the suicide rate.

The third epidemiological study took place in 2001. The National Mental Health Survey of the Elderly was a joint effort of the Institute of Mental Health (IMH) and the NUS Department of Psychological Medicine. As the CEO and Medical Director of IMH, I was glad to receive a grant of S\$300,000 from the National Medical Research Council (NMRC) for this survey. The study was delayed by the SARS

6. Kua EH, Ko SM, Ng TP (2003). Recent trends in elderly suicide rates in a multi-ethnic Asian city. *International Journal of Geriatric Psychiatry*, 18: 533-536.

epidemic, but it was eventually completed after a three-year delay, under the guidance of Professor John Copeland from the United Kingdom. After this study, we felt that we had sufficient data on the prevalence of dementia in Singapore and shifted the focus of research to interventional studies, wherein researchers test interventions and assess their impact.

**The quality of life and life expectancy of dementia patients could be improved through the stabilisation of chronic illnesses... together with lifestyle changes, including diet, exercise, gardening, music-remembrance and art activities.**

## INTERVENTIONAL RESEARCH

In 2010, we launched the Jurong Ageing Study, now widely known as the Dementia Prevention Programme (DPP), as an interventional research project. Drawing from our experience in the NUH Memory Clinic, we found that the quality of life and life expectancy of dementia patients could be improved through the stabilisation of chronic illnesses — such as diabetes mellitus and hypertension — together with lifestyle changes, including diet, exercise, gardening, music-remembrance and art activities<sup>7</sup>.

In 2011, the research team moved to the Jurong Point Shopping Mall to be part of the Training and Research Academy (TaRA). Thanks to the generosity of the Lee Kim Tah family, we have a piece of real estate in this popular shopping mall. The initial donation of S\$10,000 from Mr Henry Lim was followed by a generous gift of S\$1.8 million from the Kwan Im Hood Cho Temple. The tagline of this research is 'Preventive Medicine in the Community by the Community for the Community'. The cohort of about 1,000 elderly people is spearheaded by Dr Feng Lei, the Assistant Professor of Research, and Associate Professor Rathi Mahendran. This longitudinal study provided invaluable data on ageing in an urban community.<sup>8</sup>

The 5-year outcome of the DPP showed dementia prevalence at 3% and depression at 4%.<sup>9</sup> The Ministry of Health has stated that the prevalence of dementia for people above 60 years is 10%. Although we do not presume that DPP will prevent all dementia, if we could reduce the prevalence by a modest 10%, that will be equivalent to 10,000 cases. The cost-benefit of care will be tremendous for the family and healthcare service, while delivering quality-of-life benefits to individuals.

7. Kua EH, Mahendran R (2022) *Ageing with Dignity*. Write Editions, Singapore.

8. Rawtaer I, Feng L, Fam J, Kua EH, Mahendran R (2015). Psychosocial interventions with art, music, tai-chi and mindfulness for subsyndromal depression and anxiety in older adults: a naturalistic study in Singapore. *Asia-Pacific Psychiatry*, 7: 240-250.

9. Kua EH, Mahendran R (2022) *Ageing with Dignity*. Write Editions, Singapore.

10. Kua EH (1986). *Shades of Grey*. Asiapac Books, Singapore.



### The busking duo who went viral

For Davidson Teo, 63, and Gillian Goh, 67, busking has become a way of life and a motivation to get through trying times. When Gillian lost her sister to cancer, long-time friend Davidson invited her to busk with him to help her cope with her grief. The duo, Silver Hype, made their debut at Hougang Mall and instantly became a TikTok sensation.

Source: Must Share News

## CHALLENGING AGEISM

Our research has debunked some of the myths about ageing. In the Jurong study, the prevalence of only 3% tells us that dementia is not common.

Today, many people still consider growing old to be odious. Notwithstanding, the quest for longevity continues and the 'threescore years and ten' belief is now obsolete. It is an incontrovertible fact that not all elderly people become demented, but ageism still permeates subtly. We must do something about this.

In the first study, Chinatown's elderly seemed to have adjusted well in retirement and carved out a niche for their social life. In their reflection, there was satisfaction with home and family. Tolerance and perseverance were their stock-in-trade and they found solace in friendship. They valued relationships and although some were living alone, they had assistance from their neighbours who were of the same dialect group and many had come together from the same village in China.<sup>10</sup>

The Toa Payoh and Jurong elderly were mainly locally born and lived in better housing estates, but they did not seem to know many people in the neighbourhood. However, in the Jurong Ageing Study, we noticed that the elderly who participated in the DPP made more friends and increased their social connectedness. They have begun to rebuild their socio-ecological network like in the old days of living in the village.

In the past ten years, we changed the paradigm of medical research in Singapore. With a team anchored at a shopping mall and donations from the public, we conducted interventional studies

### The therapeutic power of gardening

The National Parks Board (NParks) has developed the Therapeutic Horticulture Programme that is especially beneficial for the elderly and persons with dementia. Activities such as plant propagation, leaf collage, gardening and growing of edible sprouts are organised in various NPark's therapeutic gardens.

Source: NParks / Facebook

in the community. The DPP — later renamed the Age Well Everyday (AWE) programme — became a tripartite partnership of NUS, the People's Association and the National Parks Board, and expanded to include eight more centres around Singapore. In this translational research model, elderly volunteers are trained to organise and teach the programme to other elderly participants, thereby empowering them into their golden years.

At the Jurong Ageing Study, we surveyed the first batch of baby boomers born in 1946. Of these 'new-olds,' many are educated and working full-time or part-time. They should be viewed as valuable human resources—assets that could benefit the community. The potential of this burgeoning group is phenomenal and the challenge for policymakers is to harness their energy.<sup>11</sup> ∞

11. Kua EH (2012). *Ageing Baby Boomers*. Write Editions, Singapore.



# AGE STRONG, AGE SAFELY

## Expert Advice from a Senior Physiotherapist

An Interview with  
**Prof Celia Tan**

By **Soh Xiaoqing**



**P**rof Celia Tan has 39 years of experience in the healthcare sector, is an active clinician, as well as teacher in Physiotherapy both locally and overseas. She also has a keen interest in research on spinal pain, innovative robotics and exercise therapy for chronic diseases, such as frailty and cancer. As an administrator, Prof Tan has helped to establish clinical, education and research units in SingHealth (SHS), such as Satellite Rehabilitation Services, Postgraduate Allied Health Institute (PGAHI) and Singapore General Hospital (SGH) LIFE Centre for health promotion.

Prof Tan is currently Senior Director, Special Projects in SHS and held the position of Group Director, Allied Health for 3 terms (9 years). She is also actively involved in teaching at PGAHI and the new College of Allied Health under SHS, which provides much needed continuing clinical training for local and overseas Asian Allied Health professionals, as well as training for educators and researchers.

### What are the most common causes of falls among the elderly?

Falls are a very big topic. In Singapore, one in three community-dwelling people over the age of 65 years falls each year, and the rate of related injuries increases with age.<sup>1</sup>

Falls among older people can usually be attributed to musculoskeletal weaknesses or poor muscle coordination. They can also occur due to age-related changes in eyesight, hearing and reflexes. Additionally, conditions like diabetes, heart disease,

thyroid problems, nerve issues, foot problems, and blood vessel problems can affect balance and increase the risk of falling. Lack of exercise due to chronic diseases or decreased confidence can also lead to muscle degeneration and bone weakness, further exacerbating the risk of falls. Older adults with mild cognitive impairment or certain types of dementia are also at greater risk.

On top of the above, certain medications can increase a person's risk of falling because they cause side effects such as dizziness or confusion. The more medications you take, the more likely you are to fall.

1. <http://www.smj.org.sg/article/approach-falls-among-elderly-community>

## At what age should we start to worry about the risk of falling?

Falls can happen to anyone at any age but the risk of falling increases as we grow older, and/or are weaker due to chronic diseases or a sedentary lifestyle.

We should probably start to worry when we start to feel the effects of ageing, but the exact age for that varies from person to person. For someone who exercises regularly, it could be 60 or even older. For those who have chronic diseases, it could be around the age of 50. You may feel extra tired when you wouldn't normally feel tired, or no longer be able to push yourself when you go for exercise, no matter how hard you try.

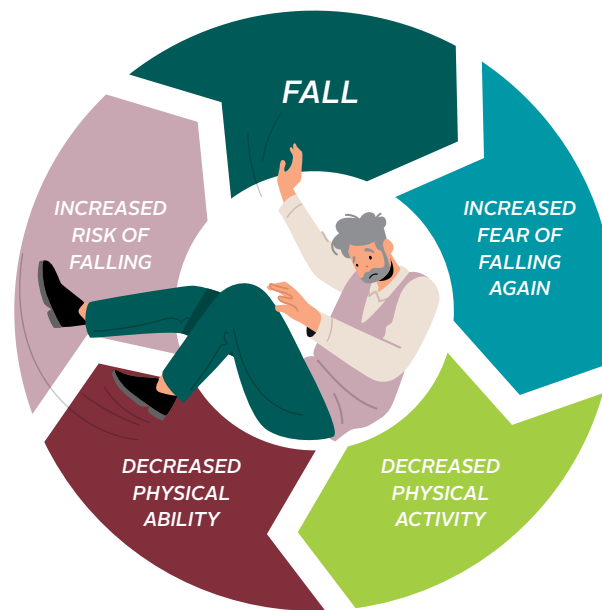
**“ALTHOUGH IT IS INEVITABLE THAT OUR BODY WOULD GET WEAKER AS WE AGE, THE GOOD NEWS IS THAT MANY OF THESE WEAKNESSES ARE NOT IRREVERSIBLE.”**

### What can be done to prevent falls?

First, you should attend to any underlying medical conditions. For example, if you have osteoporosis (bone loss), diabetes or high cholesterol, you should get the necessary treatment and medication to bring such chronic conditions under control. Doing so will help you learn to live with these conditions so that you won't increase your risk of falling.

Although it is inevitable that our bodies will get weaker as we age, the good news is that many of these weaknesses are not irreversible. We can train our body to regain strength and improve our balance. However, it does take an older person longer to do so compared to a young person.

### THE FALL CYCLE



Source: <https://morelifehealth.com/articles/fear-of-falling>

### Are there specific exercises or physical activities that older adults can engage in to improve balance and reduce the risk of falling?

Several exercises can help older adults improve balance and lower-body strength. Balance exercises such as standing with feet together, tandem standing (standing with the toe of one foot right behind the heel of the other), standing on one leg, and standing on toes can be beneficial.

The first thing I usually ask my patients to do is to practice standing on one leg. Most people think they can do it, but many cannot, even the younger ones. However, you can certainly do it with enough practice. My advice to my patients is to practice it every hour for 1–2 minutes. Just balance on one leg for as long as you can, then switch to the other leg. Most people find that they can balance well on one leg after about a week of practice. But do have a firm chair or table next to you initially so that you can hold on to it in case you lose your balance.

**“A SYSTEMATIC REVIEW HAS SHOWN THAT EXERCISE CAN REDUCE THE RATE OF FALLS BY 23%, PARTICULARLY WHEN INCORPORATING BALANCE AND FUNCTIONAL EXERCISES.”**

#### Older, wiser, stronger

Elderly and middle-aged people exercise with wooden dumbbells during a health promotion event to mark Japan's "Respect for the Aged Day" (敬老の日, Keirō no Hi) at a temple in Tokyo's Sugamo district, an area popular among the Japanese elderly.

Photo: Issei Kato / REUTERS

Besides balancing, it is also important to build strength in the leg muscles. A good way to train strength is the sit-to-stand exercise. You stand up from a sitting position on a chair without using your hands for support and repeat that about five times continuously. An advanced version of that is to stand up from a half-squatting position with your back leaning against a wall often referred to as the wall squat.

These are the two basic things I advise my patients to practice. In fact, if an old person does not practise balancing and regain enough strength in the legs, they will be at much greater risk of falling in precarious situations.

I always enjoy the happy expression on my patients' faces when they tell me how surprised they are that they can regain balance and strength after they thought they have lost them for good.

Other activities such as *Tai-chi*, Pilates, yoga, and walking can also help to build strength in the





#### Smart home upgrades for ageing in place

From smart door locks, security systems, automated lights and medication reminder to smart hubs that control all of the smart devices, smart home upgrades can help the elderly, including those with mobility challenges and other health issues, age in place safely.

Photo: Jovanmandic / iStock

legs, which can improve balance. More advanced exercises like dancing, jogging, stair climbing, badminton, and table tennis can further enhance coordination, balance, and strength. A systematic review has shown that exercise can reduce the rate of falls by 23%, particularly when incorporating balance and functional exercises in their exercise routine.<sup>2</sup>

#### How can seniors effectively navigate stairs safely, especially if they have mobility or balance issues?

Stair climbing is tricky because it requires both strength and balance to carry the body weight up the stairs or to hold back the body weight down the stairs, all on one leg. It is especially challenging for seniors with mobility or balance issues. For people living with these conditions, it is best to avoid stairs altogether and use elevators instead, but that is not always possible even in a pedestrian-friendly place like Singapore.

To ensure safety when one has no choice but to use stairs, it is important to have a sturdy railing or support that can be used for stability. Rugs or any obstacles should be removed from the staircases. Step height should not be too high, and the edge of each step should be clearly marked. Stairs should be well-lit. Non-slip flooring should be used whenever possible, and wet stairs should be avoided.

Moving escalators are the worst and should be avoided if possible. They can be scary for seniors because the height of the moving steps changes very quickly, and poor eyesight can make it difficult to tell the boundary of a step. The timing to step on and get off can also be difficult to judge for an elderly person. Some of the escalators have yellow markings to help but many still don't.

Specific strengthening and balance exercises, such as wall squats, step-ups, step-downs, and standing on one leg, can help improve stair-climbing abilities and reduce falling risk on stairs. Walking downstairs is especially challenging because it requires eccentric (muscle lengthening) strength in your quadriceps which needs to be trained differently from concentric (muscle contraction) strength. For stability, it is also important to have your entire foot land firmly on the step instead of having your heels or toes hanging from the edge when you walk up or down staircases.

#### Are there any particular home modifications or adaptations that can enhance the safety and accessibility of living spaces for older adults?

In living spaces for the elderly, high-risk areas should be identified and appropriately modified to reduce fall risks. For example, non-slip floors can be installed in areas prone to wetness, such as bathrooms and kitchens. Support railings should be installed in high-risk areas like bathrooms and staircases. Floors should be kept dry and clean, and non-slip mats can be used to prevent slipping. Furniture for sitting-to-standing transitions should be firm and stable. Motion sensor lights can be installed in areas

that tend to be dark, such as bedrooms, toilets, and kitchens. Light switches should be easily accessible and clearly marked. Stairs or steps should be minimised whenever possible, and when necessary, they should be clearly demarcated.

It is quite common for the elderly to fall when they get up to use the toilet in the middle of the night. Consideration can be given to using a bedside commode to avoid frequent trips to the toilet.

Senior people also tend to have accumulated more belongings at home. When they are not properly stored and organised, these things take up space, obstruct light, make moving around more difficult and tripping more likely. It is therefore important to declutter living spaces so that walkways are always clear and well-lit.

#### What are the key factors that contribute to maintaining or improving strength and mobility in older age?

Two key factors that need to be addressed are *sarcopenia*, age-related muscle loss, and *osteoporosis*, which is bone loss.

Evidence suggests that skeletal muscle mass and skeletal muscle strength decline in a linear fashion beginning as early as age 40, with up to 50% of mass being lost by the 8th decade of one's life.<sup>3</sup> Changes in strength, swiftness, and stamina with age are all associated with decreasing muscle mass, and it is one of the most important causes of functional decline and loss of independence in older adults.

Singapore has the highest reported incidence of hip fractures in Asia. The International Osteoporosis



2. <https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-020-01041-3>

3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4066461/#:~:text=Sarcopenia%20has%20been%20defined%20as,decade%20of%20life%20%5B1%5D>



#### Aquatic exercise for the elderly

Aquatic exercise is a low-impact activity that is particularly effective in improving the muscular strength and endurance of the elderly who suffer from arthritis, stiff joints and other health problems. It also helps improve cardiovascular health, increase flexibility and mobility, and reduce stress.

Photo: Athit Perawongmetha / REUTERS

Foundation Asian Audit showed that one in three Singaporean women over 50 years old has osteoporosis.<sup>4</sup>

Having a routine for regular exercise and proper nutrition intake plays crucial roles in combating these conditions. Resistance and endurance exercises have been shown to prevent the development of osteoporosis and sarcopenia. Adequate protein and vitamin D intake, along with a healthy diet, also play a protective role. However, further research is needed to fully understand the effects of exercise and nutrition on these conditions.

For better quality of life, it is also important to maintain cardiovascular fitness. The best exercise

for the elderly to sustain cardio fitness is brisk walking. The guideline for this is to maintain your heart rate at 110–120 beats per minute for about 30 minutes as you walk. If you do not wear a heart-rate tracking device, you should brisk walk at a pace that allows you to talk but not sing.

#### Can you provide tips or recommendations on how to prevent injuries while performing daily activities like lifting or bending?

When lifting, one should avoid bending the back and use the strength of the legs instead. Heavy loads exceeding 20 kg should be avoided, and strength in the spine and lower limbs should be developed to prevent lifting injuries. Twisting of the back while carrying heavy objects should be minimised. Objects should be carried as close to the body as possible to reduce strain on the spine. Performing stretches also relaxes the muscles and prevent the pinching of spinal nerves.

**“FOR THOSE WITH PRE-EXISTING HEALTH CONDITIONS, IT IS IMPORTANT TO CONSULT A DOCTOR FOR CLEARANCE AND GUIDANCE BEFORE ENGAGING IN PHYSICAL ACTIVITIES.”**

It is important to note that pain happens in the joints when the muscles are not strong enough to hold the bones apart when one moves, or when the muscles are too tight to keep the bones from pressing onto one another. Strengthening and stretching one’s muscles helps avoid pain in the joints.

#### How can older adults maintain an active lifestyle while minimising the risk of injury or strain?

Older adults should follow a prescribed exercise routine that is appropriate for their fitness level and health condition. Exercise dosage is key for effective results. One should exercise at least 3 times for a minimum of 150 minutes per week. Again, it is important to sustain a heart rate of 110–120 per minute during exercise, or at a pace where you can still talk but not sing.

While being active is good, overexertion should be avoided. Sufficient rest should be allowed between exercise sessions to allow for a full recovery. Stretching exercises should be incorporated before and after workouts to relax the muscles and prevent injury. If pain occurs during exercise, rest should be taken, and the exercise can be tried again later. If the pain persists, it is advisable to consult a doctor.

Consuming a varied diet to meet nutritional needs is also important. Doing so gives the body the necessary strength and helps the body to recover.

It is also a good idea to exercise in a group. Having companionship, mutual encouragement and accountability helps to motivate people to sustain good habits and a healthy lifestyle.

#### For older adults with pre-existing health conditions, are there specific considerations or precautions that should be taken when engaging in exercise or physical activities?

For those with pre-existing health conditions, it is important to consult a doctor for clearance and guidance before engaging in physical activities. Precautions and considerations may vary depending on the specific health condition. For example, individuals with diabetes are recommended to avoid very strenuous activity and heavy lifting, while those with heart disease should be cautious with extreme temperatures and strenuous exercises. Following medical advice and personalised exercise plans can help ensure safety and optimize the benefits of physical activities.

#### With medical advancements, degenerated body parts can now be replaced or repaired with injection or surgery. Instead of making the effort to exercise regularly to prevent deterioration and loss of strength, should these solutions be considered?

Compared to previous generations, we now live longer and need to keep our bodies functional for a longer period of time. In my opinion, it is advisable to rely on natural solutions to stay healthy for as long as we can. While some of these medical solutions are very effective in solving certain musculoskeletal problems, they should be considered as a last resort when the degeneration can no longer be reversed using routine exercises or other natural ways. ∞

4. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8497186/>

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DR GOH CHYE TEE

# Holistic Health Management for Gracious Ageing

As populations age, geriatric healthcare increases in importance. Elderly people require more attention and resources to manage their deteriorating health. Modern medicine commonly monitors bio-medical indicators and prescribes medicines to control chronic and geriatric abnormalities on a long-term basis. On the other hand, Traditional and Complementary medicines adopt a holistic approach to healthcare and treat geriatric issues from a different perspective.

According to Traditional Chinese Medicine (TCM) principles, the human body consists of complex visceral systems that perform functions to sustain life. These systems require the ongoing use of energy or 'Qi' to mobilise the blood, fluid and hormones. Substance or 'Jing' on the other hand, carries out the necessary metabolic activities in the body. In TCM jargon, 'Qi' is categorised as 'Yang' and 'Jing' as 'Yin'. A healthy body requires the maintenance of a balanced state of 'Yin' and 'Yang' — opposing forces that are “complementary, interconnected and interdependent”<sup>1</sup> — via visceral systems performing normal metabolic functions.

In TCM, the human body inherits 'Qi' and 'Jing' (including genetic elements) from parents in the form of 'prenatal essence' at birth. These essences will deplete and gradually be replaced by 'postnatal essence' acquired through food, water and nutrients. Both 'Qi' and 'Jing' are foundational to good health, but they are continuously affected by the ageing process. The manifestation of a declining state of health is evidenced by abnormal bio-medical indicators shown in medical reports and an imbalanced state of 'Yin' and 'Yang' from the perspective of TCM.

**TCM adopts a holistic approach to tackle pathogens for disease prevention and treatment. This requires seniors to pay attention to a variety of factors related to pathogens.**

Unlike the synthetic drugs favoured by modern medicine, TCM uses herbal medicine, acupuncture and physical therapies to rectify imbalances. As herbal medicines are nature-based, many of them can also be consumed regularly as food to delay the deterioration of health. This enables physicians to prescribe 'food therapy' to treat chronic geriatric issues with lesser side effects. For example, when elderly people suffer from low energy or blood disorders, tonifying items such as Astragalus (*Huang Qi*) and Angelica (*Dang Gui*) can be added to herbal soups to replenish energy and blood and to restore the 'Yin-Yang' balance.

TCM adopts a holistic approach to tackle pathogens for disease prevention and treatment. This requires seniors to pay attention to a variety of factors related to pathogens, including microorganisms, their physical environment, social connections, and their lifestyles, to maintain good health.

Microorganisms include bacteria, viruses, fungi and parasites.<sup>2</sup> Besides adopting modern medicine to deal with pathogens, TCM can diagnose and treat diseases by prescribing treatment based on different TCM syndromes. Typically, microorganism infections can cause a variety of symptoms, including fevers, burning sensations and pain. Medicine or foods with cooling properties can be administered to balance the heat to restore the body's balance.

1. <https://onlinelibrary.wiley.com/doi/full/10.1002/med.21793>

2. <https://medlineplus.gov/germsandhygiene.html>



#### Yellow Emperor's wisdom

Written over 2000 years ago, the *Yellow Emperor's Inner Canon: Plain Questions* emphasised a balanced diet with grains for nourishment, fruit for assistance, livestock products for benefits, and vegetables for supplementation. Proper proportions of these food groups provide essential energy.

Photo: Edwin Tan / iStock

Local circumstances, like weather and humidity, can foster 'pathogens' such as wind, cold, heat, humidity, dryness and dampness. When elderly people are exposed to these conditions over time without adequate protective measures, their stress levels can easily go beyond their body's limits and make them sick. Therefore, seniors should be aware of adverse environmental conditions and adopt measures to help prevent illness. Again, food therapies can be used as an initial remedy to maintain good health such as taking honeysuckle tea for cooling or ginger tea to warm the body to maintain balance in different weather conditions.

There are also social factors, including human relations, that can cause many mental and physical disorders. Such illnesses are addressed in TCM's classics, a collection of texts developed over the last two millennia. The classics outline seven emotions: anger, sadness, worry, fear, joy, sorrow and surprise. Each of these emotions could trigger disorders in specific organs, and eventually affect internal body systems via their interconnectivity.

Modern studies have found that individuals with good interpersonal relationships are usually happier and healthier. Especially for elderly individuals,

## Unlike physical environmental factors which are easily felt, seniors should not overlook the adverse impact that emotional challenges can have on mental health.

troubling emotions can easily be triggered if they are isolated, lonely and depressed. Unlike physical environmental factors which are easily felt, seniors should not overlook the adverse impact that emotional challenges can have on mental health. As a preventive or curative measure, cultivating a joyful social environment with harmonious relationships could help facilitate gracious ageing.

The next mitigating factor for good health is lifestyle management which typically includes work, exercise, sleep and diet. Even when older individuals no longer have to work, they still need

to attend to their health. One way to improve such health conditions is to adopt a regular exercise routine to help rejuvenate metabolism. However, it is necessary for seniors to realise their body's limits and adopt appropriate exercises to minimise injuries. Keeping a good sleep schedule is also important. Seniors who experience sleep disorders may need medical interventions to prevent deteriorating health caused by prolonged insomnia.

Maintaining a balanced diet is another important factor. Modern dieticians recommend a food pyramid consisting of grain, meat, fruit and vegetable in proper proportions. These would provide life-sustaining nutrients such as protein, carbohydrates, fibre, vitamins and fat. However, TCM uses colours and properties as a preliminary guide to food selection. Ideally, a balanced diet should consist of a variety of both. Specifically, red, green, yellow, white and black foods have different properties that benefit the heart, liver, spleen, lungs and kidneys respectively. This practice can help with disease prevention, as well as the treatment of internal disorders. For example, seniors who suffer from a kidney deficiency

condition due to depleting essences may choose to consume more black colour food such as black beans or black sesame. Doing so can help address the deficiency and restore good health.

As Singapore is a gourmet paradise with many food outlets conveniently located, many people are adopting the practice of eating out instead of preparing food in their kitchens. As such, the preference for convenience and good taste often prevails at the expense of healthier diets. Healthy individuals who eat out regularly should be aware of the trade-offs and make a conscious effort to select a balanced diet. For those who require food therapy, it is necessary to consume more home-cooked meals customised to achieve good health.

In summary, the principles of holism, balance and harmonisation are foundations to good health in TCM. When these principles are applied to geriatric healthcare, individuals are empowered with ancient wisdom to complement modern sciences. The combination of contemporary and traditional medicine could create a comprehensive health management system for seniors to lead a happy, healthy and joyful life in their golden years. ∞

#### Incorporating TCM in Healthier SG

The Ministry of Health (MOH), Singapore is exploring how TCM can complement the Government's Healthier SG plan as part of Singapore's preventive care strategy. This initiative aims to address the needs of Singapore's ageing population by shifting the focus of care from hospitals to the community.

Photo: Edwin Tan / iStock





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Before Prof Cheung retired from CUHK in 2012, he was Professor and former Chairman of the Department of Philosophy, and Director of the following institutions: University General Education, the Edwin Cheng Foundation Asian Centre for Phenomenology, the Research Centre for General Education, and the Leadership Development Programme.

Prof Cheung is also a prolific author. His most recent publications are: *Existential Questions: Life, Death, Love and Desire*, 2 volumes, (in Chinese, 2023); *The Sorrows of a Mountain University* (in Chinese, 2023); *Hong Kong in Crisis* (in Chinese, 2021), *Educated to be Human: Essays on the Humanities, Philosophy and General Education* (in Chinese, 2021), *Proximity and Distance* (2019), and *Phenomenology of Photography* (in Chinese, 2019). He is also a weekly columnist, contributing essays and photography to the Green Bean Media (UK) since 2022.

PROF CHEUNG CHAN FAI

# Ageing, Pain, and Dying

“Die early or grow old, there is no other alternative.”

SIMONE DE BEAUVOIR

*La Vieillesse* 1970 (*The Coming of Age*)

Historically, death has been a major topic for philosophers, but they have written relatively little on the topic of ageing. When life expectancy was short in the past, many philosophers died young. As a result, ageing was considered less central than death in their works. As people live longer, the study of ageing has become more relevant and pressing.

Unlike the term ‘youth,’ which represents a specific stage in life, the word ‘ageing’ is interesting because it suggests a process. It represents the passage of time and its effects on us. The emergence of gerontology in the 20th century highlights how our understanding of ageing has developed alongside increases in life expectancy. People now regularly live well into their 70s and 80s. Such longevity was something that past philosophers could not have anticipated. Pain and suffering, on the other hand, have always been central concerns in philosophy.

Photo: Rene Bohmer / Unsplash



We do not believe [death] could happen immediately not because it is existentially impossible, but because our life experiences lead us to hope for a certain “life expectancy”.

## AGEING, PAIN, AND LIFE’S AGES

Human life can be divided into three ages. At the first age, we grow and learn. In the second one, we work and establish our lives. In the third age, we retire and face a new set of challenges. As society grapples with the so-called ‘third age’ of life, sociologists and other scholars are increasingly examining the phenomenon of ageing, as well as the pain and suffering associated with it. Ageing is commonly also associated with retirement. This shift brings both freedom and loss. It frees us from the constraints of work and other responsibilities, giving us time to enjoy the things we might have missed during our working years, while confronting us with our human limitations, uncertainties and the impending reality of death.

We become more aware of our mortality as we grow older. While we may not expect to die tomorrow, the possibility is always there. Philosopher Martin Heidegger highlighted the fact that death could occur at any moment. We do not believe it could happen immediately not because it is existentially impossible, but because our life experiences lead us to hope for a certain “life expectancy”. As we age and face the challenges of the ‘third age,’ death becomes less an “empty possibility” and more a “real actuality”.

## EXPERIENCING PAIN

Pain is a highly subjective experience that forces people to focus on their own bodies. The concept of pain is unique and can only be understood in relation to one’s state of mind. Pain and suffering are differentiated; pain is personal and subjective, whereas suffering is often manifested through relationships and social interactions.

Descartes’ “I think, therefore I am” could be paraphrased to: “I feel pain, therefore I am.” In this context, not experiencing pain might indicate the absence of life. Pain serves as a reminder that our bodies have limits and experiencing it can serve as an indication that there is an issue that needs to be addressed.

There are different approaches to coping with pain, such as taking painkillers or adopting Stoic philosophical methods like appreciating the pain itself. Medicines can work to mask pain, while the Stoic perspective emphasises the acceptance of it, but it does not imply the elimination of pain.

While pain can often be reduced or eliminated, suffering, which often arises from relationships with others, can be more difficult to mitigate. The experience of pain is subjective and dependent on an individual's internal sensors, which may have a certain level of natural anaesthetic quality to avoid extreme pain. On the other hand, suffering is associated with experiences, memories or emotions. It often arises from loss, for example, the loss of a pet or a loved one. It is irredeemable.

When I was in middle school, I was hospitalised after injuring one of my feet. In the hospital, I encountered two fellow patients — one constantly screaming in agony. Another, suffering from a severe condition, was utterly silent. I found out later that both of them were likely to be in constant pain for the rest of their lives and one of them would not leave the hospital alive. I realised then the pain caused by my injury was next to nothing compared to their suffering that rendering their lives hopeless and irrelevant.

**While pain can often be reduced or eliminated, suffering, which often arises from relationships with others, can be more difficult to mitigate.**

This confrontation with different types of pain propelled me to question the meaning of life, leading me to philosophy and subsequent explorations into the essence of suffering. Years later, I recalled my hospital experience vividly, citing it as instrumental in shaping my understanding of pain as a transient but captivating entity. There are two types of pain: inflicted pain, which arises from physical harm, and emotional pain, which stems from things like grief, loss, trauma, stress, and unfulfilled wants. Much suffering comes from misconstrued desires — when we fail to comprehend what we truly need. According to the ancient Greek philosopher Epicurus, true happiness isn't derived from fulfilling desires, especially when those desires are superfluous or irrational. Instead, happiness could be found in the simplest of things, like bread and water. As he saw it, by moderating our desires, we could alleviate our suffering and find modest pleasure.

Many of today's consumerist-driven desires, which often lead to a sense of inadequacy and frustration when unmet, are unnecessary. The suffering resulting from unfulfilled materialistic desires is a different kind of suffering from physical pain. While I do not dismiss the very real distress it can cause, I assert that this form of suffering is largely avoidable because it is merely a result of our societal constructs and excessive desires.

#### **TAKING MEANING FROM EXISTENCE**

Ageing gives rise to existential crises, particularly the sense of loss and feeling of impotence that can come with physical decline, memory decay, and the impending reality of death. In this phase of life, these concerns become more pressing, as individuals grapple with questions of self, life and value.

Heidegger claimed that death is the ultimate question of our existence. The third age becomes a crucial time for understanding the value and meaning of one's life.

**This concept of authenticity is something introduced by Heidegger. It's not about becoming a certain type of person or engaging in certain activities, but it's about truly confronting oneself.**

Reflections on pain and suffering offer a fascinating glimpse into the human condition, addressing the physical and existential aspects of pain and inviting us to reassess our understanding of desire and contentment. We should think critically about our attitudes towards pain, suffering, and ultimately, the meaning of our lives in the face of ageing and mortality.

Many may argue that certain religious faith negates the need for discussions on the ultimate questions of death. But in fact, it's the contrary. When we yearn for eternal life, we are called upon to discuss, even more, the meaning of life. Is it as we hope, that we will gain eternal life and evade death? Is eternal life a true reward or is it a punishment? How does this promise of eternal life lend value to our lives? These questions undoubtedly raise numerous dilemmas.

If life has no value, then we are brought to the question of what it means to be an authentic person. The concept of authenticity is something introduced by Heidegger. It's not about becoming a certain type of person or engaging in certain activities, but it's about truly confronting oneself. Within the context of history, how do you affirm your position, the meaning and value of life, and affirm yourself as an individual? These are questions that most people don't ask.

About a quarter of today's population of the world is over 60. How do they live their lives? Do they stop working as they grow old? Consider the elderly who don't live in nursing homes and spend their days in public parks. They are "third-class" (三等 Three waiting, in Chinese) citizens, waiting for meals, waiting for sleep, and ultimately, waiting for death.



Photo: Craig Whitehead / Unsplash

Ageing, living, and dying are different understandings of the same process. So, to me, ageing is also living, but at the same time, ageing is dying.

Old age can be incredibly tragic. I know of a Nobel laureate, once among the world's finest, who resembled a child in his old age. He was unable to use the toilet by himself or even eat on his own. The greatest pain was not for him but for his wife who took care of him. Anyone can end up like that. Will I be like him ten or twenty years from now? This is a pressing question.

I believe ageing is also living. Ageing, living, and dying are different understandings of the same process. So, to me, ageing is also living, but at the same time, ageing is dying.



Photo: Jon Tyson / Unsplash

Death and old age have been effectively marginalised. This reflects the influence of capitalism, which often favours the youthful and joyful, perpetuating a relentless pursuit of the eternal and unchanging.

The interesting thing here is, dying and ageing seem like a downward trajectory, but at the same time, there's the fascinating gift of life: it only happens once. Everyone knows this; there is no second chance. This also means that my life is unique. Only I have the opportunity to live my life. The concept of 'I' is intriguing. This idea of identity and individuality is of utmost importance. We are separate from others, but at the same time, we are connected with them. How should we make the most out of the uniqueness and interconnectedness of our lives when we know ageing is unavoidable?

#### SUFFERING AND EMPATHY

With empathy, we see beyond our own pain, feeling the suffering of others. This could range from sympathising with the grief of a friend who has lost a parent, to Mother Teresa's empathy for those oppressed and suffering in daily life. Empathy can certainly be cultivated. But it raises an interesting question: is it possible for someone to take pleasure in the suffering of others?

'Schadenfreude' is the German term for finding joy in another's misfortune. From the audience's laughter at a clown hurting himself to the Roman Colosseum's bloody spectacles and the contemporary appeal of boxing, we often find delight in others' pain. As much as it is paradoxical, it is also a testament to our complex relationship with suffering.

But suffering is deeply personal. It is like tasting coffee — it's hard to convey the flavour unless someone has experienced it for themselves, and even then, they might not perceive it in the same way you do. This introduces an element of scepticism. We can't necessarily distinguish

genuine suffering from a performed one — consider the actor weeping on stage or playing a tragic character like Hamlet. While their plight may evoke empathy, it isn't rooted in their personal reality.

However, the nature of modern society tends to distance us from visible suffering. Cancer hospitals and hospices aren't places we visit regularly. Death and old age have been effectively marginalised. This reflects the influence of capitalism, which often favours the youthful and joyful, perpetuating a relentless pursuit of the eternal and unchanging.

Suffering and empathy are complex in nature. They intertwine in our daily lives and have a profound impact on our understanding of human existence. This demonstrates the interconnectedness of our individual experiences and collective societal trends, revealing the intricate weave of the human condition.

With the awareness of suffering and empathy, and the recognition that suffering seems unavoidable as we get closer to the end of our lives, we may have a more peaceful attitude towards our ageing and eventual death. ∞

# UNPACKING THE COMPLEXITIES OF AGEING AND LONGEVITY

## A Medical Perspective

### An Interview with **Dr Sara Bonnes**

By Guest Interviewer

**Adj Asst Prof Maleena Suppiah Cavert**

Chief Wellbeing Officer,  
National University Health System (NUHS)

*This interview took place at the Mayo Clinic during a visit with The HEAD Foundation in early 2023.*



**D**r Sara Bonnes is an Associate Professor of Medicine at the Mayo Clinic College of Medicine. As an internal medicine doctor, Dr Bonnes' interest lie in clinical nutrition, resident education, and continuing medical education. In 2020, she was awarded the College of Health and Human Sciences Rising Professional Award by Kansas State University. Additionally, she was recognised as one of the highest-rated teachers in internal medicine residency at Mayo Clinic in 2019. Dr Bonnes received her medical degree from the University of Nebraska College of Medicine and has over 10 years of experience in practice.

Dr Suppiah's career as a food scientist, educator, and healthcare professional spans six countries and over three decades. She keeps healthy through educated nutritional choices, dancing, yoga, swimming, tennis, meditation, and cooking for family and friends.

#### **What is the current understanding of the ageing process and what causes it at the cellular and molecular levels?**

Ageing is a complex process. My involvement with ageing has been more from a clinical perspective. Specifically, how we can assess interventions to help patients achieve optimal health spans, being as healthy as they can for as long as possible. The question regarding the ageing process at the cellular and molecular level is really a million-dollar question. If we truly understood that then we would probably be able to have more effective strategies and therapies to help prevent some of the complications of ageing.

There have been various discoveries that we have identified as components of the ageing process. You must have heard about telomeres – the kind of protective cap on the end of the DNA. For a while, we thought that was the answer. We have to keep the telomeres happy and keep them growing. And now we are starting to realise that that's not the answer to everything.

However, we do know that cells and their signalling pathways change as time goes on. Cells are normally able to reproduce and divide. Over time, cells tend to become senescent, and eventually, they reach a point where they are not able to reproduce effectively. They also release more pro-inflammatory chemicals. These are chemical signals that cause issues with the cells nearby. As that happens, what can we do about it? Even if we cannot stop cells from ageing, how do we at least inhibit it so that we do not

have one cell impacting twenty others or even the whole body? And that's where we are starting to look into drugs that are called senolytic therapies or senomorphic therapies, to try to stop some of that destructive process that the cells seem to undergo as they age.

### What are some of the most promising interventions or treatments for slowing down the ageing process and increasing longevity?

Currently, the most evidence-based interventions are these five lifestyle factors: maintaining a healthy weight, exercising regularly, not using tobacco products, alcohol in moderation and having a healthy diet. We are also starting to realise that sleep and stress management are also important. But there are probably more specific data available on the first five factors. And there are still a lot of controversies around what's ideal in any of those domains.



#### The quest to be 18 again

Backed by a team of 30 doctors and spending millions, 45-year-old tech centimillionaire Bryan Johnson has been undergoing an intense data-driven experimental programme called Project Blueprint to unlock the key to ageing. His goal is to reverse the ageing process and have the organs and body of an 18-year-old.

Source: Project Blueprint

There is also a lot of ongoing work looking at supplements and drugs as well as other therapies. But we are still in the research phase, so we are not yet able to make broad recommendations about those.

### What about strong social connections and relationships?

Yes, it is important for people to have a purpose in life and to feel that they have a sense of why they are continuing. There are a lot of different factors, and we are still trying to understand the effects of their interactions.

Among all these factors, exercise seems to be the most consistent and probably the most important. It helps with sleep and stress, and it's a mood booster overall.

### What role does genetics play in determining a person's lifespan and likelihood of developing age-related diseases?

We certainly know that genetics play a role. How long your parents lived does impact how long you think you will live, but we do not have the perfect formula. If diseases impacted your parents and if they were lifestyle-based, today we have more advanced testing and better interventions to help us understand and reduce the impacts. So, we know that genetics play a role, but I do not think we know exactly how much that pre-determines anything.

### Talking of genetics or epigenetics, some people take a sample of their saliva and send it to a lab to try to find out whether there are any pre-existing genetic conditions in their DNA they should worry about. This is sometimes known as precision medicine or personalised medicine. What is your view on this?

I think there are pros and cons to doing self-DNA testing. If you meet with me as a physician and we are talking about your family history, particularly of dementia or certain other terminal illnesses, we would have a long discussion before I recommended



#### Kicking high and breaking barriers

At the age of 75, Sensei Oshiro Nobuko of the Okinawa Karate-do Shorinryu Taishinkan Association was awarded the rank of 9th-dan in January 2023, making her the highest-ranked female karateka in Okinawa.

Photo: Chris Willson / Alamy Stock Photo

testing your DNA. We would also meet with a genetic counsellor to discuss the risks and benefits, and decide whether you really want to know, as well as how you wish to handle things if you test positive for a certain condition.

I think there are potential benefits to knowing that you are at risk for certain things. But getting that information without the support of a medical team can sometimes be detrimental because you don't necessarily know what to do moving forward, or how to support things as you go.

On top of that, our DNA testing is still limited. We know that mutation APOE-e4 increases your risk for Alzheimer's, but having that gene doesn't mean that you will get Alzheimer's. Having someone

**“THERE ARE ANTI-AGEING DRUGS THAT HAVE SHOWN PROMISE, BUT AS YOU GET INTO CLINICAL TRIALS THERE ARE POSITIVE AND NEGATIVE EFFECTS ON PRETTY MUCH EVERYTHING.”**

help you understand the context of testing is very important so that people don't inadvertently do something potentially harmful in their lifestyle or personal behaviours due to misunderstanding the implications.

### What is the current state of research on anti-ageing drugs, and are there any that have shown promise in clinical trials?

There are anti-ageing drugs that have shown promise, but as you get into clinical trials there are positive and negative effects on pretty much everything. Many teams are working on a variety of potential anti-ageing drugs. And medications like rapamycin may have benefits as well. But again, we are not at a stage where we can make broad recommendations about any of these drugs. For certain disease states, there are already approved medications that we use on a regular basis that have shown some benefits and longevity outcomes.

Another drug they are studying more is Metformin which we use for patients with impaired fasting glucose or diabetes. Patients who are on that medication do better in the long term, in terms of mortality and other outcomes. It's not necessarily targeted as an anti-ageing medication, but they are looking at the possibility. I have had patients who needed Metformin for other reasons, and it had

some very positive outcomes. On the other hand, I have also had patients who have had significant side effects from Metformin. So, we can cause inadvertent harm at times by misapplying things or trying things when we don't yet have the full evidence. Metformin may very well be helpful as far as ageing goes, but I would like to see more information before I say that's the answer. For certain medical conditions, there are medications that we know do improve outcomes. We just don't know that the same outcome can be expected for the broad population.

#### Beyond the physical

In addition to physical ageing, there is also a growing awareness of the importance of mental and emotional health in later life. Concerns such as loneliness, social isolation and mental health disorders among older adults are receiving greater attention as they have been linked to an increased risk of mortality.

Photo: Philippe Leone / Unsplash

### How does ageing affect the various systems of the body, such as the cardiovascular, neurological and musculoskeletal systems?

Let's start with the musculoskeletal system – I think that is probably one system where we can really find a lot of changes as we age. We tend to start losing muscle mass within the third decade of our life. We know that muscle strength and muscle mass decrease as we age. Without specific interventions to try to help maintain muscle integrity and strength, we would have an increased risk for frailty, falls and imbalance.

The neurovascular ageing process is different for everyone, and our individual health situation plays an important role. Our vision, hearing and mental processes change with age. Those are all very important to us because they affect our sense of space, our ability to communicate and our interpretation of the world around us. And that, in

#### Ageing brains and inflammation

A recent study by Harvard researchers, published in the journal *Cell*, provides new insights into the link between inflammation and cognitive decline in ageing brains. The findings suggest that this decline may be caused by a cellular chain reaction triggered by inflammation.

Photo: Bulat Silvia / iStock

turn, impacts the psychological systems because if I can't hear and have proper social connections, I will feel more isolated.

Changes to cardiovascular systems are certainly associated with age. Many adults tend to develop plaques or other issues, and the resulting narrowing of blood vessels may impede blood flow. We also have an increased risk of developing high blood pressure or other illnesses. The heart muscle is like other muscles – if we do not use it as effectively and regularly as before, it will not function as well as before. We will eventually lose the strength or stamina we used to have.

So, there are certainly a lot of different impacts on our systems – some are purely due to ageing, and some are ageing in association with other diseases. But we do know that as you age, you have an increased risk for heart disease such as heart attacks, or developing plaques within arteries, as well as increased blood pressure. You may even have difficulties at times with your heart rhythm not being the same.

### Definitely. And I think sarcopenia, or the loss of skeletal muscle mass and strength due to ageing, is also associated with menopause in women, am I right?

You are right. There are investigations into how some of these hormonal changes may impact things. We do have female patients who go through premature menopause or need to undergo surgical menopause to treat some other medical conditions. We are beginning to realise that there may be cognitive impacts and functional impacts



associated with some of those hormonal changes. So, there is no clear-cut treatment for a single problem. Everything is interconnected.

### On top of the impacts on our systems, what is the relationship between ageing and specific chronic diseases such as Alzheimer's, cardiovascular disease, and cancer?

As we age, we do have an increased risk for all of these diseases, particularly cancer, as well as Alzheimer's disease and cardiovascular disease. What is interesting is that we are starting to see more cancer and heart disease in young adults. So, I think we need to separate the pathway we had attributed to ageing from other pathways that are truly impacting us, whether it is molecular signalling, diet and lifestyle factors that we talked about earlier. For example, obesity has certainly gone up, and physical fitness seems to have gone down. So, is it truly ageing or is it some of these other lifestyle factors that we have associated with ageing that may be contributing to the increase in some of these diseases?

Although not all replication abnormalities in cells result in cancer, cancer is certainly caused by DNA variants or cells replicating in an abnormal way.





#### Beauty has no age

At a fashion show named "Another Look at Old Age" in Paris, France on October 27, 2022, models presented creations by fashion school students from L'Institut Supérieur des Arts Appliqués. The show aimed to promote a more inclusive stance on age and challenge the notion that beauty has an expiration date.

Photo: Sarah Meyssonier / REUTERS

But even in the absence of that, old cells can cause inflammation. Inflammation is a term I struggle with because most people understand inflammation as something red and swollen that you get after you fall and scrape your knee. But we are starting to realise that there is a lot more to inflammation than just what we can see, or that we have been able to measure in the traditional sense. There are a lot of chemical signalling pathways that can also trigger inflammation. They can impact our blood pressure, our ability to regulate weight, and our ability to sleep well and be rested. And they may have long-term consequences because they can potentially lead to heart disease, cancer or other diseases.

#### What role do environmental factors such as air pollution and exposure to toxins play in ageing and longevity?

I think we are still learning to understand that better. We realised that exposure to certain chemicals or products can certainly lead to inflammation or changes in DNA that seem to accelerate the ageing process or increase our risk of getting some of the diseases we expected to be age-related in the past. What I don't think we understand is, of all these things that we are exposed to, what may have those health impacts? So far, there is not a comprehensive list of things to avoid and things that are okay. I think we are still learning as we go.

On top of that, we have made so many advances in technology in recent years and we are still trying to understand their implications and how certain things may affect our health.

#### How do societal attitudes and beliefs about ageing impact the physical and mental health of older individuals, and what can be done to change these attitudes?

Yeah, I smile because I just read an article that talked about acceptance. People who accept the ageing process and don't have negative perceptions seem to be happier and live longer and better. I don't have the exact answer but I think it is probably related to stress and social connections, as well as some of the self-talk we have with ourselves. For example, we can say "Today, I get to go see my grandma and learn from her and share a meal with her," or we can think of it as an obligation to go see this person and care for this person. Those are two different perspectives that help illustrate how our thinking contributes

"I THINK HOW WE PERCEIVE THE AGEING PROCESS AND THE RELATIONSHIPS ASSOCIATED WITH IT PROBABLY DOES HAVE A SIGNIFICANT IMPACT ON HOW AGEING AFFECTS US. **THOSE WHO ARE OPEN, ACCEPTING AND HAVE STRONGER SOCIAL CONNECTIONS SEEM TO DO BETTER.**"

to our stress, our sense of purpose and well-being, and how we interact with the world around us.

I think how we perceive the ageing process and the relationships associated with it probably does have a significant impact on how ageing affects us. Those who are open, accepting and have stronger social connections seem to do better. And I think that also aligns with all the other factors we discussed, like having a purpose and a positive sense of well-being, managing stress, and managing our mood. These are all important as we navigate the ageing process. A Harvard study on ageing found that social connections are important in predicting longevity and that the sense of isolation can have a significant negative impact. We are social beings. Not having social relations really impairs our ability to continue as individuals.



#### Sedentary lifestyle in young people

A 2019 study by the World Health Organization (WHO) found that more than 80% of adolescents worldwide do not get enough exercise, putting their current and future health at risk. To promote optimal health, the WHO recommends that adolescents engage in at least 60 minutes of moderate to vigorous exercise every day.

Photo: Yalana / iStock

**“WE CAN’T SOLVE THE PROBLEMS OF BEING 65 WHEN WE ARE 65. WE HAVE TO START LOOKING AT IT WHEN WE ARE 45 OR 35 OR 25 TO FIGURE OUT HOW WE CAN LIVE WELL WHEN WE ARE 65, 75 AND 85.”**

**I think the Harvard study that you referred to is the three-generation longitudinal study done by Professor Robert Waldinger. It found that the No.1 determining factor for health and longevity was relationships. One of my aunts who is 72 just passed on due to an autoimmune disease. But I think the fact that her husband had passed just a year and a half before she did sort of made her not want to fight that hard to live anymore.**

That is an interesting point as well. When one spouse passes, it’s not uncommon that the other spouse passes within a short period of time. We talk about that kind of relationship impact, but I think there is data to support it as well. This is also expected because this is part of the social connections the Harvard study found important.

**Is there anything else you would like to share about ageing or longevity, or something that impacts you personally as a physician?**

In the US, historically, we have labelled 65 and over as the ‘ageing population’. But practically speaking, the decisions we make in our 20s impact our life in our 60s. And so, what I hope to help patients see is that the sooner we intervene and make positive changes in our lifestyle, the better our life will be



#### The secret to longevity

Jeanne Louise Calment, born on February 21, 1875 in Arles, France, holds the record for being the oldest person ever (female) and the oldest person to ever live, having lived to the age of 122 years and 164 days. She attributed her longevity to a diet that included olive oil, port, and chocolate, and quit smoking at the remarkable age of 120.

Photo: Pool New / REUTERS

now and 10, 20 or 30 years from now. I think the one thing we tend to forget is that we can’t solve the problems of being 65 when we are 65. We have to start looking at it when we are 45 or 35 or 25 to figure out how we can live well when we are 65, 75 and 85.

I don’t know how to make the 20-year-old listen, but I think we do have a lot to learn. If we start exercising and watching what we eat when we are young, then we won’t have to make huge changes later in life. We should make little changes along the way because we all change as we age. Setting up good habits is not just for adults, but intervention is also for children. We have to make being healthy truly a family activity and celebrate healthy options, and treat special meals as special meals rather than a daily occurrence. And make going for a walk together instead of watching TV an enjoyable experience. Not that we can’t have any ‘fun’, but I think reframing how we think about these things is important.

As an Internist, I fully understand that lifestyle changes are difficult and that dealing with chronic health conditions, whether they are associated with ageing or otherwise, is hard. There are a lot of different global health recommendations out there, but what works for you may not work for me, and some of it is trial and error. We sometimes overlook lifestyle changes in the bigger treatment issue, but the effort we put into managing them can certainly have a significant impact on how we view life, how we function and how we are able to carry forward. A lot of my patients feel like they are to be blamed for what happens. “What did I do wrong to have this cancer?”, “I did everything right and why do I still get this?” Well, it’s a lottery and sometimes it’s just bad luck. Beating yourself up with your bad luck is not going to help. The better thing to do is to figure out how to balance what you are dealing with and address the connection between mental and physical health. That can have significant impacts on how things look going forward. ∞



## FEATURE

**ASHOKA** is the 5th largest non-profit organisation globally with a focus on identifying the most innovative citizen sector actors that will change the world. Bill Drayton founded Ashoka in 1980 based on the idea that the most powerful force for good in the world is a social entrepreneur: a person driven by an innovative idea that can provide a solution to an entrenched global problem.

Working towards a world where 'Everyone is a Changemaker' for the good of all, Ashoka has built a network of close to 4,000 social

entrepreneurs known as Ashoka Fellows — with 3 Nobel Prize winners among them. At the heart of Ashoka's philosophy is the desire to create a world where everyone has the opportunity to participate and contribute to the community for our common good.

**Hae-young Lee** is Founder and Global Co-Leader of the new longevity work at Ashoka Innovators for the Public, **Sumitra Pasupathy** is the former Global Stewardship Lead for Ashoka Innovators for the Public, and **Todd Pavel** is from Longevity Venture and Fellowship at Ashoka.

HAE-YOUNG LEE, SUMITRA PASUPATHY & TODD PAVEL

# New Longevity — A New Perspective from Social Innovators

Asia is the birthplace of the 'longevity noodles' (*yi mien*, or *mie panjang umur* in Indonesian, *pancit* in Tagalog), which have their origins rooted in Chinese culture, and are traditionally associated with birthdays — particularly milestones such as one's 60th or 70th. This symbolism reflects a wish for a long and prosperous life across countries such as Singapore, Malaysia, Hong Kong, the Philippines, Indonesia, Japan, South Korea, Taiwan and many more.

This practice is becoming increasingly significant from a social demographic standpoint. Asia is home to the largest ageing population in the world, with significant demographic shifts across all nations. The region is experiencing a rapid increase in the proportion of elderly individuals due to various factors, including declining birth rates and advancements in healthcare, leading to increased life expectancies. According to the

1. Note by the secretariat. (2022, April 20). Overview of levels and trends in population ageing, including emerging issues, and their impact on sustainable development in Asia and the Pacific. Retrieved from [https://unescap.org/sites/default/d8files/event-documents/MIPAA\\_2022\\_JGM\\_3\\_1\\_E\\_reissued.pdf](https://unescap.org/sites/default/d8files/event-documents/MIPAA_2022_JGM_3_1_E_reissued.pdf)

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3. Stanford Center on Longevity. (n.d.). Laura Carstensen. Retrieved from <https://longevity.stanford.edu/people-2/laura-carstensen/>

4. Stanford Center on Longevity. (n.d.). The new map of life report. Retrieved from <https://longevity.stanford.edu/the-new-map-of-life-report/>



### Never too late, never too old

Malaysia's oldest election candidate, the late Maimun Yusuf, gained international headlines when she contested the 2008 and 2013 general elections as an independent candidate for the Kuala Terengganu parliamentary seat at ages of 89 and 94 respectively. When asked in 2013 by Malaysiakini news site why she wanted to contest, the grandmother said, "It is a sin to remain silent when you witness people committing wrongdoings. Merely shouting about it by the roadside would lead to nothing."

Photo: Bazuki Muhammad / REUTERS

United Nations Economic and Social Council, Asia has the highest number of older persons, defined as individuals aged 60 and above. By 2050, it is estimated that Asia will account for more than half of the global population aged 60 and older.<sup>1</sup> Countries such as Japan, China, South Korea and Singapore are at the forefront of this trend. Youthful countries such as Indonesia will not be able to buck it. In addition, 80% of all older people will live in low- and middle-income countries.<sup>2</sup>

Professor Laura Carstensen, the founding director of the Stanford Centre on Longevity, tells us, "We need to change the way we live in fairly radical ways". The Ashoka partner adds, "We need to re- envision the life course, what it can look like today, and what the big challenges are that we need to

address".<sup>3</sup> To help address this, the centre has created the New Map of Life initiative<sup>4</sup>, which plots new points on life's course through nine domains central to longevity: early childhood, education, work, financial security, built environment, climate, health and technology, lifestyle and fitness, and intergenerational relationships.



Scan to read more about  
The New Map of Life initiative



## Social entrepreneurs often show us patterns and pathways for the future we want to see — they are the ‘R&D’ labs for large-scale solutions and movements.

We need to imagine a new life course in which all parts of society can participate and contribute fully for the good of all. In looking for ways to do so, Ashoka monitors social innovation across the world. We look for patterns in the opportunities identified by Ashoka Fellows — our global network of social entrepreneurs. At the heart of Ashoka’s philosophy is the desire to create a world where everyone has the opportunity to contribute to the community for our common good. Social entrepreneurs often show us patterns and pathways for the future we want to see — they are the ‘R&D’ labs for large-scale solutions and movements.

A global study that reviewed the work of 100 social entrepreneurs who are reshaping the concept of ageing helped us reconsider our perspective. It made us realise that our life journey, which has long been seen as having three to four fixed stages (i.e., education, work, retirement), should now be viewed as a longevity continuum, with six to eight life stages across a 100-year life. In order to fully embrace this new paradigm, we believe society needs to undergo five critical shifts:

### Bonding across generations

CoGenerate was co-founded by Marc Freedman with the mission of promoting intergenerational engagement at various touchpoints to bridge divides and solve shared problems. It supports initiatives such as the New York-based Grandpas United, an intergenerational youth mentoring programme that also challenges ageist narratives.

Source: CoGenerate



### 1. REFRAME AGEING AS AN OPPORTUNITY TO CONTRIBUTE TO SOCIETY AND INVITE EVERYONE, INCLUDING THE ELDERLY, TO ACTIVELY CONTRIBUTE.

This involves defeating stereotypes of ageism and adopting generative and purposeful qualities throughout all life stages. Ashoka Fellow Ximena Abogabir shares her insight from Travesía100<sup>5</sup> (‘Journey to 100’ in English), which works to change society’s view of those 60+ by promoting an active, happy and purposeful maturity:

*“Then one day, I was 70 years old. Society didn’t have any more roles for me to play. I had to invent a new role, meaning and purpose. And what about everyone else?”*

As more and more of her fellow Chileans embark on a ‘Journey to 100’, Ximena helps them plan the trip of a lifetime.



Scan to watch Ximena as she talks to Ashoka on our platform ‘Welcome Change’



### 2. PROVIDE INCENTIVES TO PROMOTE INTERGENERATIONAL LEARNING AND COLLABORATION.

Ashoka Fellow Marc Freedman is an author and the founder of Encore.org and CoGenerate, and initiatives such as Experience Core and the Purpose Prize. He says that modern industrial society increasingly drives age segregation and divides society into silos. Thus, social innovations that isolate elders in care homes away from younger generations hinder the progress of elders. Studies show that adults that build bonds with younger people are three times happier in their seventies<sup>6</sup>, while communities with better intergenerational ties experience a variety of benefits<sup>7</sup>.



Scan to watch Marc’s take on PBS NewsHour



5. Abogabir, X. (n.d.). *Quiénes somos [About Us]*. Retrieved from <https://travesia100.cl/quienes-somos/>  
6. [https://greatergood.berkeley.edu/article/item/what\\_happens\\_when\\_old\\_and\\_young\\_connect](https://greatergood.berkeley.edu/article/item/what_happens_when_old_and_young_connect)  
7. Morrow-Howell, N., Hinterlong, J., Rozario, P. A., & Tang, F. (2003). Experience Corps: Design an intergenerational program to boost social capital and promote the health of an ageing society. *Research on Ageing*, 25(2), 172-194. doi:10.1177/0164027503251332

### Caring for the caregivers

In Savar, Bangladesh, it was estimated that 67% of households, consisting of a carer and a person with a disability, were living in extreme poverty without the support of mainstream poverty alleviation programmes. To address this pressing issue, Carers Worldwide initiated a project in 2018–2020, employing a community empowerment approach to tackle the social and economic challenges faced by the primary caregivers who are mostly women.

Source: Carers Worldwide



### 3. ALIGN HEALTH SPAN AND LIFESPAN AS PEOPLE TAKE MORE OWNERSHIP OF THEIR HEALTH AND WELL-BEING.

Lifespan is defined as the number of years a person lives, whereas health span is defined as the length of time a person is healthy — not just alive. What social determinants are most important to consider for healthy ageing in communities as lifespan expands across all socio-economic groups? Factors such as social isolation, social protection, financial sustainability and health-ageing all become increasingly important in this context.

The entire care continuum needs to be revisited, including the times when elders are sick where there is choice, agency and control over the matters that affect their health and well-being. Ashoka Fellow Anil Patil works with Carers Worldwide and explores the support for caregivers in South Asia. Also, Ashoka Fellow DY Suharya founded Alzheimer's Indonesia with the aim of improving the quality of life of people with dementia and family caregivers in Indonesia.



Scan to watch Anil's interview on Forbes



Scan to watch DY sharing her story on PBS NewsHour



## The longevity opportunity requires a re-imagination of work through the entire life span of 100 years.



### Is the gig economy the answer?

In ways other than traditional employment, gig work provides a vehicle for older workers to remain productively engaged, giving them the opportunities to supplement their income and the flexibility to work on their terms. However, an unfreezing of pension rules, benefits practices and staffing policies is needed to solve the longevity challenge.

Photo: Edgar Su / REUTERS

### 4. PROVIDE THE CHOICE AND OPPORTUNITY TO LEARN AND WORK THROUGHOUT ONE'S LIFE.

The longevity opportunity requires a re-imagination of work through the entire life span of 100 years. The current pattern of work assumes intense periods of work in the middle stage of life, with retirement often at 65 years old, but that is expected to change in many nations. One study projects that over half of the OECD's member states will raise the retirement age by the time today's young people end their careers, in a move to address the challenges posed by their shifting demographics.<sup>8</sup> Ashoka Fellow Sergio Serápião, founder of the movement Lab60+ in Brazil shares his thoughts:

*“Work is important for many reasons, beyond the financial. Adults socialise through work, we chat, make friends, engage others face-to-face, and fulfil a role. Retirement can cancel all that overnight, and for many it marks the beginning of decline, not caused by age but by isolation. It's no wonder that at Labora, we use social connection and well-being as indicators of success in senior employment, right along with earned income. In our youth-centred culture, jobs are designed for people not older than 40. So, we need not just more jobs, but new jobs, professions of the future, where seniors' own strengths and competencies serve real needs. This means working with all the actors, not just seniors, but employers, and specific industries that already see the strategic advantage to expanding service to senior customers.”*

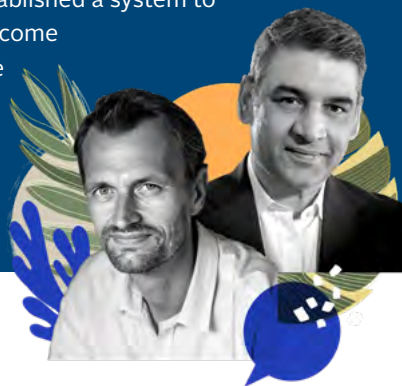
Scan to read more on how Sergio is mobilising companies to engage elders in innovative ways in this Forbes interview



8. [https://www.oecd-ilibrary.org/sites/ca401ebd-en/1/3/3/6/index.html?itemId=/content/publication/ca401ebd-en&\\_](https://www.oecd-ilibrary.org/sites/ca401ebd-en/1/3/3/6/index.html?itemId=/content/publication/ca401ebd-en&_)

**5. INTRODUCE NEW SYSTEMS, POLICIES, LAWS AND ECONOMIC INCENTIVES TO ENCOURAGE AGE DIVERSITY AND FAST-TRACK THE NEW LONGEVITY PARADIGM.**

Society requires the collaboration of both private actors and governments to envision new financial, economic and regulatory landscapes, unlocking the potential of humanity. The initiatives of Ashoka Fellows, including the work of Didier Ketels, who trains social workers as legal intermediaries to aid disadvantaged groups in resolving legal disputes quickly and fairly, and Gautam Bharadwaj, who has established a system to assist financially excluded low-income individuals in India to accumulate micro-savings for their old age, serve as tangible examples of this possibility.



Ashoka is working with its partners on a New Longevity movement, to create the systems change and orchestration that is necessary. Together, we can create a world where “Everyone is a Changemaker”.

The next time we enjoy our longevity noodles at a celebration, we should take the chance to think about how we can help create a world that is indeed joyful, healthy and prosperous for all. ∞

*Ashoka is seeking to elect more social innovators and changemakers for this longevity movement. If you would like to support or learn more insights, please visit [www.next-now.org/new-longevity](http://www.next-now.org/new-longevity) or contact [tpavel@ashoka.org](mailto:tpavel@ashoka.org) or [nzulminarni@ashoka.org](mailto:nzulminarni@ashoka.org) for more information.*

**Soccer Grannies: South Africa’s Footballing Pensioners Find a New Lease Of Life**

In 2003, a serendipitous encounter with a soccer ball in the park ignited a passion that would forever change the lives of a group of South African grandmothers.

“One day, we were enjoying the park when a soccer ball rolled over to us, one of the women kicked it back to them, then it happened again, and soon we were all learning soccer,” recalls one of the Soccer Grannies.

Led by the vision of Ashoka fellow, Beka Ntsanwisi, who is also a renowned community activist and cancer survivor, these spirited women aged 55 to 84 formed the Soccer Grannies. Defying stereotypes, they pursued their love for soccer, inspiring others with their skills, camaraderie, and determination on the field. Beyond the game, these inspiring grannies advocate for better conditions for elderly people in their townships, becoming agents of positive change.

Beka’s dream of hosting an international Grannies tournament finally became a reality in March 2023. With women from Africa, Europe, and the U.S., all aged over 50, participating in 20 teams, the first-ever Grannies International Football Tournament (GIFT) was joyously hosted in South Africa. The event stood as a testament to the unity and empowerment that Beka’s Soccer Grannies represent, successfully challenging and reshaping perceptions of elderly women in South Africa.

Scan to watch the Soccer Grannies in action



Scan to read their inspirational story in “Soccer Grannies: The South African Women Who Inspire the World”



## PERSPECTIVE

**CHRIS OESTEREICH** is a lecturer at Thammasat University's School of Global Studies, a columnist for Free Inquiry magazine, and the publisher of the Wicked Problems Collaborative, an independent press focused on addressing humanity's challenges. He partners with his wife Eileen to run Morph, an upcycling brand that transforms waste into practical items. Through their firm, Linear to Circular, Chris and Eileen assist

organisations in navigating sustainability issues as they work to foster the circular economy. Chris also co-founded the Circular Design Lab, which teaches systemic design principles to help people create positive impact in their work and communities. Through his work, Chris aims to help people see the need for transformative change and the benefits of making it happen.

CHRIS OESTEREICH

# Rethinking Retirement: Navigating Ageing Societies Amidst Accelerating Change

**W**e live in an era defined by transformation. The pandemic heaped challenges on ageing societies that were already dealing with climate change, accelerating technological evolution, widening inequality, rampant overuse of resources and more.

The ideas that underpin our societies are being challenged and thus require a broad rethink. This includes our approach to work, retirement, and the overall organisation of our lives. As the consequences of our actions unveil themselves, it's becoming increasingly evident that we need a paradigm shift.

## SHIFTING DEMOGRAPHICS

Humanity is experiencing an unprecedented increase in life expectancy that is paired with decreasing birth rates. This has us headed towards a time when there will be more people aged 65 or older than children below the age of five. Together, these factors are changing the demographic nature of our societies. If we keep doing things the way we do now, fewer young people will have to provide for a larger cohort of older people.<sup>1</sup>

Populations are steadily urbanising. Nearly 50% of the global population lives in cities, and they emit roughly 75% of global carbon dioxide. As the

population continues to grow, the overall portion of cities is expected to do the same. These trends will compound the carbon dioxide emissions arising from cities, and unless we make drastic changes in how we live, the total emissions will also continue to grow.<sup>2</sup>

*We know what happens then.*

Urbanisation's impacts go far beyond climate. Social isolation is a risk as social structures and community dynamics shift with the move to urban settings. The availability of healthcare and other important services tends to be better in cities, but costs may be prohibitive, and access may be limited. Infrastructure may better meet the needs of ageing populations, but that's not a given. Housing and mobility are additional areas where cities can offer benefits and challenges for elders.

In sum, there is much we should be mindful of in terms of the ongoing and potential effects of urbanisation on our ageing populations.

## TECH

Renewable energy is a technology that is often offered as a solution to our energy needs and climate concerns. While the capacity of wind, solar, hydropower, biofuels and other renewables more than doubled from 2001 to 2021, the portion of total energy use they accounted for was only still less than 14%.<sup>3</sup> That portion is expected to continue to grow and the pace should accelerate, but we have a long way to go in meeting energy needs sustainably. We also need to be concerned with the resources that go into their production, as well as their handling at the end of life.

### The ageing time bomb

Hong Kong is bracing for a significant demographic challenge as its population ages rapidly, creating an imminent shortage of over 60,000 residences for the elderly by 2032. According to a recent report by JLL, the city is on track to achieve the highest global share of people aged 60 or above by 2050, comprising over 40% of the total population.

*Photo: Lee Aik Soon / Unsplash*

1. <https://ourworldindata.org/age-structure>; <https://www.un.org/en/un75/shifting-demographics>

2. <https://www.oecd-ilibrary.org/sites/05384b8c-en/index.html?itemId=/content/component/05384b8c-en>

3. <https://ourworldindata.org/grapher/global-energy-substitution>



Ideally, [technological change] creates more desirable [jobs] in sufficient numbers to replace those it destroys. When that does not happen, dissatisfaction can grow.

We are also dealing with technological change that is unparalleled in human history. Ideas which were long fanciful become real — and then banal — in short order. Advances in Artificial Intelligence (AI) and Machine Learning systems abound. Large Language Models approximate writing, while image generation systems create pictures from simple text prompts. These tools are in their infancy, but it appears they are already being used in US political campaigns and they threaten to greatly amplify the ‘flood the zone’ campaign approach employed by Steve Bannon.<sup>4</sup>

Technological change continually chews up existing jobs while creating new ones. Ideally, it creates more desirable ones in sufficient numbers to replace those it destroys. When that does not happen, dissatisfaction can grow. In the US, Donald Trump made the most gains over Mitt Romney’s electoral performance “in communities where robots were adopted more extensively.”<sup>5</sup>

Technological advances can greatly benefit our lives, but as the author William Gibson wrote, “The future is already here — it’s just not evenly

4. <https://www.npr.org/2023/06/08/1181097435/desantis-campaign-shares-apparent-ai-generated-fake-images-of-trump-and-fauci>

5. <https://cepr.org/voxeu/columns/automation-and-its-enemies>

6. <https://ourworldindata.org/covid-vaccinations>

7. <https://www.nidirect.gov.uk/articles/staying-mentally-active#:~:text=Studies%20show%20that%20mental%20decline,dementia%20conditions%20like%20Alzheimer's%20disease>

8. <https://www.ipcc.ch/report/ar6/wg1/chapter/chapter-1/>



#### Tech-enabled lifelong learning

Recent progress in neuroscience demonstrates that brain ageing may be reversible, and that continuous learning activity can increase neuronal regeneration and delay the onset of cognitive impairment in elders. From streaming services and video hosting platforms to asynchronous and live interactive classes online, there are abundant opportunities for lifelong learning online for elders, given that they have digital access and skills.

Photo: RgStudio / iStock

distributed.” COVID vaccinations provide a stark example. Three years into the pandemic, people in upper-middle and high-income countries have had an average of over two doses per person, while low-income nations have delivered just four doses for every ten people. These are, of course, not evenly distributed throughout these groups or the nations they represent. Many people have had four or more doses, while 30% of humanity is still waiting for their first dose.<sup>6</sup>

For those with access, technological advances promise a seemingly endless array of benefits. Assistive technologies will help us ensure that we are not missing medications, and alert others if we need help. Advances in telemedicine offer the opportunity to ‘visit’ the doctor without having to leave the home. Communication platforms can remove language barriers, avoid isolation, and keep us in touch with our loved ones. Tech also promises ways to reduce our risk of dementia conditions by maintaining intellectual stimulation.<sup>7</sup>

## CLIMATE CHANGE

The aforementioned demographic shifts will occur under the shadow of climate change, while also compounding it. As temperatures increase, sea levels will rise, causing a host of challenges for coastal populations while triggering migration. Rising temperatures will also bring more and stronger extreme weather events like floods, droughts and storms. Those, in turn, will facilitate the additional spread of disease and increase the cost of functioning and maintaining cities.

The Intergovernmental Panel on Climate Change, the UN effort to assess science related to climate change, tells us that in the 50+ years since they began their work, “the influence of human activity on the warming of the climate system has evolved from theory to established fact.” They further inform us that every component of the climate has been affected. The oceans and atmosphere have warmed. Snow and ice are diminished. The sea level rose, while the oceans acidified and their oxygen levels decreased. Extreme weather events have increased in frequency. All these trends are ongoing and the driving forces remain. While the climate question has been unequivocally answered, other questions remain around what changes will occur going forward, how fast they will happen, and to what extent. The answers to those questions still depend greatly on our choices and actions going forward.<sup>8</sup>

#### “I’m here for my grandchildren.”

Defying a London-wide ban on Extinction Rebellion (XR) protests, hundreds of grandparents gathered outside Buckingham Palace on 17 October 2019 to launch ‘XR Grandparents,’ a group that unites grandparents and elders with the aim to safeguard the planet for future generations and calls for action on climate change.

Photo: Stephen Chung / Alamy Stock Photo



Climate shifts present significant challenges for older adults. Ageing leaves them more frail and more likely to have chronic medical conditions that require access to medication and assistance with daily living. Climate-induced disasters can be particularly disruptive for them. Floods and famines can increase stress levels while fostering mental health challenges and emotional strain. Those with limited mobility are at increased risk during and after extreme weather events. Heat is a concern, as ageing and some medications can impair the body's ability to deal with it. Also, those with compromised immune systems are at greater risk of illness as the range of insects expands. The incidence of water-borne diseases is also expected to increase with increased rainfall and rising temperatures. Climate-related displacement can cause emotional instability, stress, anxiety, trauma and more. Food insecurity and malnutrition are also concerns. In a warming climate, elders might experience multiple related challenges and thus be forced to deal with their compounding effects.<sup>9</sup>

**We need to start from a place of understanding the complexity of our circumstances. The systems we need to adapt are interconnected and cannot reasonably be changed in isolation.**

9. [https://health2016.globalchange.gov/low/ClimateHealth2016\\_04\\_Extremes\\_small.pdf](https://health2016.globalchange.gov/low/ClimateHealth2016_04_Extremes_small.pdf); <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9334478/>; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6119235/>; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6857396/>

10. <https://cusp.ac.uk/themes/m/tj-imagining-a-postgrowth-world/>

11. <https://cusp.ac.uk/themes/m/tj-imagining-a-postgrowth-world/>; <https://wickedproblemscollaborative.substack.com/p/wpc-interview-gawain-kripke#details>

## NOW WHAT?

Coming back to our ageing societies and the implications going forward: what should we do to adapt to all this ongoing change? We need to start from a place of understanding the complexity of our circumstances. The systems we need to adapt are interconnected and cannot reasonably be changed in isolation. These are highly complex challenges that will have different effects in different places. Circumstances will also vary, so we need to be aware of that as well. Given those factors, and the ongoing changes, solutions that work in one place may not work in another, and what does work may not do so for long. More importantly, the changes we need are critical in nature, so we need to look at the big picture as we aim to shift outcomes in desired directions.

All of this change should make us want to take a step back and think about how we want to move forward. Ageing societies cannot magically support growing numbers of retirees. Nor can they address the broader shifts in needs and challenges. For that, I think we need to become far more flexible and adaptable than we currently are, as we shift from a growth orientation to one focused on delivering on people's needs in environmentally sustainable ways.

There are many ways in which we might add flexibility to our society, while also helping to ensure that everyone's needs are met. At the recent Beyond Growth conference hosted by the European Parliament, Professor Tim Jackson gave an impassioned speech in favour of using this moment to rethink our economies and centre them around care; the provision of necessities for health and welfare. As he puts it, "To deliver prosperity as health, we need an economy whose guiding principle is care."<sup>10</sup>

Care is something that has long been given a backseat to economic concerns. As my colleague Gawain Kripke once told me, "Most societies, I think, don't really recognise or support care very well, because most care is seen as basically a private domestic interaction within households." He then added, "the whole field of economics has never really wrestled with the idea that this is work,



### It's about more than money

20-first's 2022 Global Longevity Management Scorecard ranks the 10 best age-ready countries based on the life expectancy, healthy care system and happiness index of a country, alongside the top 10 countries by GDP. It is found that only one top GDP country, France, appears in the list of top 10 age-ready countries. Other big GDP countries, such as China, India and the US, score poorly.

Photo: skynesher / iStock

real labour, that should somehow be included in economic analysis." Instead, care has largely been externalised much like the responsibility for greenhouse gases. Shifting that from an individual or family level, to a collective one, would alleviate untold challenges while allowing us to optimise resource use at a time when that is dearly needed.<sup>11</sup>

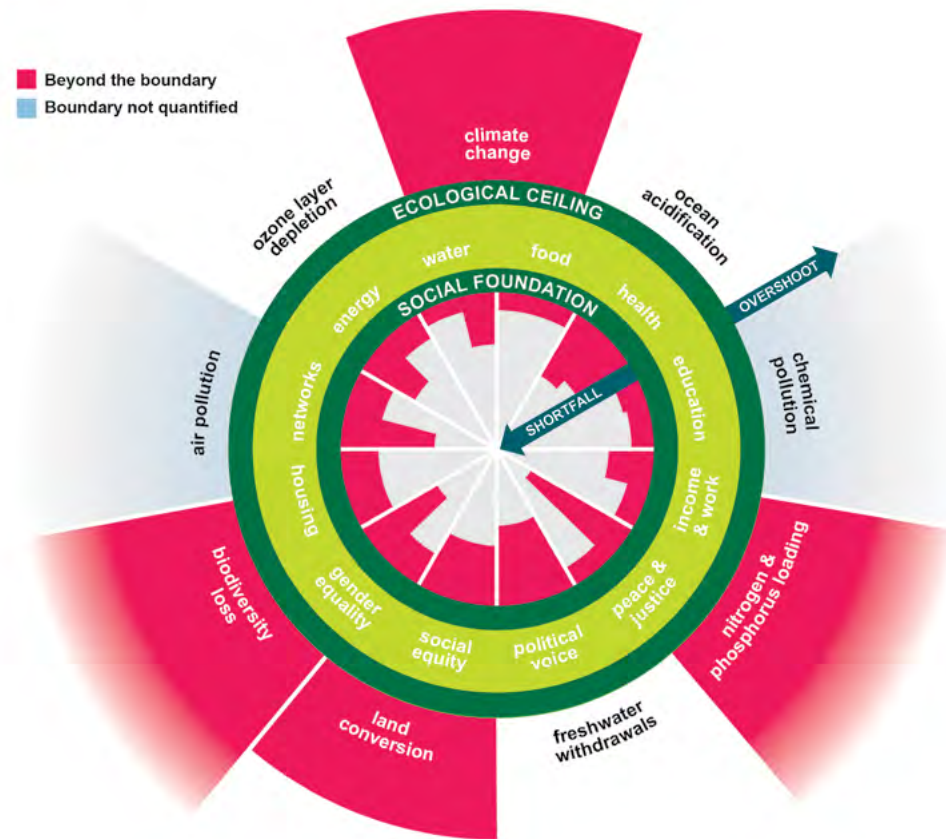
We live in ageing societies where many people's basic needs currently are not met. Given that, the idea of centring care seems an unalloyed good. But those older members of our societies should not be viewed purely as recipients. Grandparents providing care for their grandkids while the parents work is just one of many examples to the contrary. What if the amount and kinds of such care were better understood, and we somehow worked together to ensure that the needs were better met? What if, instead of retiring, the amount that we work steadily dropped off over time? And as we contributed more overall in a longer life, we could look forward to steadily earning more free time. And what if we also shifted towards self-directed work? The later we were in our careers, the more

we would be able to choose to spend our efforts doing things we personally found to be rewarding.

We might also find ways to better support well-being throughout our lives, mentally, physically and emotionally. Provisioning care where it is needed should help greatly with some of this, but we could also restructure our lives and communities for active lifestyles, while also supporting mental health. Doing so would help us better maintain overall well-being as we live longer lives. Providing opportunities for lifelong education would enable us to react to our rapidly changing societies.

Universal Basic Income (UBI) is an idea which might also help, as it offers a variety of benefits. Guaranteeing people a meaningful monthly income can reduce inequality and risks from technological disruption, while also fostering flexibility. Instead of being locked into full-time jobs, people would be in a better position to react to society's needs. Along with UBI, shorter work weeks would help us reduce resource use, while giving us more time to pursue our interests.

THE DOUGHNUT OF SOCIAL AND PLANETARY BOUNDARIES (2017)



Source: <https://www.kateraworth.com/doughnut>

If we were able to collect better data on the provision of care, we might use that information to coordinate the fulfilment of needs across society. Here is an opportunity for our rapidly advancing tech to truly benefit us all. We could build a system that understood all our needs — as defined in the Social Foundation of Kate Raworth’s *Doughnut Economics* — and helped us optimise our efforts to deliver upon those needs, while also helping us achieve environmental sustainability. If our goal is truly to deliver on those basic needs for all of humanity, we are currently failing on every single one.

With that in mind, try to imagine a world where work is more varied and adaptable. Imagine a world where technology helps us be so efficient that most of our time is left available for whatever we wanted to do. Imagine a world in which humanity lives in concert with the planet. Imagine a world where every human being has every basic need met. I want to work towards a world in which we do those things, a world where we can contribute meaningfully throughout our lives, while also receiving the support we need. To me, that sounds like a world we should all be excited to create. ∞

FEATURE

**DY SUHARYA** is the Regional Director of Alzheimer’s Disease International (ADI) Asia Pacific Region and Founder of Alzheimer’s Indonesia (ALZI). With more than 20 years of experience in public health, public-private partnerships and communication, DY has worked as a Health Communication Consultant with the World Bank, WHO and UNICEF. DY’s mother was diagnosed with Dementia in 2009 and has been her source of inspiration in improving the quality of life

for people with dementia, caregivers and inter-generations through the establishment of Alzheimer’s Indonesia since 2013. Her mother passed away in April 2017, but her legacy continues. DY’s been recently recognised as one of the Ageing Asia Global Ageing Influencer (2021) and as one of the WHO UN Decade Healthy Ageing 50 Leaders to transform the world to be a better place to grow older (2022). DY Suharya can be contacted at [dsuharya@gmail.com](mailto:dsuharya@gmail.com).

DY SUHARYA

# From Caregiver to Global Advocate: A Journey of Empowering Lives Affected by Dementia

**M**y mother, Tien Suhertini Suharya, was diagnosed with vascular dementia in 2009. Looking back, I now know that she was displaying typical symptoms of the disease long before that, including memory loss, disorientation and changes in mood and personality. Dementia is a general term for a decline in cognitive ability severe enough to interfere with daily life, and it’s often caused by damage to brain cells. Alzheimer’s is the most common cause of dementia, accounting for 60–80% of cases.

The experience drove me to seek work opportunities abroad, so I would not have to spend time at home. I worked as a journalist and later as a public health communication consultant for organisations like the World Bank, WHO, and UNICEF.

However, in 2012 while I was pursuing my PhD in Public Health at Curtin University in Perth, Australia, I received a call from my father, informing me of my mother’s declining condition post-diagnosis. Like many people, I suddenly found myself confronted with the decision of having to provide care for my mother, as well as my father, rather than continue with my studies. Just as it was for me, for so many, this is often not a ‘choice’ but a new reality that they are suddenly forced into.



**Like many people, I suddenly found myself confronted with the decision of having to provide care for my mother, as well as my father, rather than continue with my studies.**

The problem of ageing is adding to the need for dementia care, as the number of older adults increases worldwide. This strains families, healthcare systems, and economies as they grapple with the challenge of providing adequate support and care for those affected by dementia.

After 15 years of living abroad, I decided to return home to become a full-time caregiver for my mother. This ended up being one of the most fulfilling and rewarding decisions I have ever made in my life.



DY and her parents, Yaya Suharya and Tien Suhertini, 2015

### ALZHEIMER'S INDONESIA

When I returned home to begin my duties as a family caregiver, alongside my father, sister and a domestic worker that we hired, it became a full-time job that not only affected my mother but our entire family. Burnout is one of the biggest problems for caregivers, and we were no exception.

By being a full-time caregiver for my mother, I realised that there was a lack of support, information, resources and understanding of what dementia and Alzheimer's Disease is in Indonesia. The following year, in 2013, on my mother's birthday, I founded Alzheimer's Indonesia (ALZI) with a few family caregivers and healthcare professionals in Indonesia with the aim of improving the quality of life of people with dementia and family caregivers in Indonesia, because my family members' quality of life was affected.

*Studies have shown that compared to other caregivers, dementia caregivers are more likely to consider the caregiving activities as highly stressful, have higher levels of burden and psychological distress, and report higher levels of burdens on multiple dimensions—financially, emotionally, and physically.*



Caregivers meeting support group initiated by ALZI in Jakarta since 2013

**After seeing the successes and real changes made to improve the lives of people living with dementia and caregivers in Indonesia through Alzheimer's Indonesia, I knew I wanted to make an even bigger difference.**

The first initiative that ALZI organised was a caregivers meeting as a platform for family caregivers to seek support, information and network. ALZI's started our caregiver meeting support group with 20 family caregivers in Jakarta, Indonesia in October 2013. It has been consistently conducted not only in the capital city but also in more than 10 other cities in Indonesia. Currently, ALZI has been supporting more than 6,000 families, volunteers, and chapter leaders in 18 cities in Indonesia and seven cities overseas (Indonesian diaspora community). ALZI communities have nearly 10,000 followers as of 2023.

In December 2022, the PBS NewsHour 'Brief But Spectacular' programme broadcasted a three minutes video of my journey as a caregiver that led me to my advocacy work both in ALZI and Alzheimer's Disease International (ADI). I realised from more than 42,000 likes and viewers on PBS, Instagram, Tik Tok and Facebook that I have indeed been on the right track of a purpose-driven life. People that I do not know from all continents of the

Scan to watch DY's interview featured on PBS NewsHour's 'Brief but Spectacular'



world reached out to me, shared their stories, and followed my social media account as well. I did not realise how much this issue of an ageing population and cognitive decline added to the need for dementia care and a sense of solidarity everywhere around the world. This precious experience touched many people around the world. I owe it to my mom for giving me a sense of purpose in my life and I am forever grateful. Mom: You are my forever sunshine!

### ALZHEIMER'S DISEASE INTERNATIONAL

After seeing the successes and real changes made to improve the lives of people living with dementia and caregivers in Indonesia through ALZI, I knew I wanted to make an even bigger difference. In 2016, I had the opportunity to become Alzheimer's Disease International (ADI)'s Asia Pacific Regional Director, where I am responsible for overseeing 20 countries in the region. My work as a Regional Director aims to strengthen our member associations to be self-reliant and to have the ability to provide services and support needed for people living with dementia and their family caregivers in their respective countries.

**We advocate National Dementia Plans as the best tool for effectively managing and slowing increased rates of dementia prevalence, improving the quality of life for those affected, and mitigating the social and economic impacts on families and communities.**



In the last year, the capacity-building activities and achievements around advocacy and continuum of care for our member associations in the Asia Pacific have been significant. From the 2022 ADI Asia Pacific regional meeting and conference in Taipei, Taiwan which attracted over 1,000 participants from 20 countries, to the establishment of partnerships with several universities and organisations and our ongoing Twinning programme, our associations show no sign of slowing down the ways they can be of most support to those most impacted by dementia.

As of 2023, eight of our member associations in the Asia Pacific region have also stepped up to launch National Dementia Plans (NDPs) in their respective countries, with another six currently in development.

NDPs are comprehensive, government-led strategies which aim to address the challenges posed by dementia through research, care, advocacy, and support services. At ADI, we advocate NDPs as the best tool for effectively managing and slowing increased rates of dementia prevalence, improving the quality of life for those affected, and mitigating the social and economic impacts on families and communities.

As we look towards the future, innovations like telemedicine, improved diagnostic tools, and the availability of new treatments are poised to play a significant role in enhancing the lives of those affected by dementia. We are already witnessing the transformative impact of these innovations, as remote consultations, support, and monitoring for individuals with dementia and their caregivers increase access to care and alleviate the burden on healthcare systems.

As these advancements in care and treatments become increasingly more mainstream, the importance of NDPs cannot be overstated. By having an NDP, healthcare systems and communities are better prepared and more equipped to adapt to the evolving landscape of dementia care and support, as well as the posing issue that dementia poses on our families, our communities and our cities.

### GETTING SUPPORT

I dream of a future where dementia has a cure, a solid support system in society and no one has to endure the challenges, pain and uncertainty that I and so many countless others have faced, either as carers or the ones being diagnosed.

By having accidentally found myself as a member of the global dementia community, a founder of an Alzheimer's Association, a participant in high-level advocacy, and on the ground with Alzheimer's and dementia associations from all over the world, I know just how much incredible, inspiring work is being done by so many people like myself.

If someone you know, or a loved one, finds themselves in such a position, I encourage them to reach out to their national, regional, or local Alzheimer's and dementia association. No one has to go through this journey alone.

As we continue to work towards a future where everyone has equal access to information, support, care, and ultimately a cure, it's important to remember the power of community, advocacy,

and support. There is also the future of dementia diagnosis and care using solutions-based innovative telemedicine that will support people in their journey of caring. By sharing our stories and experiences, exploring the maximum capacity of a community-support group network and linking it up to technology, we can increase the ability to provide high-quality care, raise awareness and understanding of dementia, to create a more compassionate and informed society that's better equipped to care for those affected and their families. Together, we can face the challenges of dementia and create a brighter future for all. ∞



DY and her parents and sister, Lelly, at home in Jakarta, 2014

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HAWATI ABDUL HAMID

# Installing a Pension Floor for All Elders in Malaysia

## A Case for Social Insurance Pension

*This article is adapted from Building Resilience: Towards Inclusive Social Protection in Malaysia, a report by Khazanah Research Institute, Malaysia.*

Our society is growing older. In 2020, Malaysia's population of 32.4 million transitioned into an ageing society, with 7% of its people aged 65 and older. The country is projected to become 'aged' in 2045 when the share reaches 14%, and 'super-aged' by 2060 when it reaches 20%.<sup>1</sup>

Longevity is to be celebrated but ageing often increases the risk of deteriorating income, health and social support, and while it is inevitable, the experience varies depending on how well the risks are managed. Policies must be designed to address the complex nature of old-age vulnerabilities.

Income insecurity in old age is one of the key factors underpinning other challenges including poverty, homelessness, disability, as well as physical and mental health issues. Malaysia's rapidly ageing population requires urgent attention given the persistent coverage gap, inadequate benefits and unsustainable financing.

1. Unless otherwise stated all demographic statistics are KRI calculations based on the medium fertility variant of the 2019 revision of the United Nations Population Forecast via CEIC (n.d.).

*... there is no method of avoiding the costs of ageing. In fact, all debate and policy decisions are about how to allocate, in the fairest manner, the costs of ageing among all stakeholders. In this debate, however, the term 'fair' is open to interpretation, which is driven by the interests of those involved.*

ASEAN Secretariat (2020)



Photo: Kelvin Zyteng / Unsplash

## THE IMPORTANCE OF OLD-AGE INCOME SECURITY

An old-age retirement system should strive to achieve at least two main objectives. First, it should provide basic income security that prevents old-age poverty; and second, it should serve as a consumption smoothing mechanism throughout periods of both high and low income. The fulfilment of the first objective is usually assessed by the share of elders drawing pension benefits equivalent to the poverty line. The second one looks for a benefit level not lower than 40% of previous earnings.

While Malaysia already has in place a multi-tiered retirement ecosystem to help its population fulfil the intended objectives, the system has yet to achieve the first two objectives for all of its population.



### The 'painful truths' of the financial situation of Malaysians

Data from the RinggitPlus Malaysian Financial Literacy Survey 2022 revealed that 70% of Malaysians saved less than RM500 per month (S\$153) or did not save at all since the pandemic began, which marked the worst ever result in five years.

Photo: Bazuki Muhammad / REUTERS

## While the EPF scheme is meant to accumulate savings for retirement, the breadth and depth of the coverage have been inadequate.

Tax-funded pensions that protect against old age poverty are effectively guaranteed to a few elders in two groups with benefits varying between the schemes. The first group includes elders aged 60 and above who are eligible for means-tested assistance under the Bantuan Warga Emas (BWE) scheme. However, the scheme currently only protects 4.2% of elders with a basic income of RM500 monthly as it is limited to those living below the poverty line and without family support. On the opposite end, the second group is comprised of more privileged elders who have served the public sector and hence are entitled to a civil service pension. The benefit under this scheme ranges from at least RM950 monthly up to 60% of their last-drawn salary. Between the two groups, just 24% of Malaysian elders receive periodic old-age benefits, while the world average is one in two<sup>2</sup>.

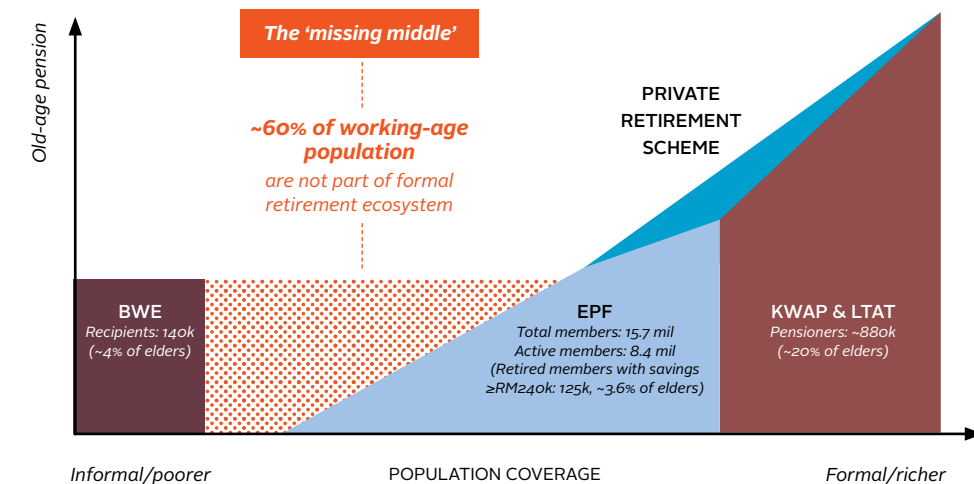
Meanwhile, workers in the private sector are required to build their retirement savings under the Employee Provident Fund (EPF). These are made via mandatory contributions by their employers as well as deductions from their own monthly salaries. However, EPF members are not considered to be pension beneficiaries due to the individual nature of these accounts and the opportunity for lump sum withdrawals<sup>3</sup>.

- This is based on an unweighted average of old-age effective coverage from 180 countries reported. Source: ILO (2017)
- The total periodical and monthly EPF withdrawals have been negligible, reported to be 796 in 2017 and just 579 in 2019. Source: EPF (various years)
- EPF via Malaysiakini (2020)
- EPF Basic Savings target by age 55 was revised from RM 120,000 in 2008, RM 196,800 in 2014, RM 228,000 in 2017 and RM 240,000 in 2019. Source: EPF (n.d.-a)
- Possible source: <https://api.nst.com.my/business/2023/01/873038/epf-loss-after-four-withdrawals-rm145bil>

While the EPF scheme is meant to accumulate savings for retirement, the breadth and depth of the coverage have been inadequate. In 2010, it was estimated that 70% of retirees would exhaust their EPF savings within 10 years. In 2020, more than half of EPF members aged 54 had less than RM50,000<sup>4</sup> in their accounts. This falls far short of the target set in 2019 of RM240,000 in savings by age 55, which would provide RM1,000 a month

for 20 years of retirement — in line with Malaysia's life expectancy.<sup>5</sup> Even then, this rate is far below the estimated monthly expenses of RM 2,450 necessary for a senior citizen to maintain a decent living standard. On top of this, the four COVID-19 withdrawal schemes in 2021 and 2022<sup>6</sup> reduced the saving levels further with a total of RM145 billion withdrawn.

FIGURE 1: MULTI-TIER RETIREMENT ECOSYSTEM IN MALAYSIA



First tier	Second tier	Third tier
<b>BANTUAN WARGA EMAS (BWE)</b>	<b>MANDATORY RETIREMENT SAVINGS</b>	<b>VOLUNTARY PRIVATE RETIREMENT SAVINGS (PRS)</b>
RM500 monthly for ~140k elders aged 60+ without income and families (~4%) (2020) Allocation: RM576 mil (2020)	EPF total members: 15.7 mil (2022) EPF active members: 8.4 mil (2022)	Total accounts: 455k (2019) 12 schemes comprising 57 funds managed by 8 PRRS providers
	<b>CIVIL SERVICE PENSION</b>	
	Existing civil servants: ~1.6 mil (2022) Existing pensioners: ~886k (2022) Annual pension & gratuities: RM31 bil (2022)	

**Note: The figure is not drawn to scale and does not represent the actual amount of old-age pensions and population proportion.**

The EPF (Employee Provident Fund) is the mandatory retirement savings fund for private sector workers in Malaysia, The LTAT (Lembaga Tabung Angkatan Tentera) is a statutory body providing retirement savings scheme for officers and members of other ranks of the Malaysian Armed Forces and the volunteer forces; KWAP (Kumpulan Wang Awam Diperbadankan) is Malaysia's civil service pension fund; JPA (Jabatan Perkhidmatan Awam) is the Public Service Department; PRS refers to Private Retirement Scheme.

Source: Adapted from Knox-Vydmanov (2021), OECD (2015) for illustration purpose [LHS], SC (2020), JPA(2022), World Bank (n.d.), EPF (n.d.), Berita Harian (2022), MalaysiaKini (2021) [RHS]

Notably, the sparse provision has resulted in a significant gap known as the ‘missing middle’. These are individuals who are not part of the mandatory retirement schemes and who also do not qualify for old-age assistance or part of the civil service pension. It is estimated that in 2019 about 60% of working-age individuals<sup>7</sup> in Malaysia were outside the formal retirement arrangements. Most of these individuals would have to rely on personal savings and assets, or intra-generational family transfers to sustain themselves after retirement. However, declining fertility rates, shrinking household size<sup>8</sup>, lower prevalence of multi-generational households<sup>9</sup>, as well as rising living costs and household debt<sup>10</sup> indicate a future where old-age income security would depend less on family transfers.

## COMPARISON OF POTENTIAL SOLUTIONS

Public discourse has centred around two sets of options to address the long-standing issues of poor coverage and adequacy. The first proposes to improve the mechanisms within the EPF, while the second suggests broadening the coverage and possibly deepening the benefits of the means-tested BWE programme. These two solutions are not mutually exclusive and are often complementary.

EPF-centred solutions require parametric changes to the existing schemes. Three opportunities to improve the equitability of the EPF or help members with lower incomes include: (i) deepening the **progressive contribution** by increasing the employer’s contribution for local workers with a monthly salary of below RM5,000

7. <https://www.krinstitute.org/assets/contentMS/img/template/editor/Report%20-%20Building%20Resilience;%20Towards%20Inclusive%20Social%20Protection%20in%20Malaysia.pdf>, pp 92

8. Household size shrunk from 4.3 in 2005 to 3.9 in 2019. The declining pattern is observed in both rural and urban areas. Source: DOS via CEIC (n.d.)

9. The proportion of three-generation households declined from 41.1% in 2004 to 30.7% in 2016. Source: World Bank (2020)

10. Household debt as percentage of nominal GDP has increased from its all-time low of 60.4% in 2008 to 93.3% in 2020. Source: BNM via World Bank (n.d.-b)

## However, expanding BWE to universal coverage, even at a minimum benefit level, is a significant leap, with cost implications posing the greatest hindrance.

from 13% to 15%; (ii) introducing **progressive dividends** by applying higher dividend rates for members with lower savings; and (iii) adding five years to the contribution period by raising the **statutory minimum retirement age** from 60 to 65.

A hypothetical simulation model assessed the effectiveness of each proposal and it found that raising the retirement age would have the most significant impact on improving members’ savings. Doing so would result in 82.2% of EPF members avoiding old-age poverty, while only 61.1% and 59.2% respectively would be able to do so with the progressive dividend and progressive contribution initiatives.

While raising the statutory retirement age can potentially address the gap, it is important to recognise that not all elders can continue to work due to various factors such as education, health, wealth and personal preferences. And more importantly, these proposals are not enough to yield significant results in terms of widening the coverage and deepening the savings as about 20% of EPF members would still live below the poverty line, let alone those who are not members of the EPF.

Alternatively, the introduction of a universal social pension in Malaysia has been proposed to overcome coverage challenges faced under the EPF schemes, particularly for informal and unpaid work. Tax-funded social pensions in Malaysia are limited to poor older individuals without income



### Elderly women hit hardest

According to a report from the World Bank in 2020, the employment gap between men and women in Malaysia is largest between ages 50 and 60, with only 17.9% of women in this demographic being employed compared to 59.7% of men. Women make up a larger portion of those self-employed or as unpaid family workers, resulting in less social insurance coverage. This makes financial security a particular challenge for women.

Photo: Bazuki Muhammad / REUTERS

or family support and pensionable civil employees. The proposal is to expand the BWE to establish a pension floor where all eligible individuals will receive regular old-age benefits, typically pegged at the poverty line.

However, expanding BWE to universal coverage, even at a minimum benefit level, is a significant leap, with cost implications posing the greatest hindrance. The estimated universal social pension expenditure share of 1.5% of Gross Domestic Product (GDP) (RM24 billion) is nearly 50 times the BWE program’s existing share of GDP (RM0.5 billion). Undeniably, a social pension that is universal and fully tax-funded is the most ideal, but it remains elusive. The delivery of tax-funded social pensions varies widely globally, underscoring the fiscal constraints faced by governments.

### INSTALLING A PENSION FLOOR VIA THE SOCIAL INSURANCE MODEL

Given the challenges and limitations of other options, introducing a life annuity scheme under the social insurance pension (SIP) model is deemed an enduring approach to achieving full coverage for basic income during old age. This scheme guarantees a lifetime stream of income via an annuity — a series of periodic payments — in exchange for a premium. It is based on the principles of solidarity and collective financing, must be operationalised by an institution with a public mandate, and should not be confused with private insurance.

In general, a SIP provides old-age benefits to individuals who have met the qualifying age against compulsory contributions made during

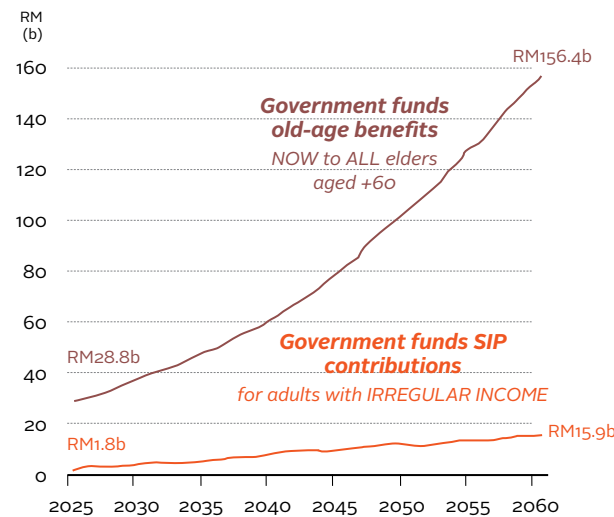
working years — typically a percentage of earned income — for a minimum period which can vary between 10 and 35 years. Like other schemes, the operational details vary from country to country, but it is worth noting that most social insurance schemes are a hybrid of defined benefits and defined contribution schemes where one's entitlement depends on one's contribution.<sup>11</sup>

Key features of a life annuity under SIP include monthly disbursements rather than annual ones, a single rate for both men and women, and pension benefits that increase annually to account for inflation. Assuming the scheme launches in 2025, preliminary estimates indicate that a 24-year-old would pay RM53 per month for 36 years to receive a monthly annuity equivalent to the future value of the poverty line per capita starting from the age of 60.<sup>12</sup> Upon reaching the age of 60, these individuals will receive a future value of RM1,346 monthly, instead of RM600 in 2020.

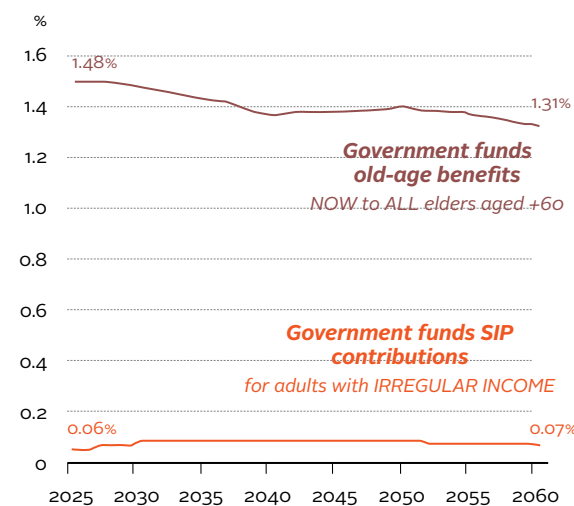
The SIP annuity will also increase annually at a fixed rate of 2% to account for inflation. It only offers a basic annuity scheme that covers the risk of longevity, and no compensation is given when the recipient dies as the annuity is not inheritable by surviving dependents. The scheme must also go through a periodic assessment to ensure the contribution rate can meet the potential increase of benefit expenditure, which will lead to higher premiums in the future.

To avoid additional costs to workers and employers, it is proposed that a percentage of EPF contribution be used to build this collective fund. The government also plays an additional role in ensuring the continuity of contribution for individuals without regular incomes, such as homemakers, unemployed individuals, and self-employed individuals with low and irregular wages. Once the desired coverage is achieved, the SIP has the potential to effectively provide the

**FIGURE 2: ESTIMATED INVESTMENT, BY SCHEME (RM), 2025-2060**



**FIGURE 3: ESTIMATED INVESTMENT, BY SCHEME (% OF GDP), 2025-2060**



**Once the desired coverage is achieved, the SIP has the potential to effectively provide the necessary pension floor to close the gap for the 60% without formal retirement arrangements.**

necessary pension floor to close the gap for the 60% without formal retirement arrangements. The benefit or annuity set at the poverty line per capita of RM600 is considered to be sufficiently high to cover basic needs during old age while at the same time sufficiently low to still encourage individuals to continue contributing to their existing retirement savings.

This proposed SIP route is expected to cost much less at RM1.8 billion than the RM28.8 billion it would cost to directly provide the universal tax-funded social pension for all elders as shown in figures 2 and 3. Based on the forecast, the large cost difference still holds even if we compare the annual cost of paying the premium today (0.09% of GDP) versus the cost of paying social pension tomorrow (0.3% of GDP) for the same age cohort.

Pension systems are crucial for income security in old age, but other social services like healthcare and housing also play a vital role. No single programme can address all challenges that arise from an ageing society. The proposed SIP scheme offers a step towards developing a sustainable and equitable pension floor in Malaysia that can insure against longevity risk and ensure old age-income security. While the fruit of SIP may only be seen long into the future, the seeds of change have to be sown now. ∞

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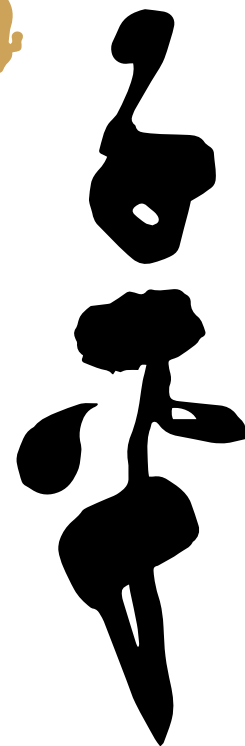
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11. As the name suggests, defined-benefit schemes are those where benefits of the schemes are predetermined, while in defined contribution schemes, the contribution rates are predetermined.

12. This is based on an expected investment return or interest rate of 4%.



# Artful Ageing: The Unstoppable Creative Journey of the Centenarian Artist Lim Tze Peng



Authored by THINK Editorial Team

Lim Tze Peng is one of Singapore's most significant artists and a living legend. He was born in 1921 to a family of farmers in Pasir Ris, Singapore. A graduate of Chung Cheng High School, Lim became a primary school teacher in 1949. Two years later, he became a school principal, a role he held until he retired in 1981.

Lim started to learn to paint in his twenties, but he didn't do so professionally until after his retirement. His repertoire of Chinese ink paintings, depicting post-independence Singapore, and his calligraphy work, have earned him local and international acclaim; including Singapore's prestigious Cultural Medallion in 2003.



**Singapore River Street Scene**  
Ink on rice paper  
2010

Lim's latest calligraphic creations are exceptional examples of his pioneering 'Nanyang' spirit. By creatively adding colour to calligraphy, Lim has developed a new expression that is modern while remaining true to preserving Chinese artistic tradition and culture.

For a closer look into Lim Tze Peng's life and work, THINK's editorial team ventured into an art gallery nestled in Singapore's city centre. There we met the gallery's owner and president of the Singapore Art Society, Terence Teo. A confidante of Lim for over four decades, Teo has met countless admirers and collectors of Lim's artwork. Amid a collection of stunning artwork and over a pot of perfectly brewed Chinese tea, Teo spent hours sharing anecdotes from their decades of friendship. Through Teo's stories, we hope to deepen our readers' appreciation for the tenacity and creative spirit of the centenarian artist.



**Singapore River Series – Serenity at the Docks**  
Ink on rice paper  
2021



Lim Tze Ping painting on site in the 60s

“ During his early years, Mr Lim focused on life paintings, which showcased his experiences in Singapore and his travels. This period saw the birth of his celebrated series — depicting the Singapore River, Chinatown, the island of Bali, and the quaint kampungs (Malay villages) in Pasir Ris, where he spent his childhood. As Mr Lim entered his eighties, however, outdoor painting became increasingly challenging. He then started to paint from memories and imagination, and his art took on a more profound purpose: expressing his innermost feelings. As a result, his work evolved to become bolder, increasingly colourful, and more abstract — a testament to his ever-adapting artistic vision. ”



**The Arrival**  
Ink on rice paper  
1970s



**Seaside**  
Ink on rice paper  
2003

“ Though Mr Lim is a self-taught artist — having never attended a formal art school — his high school art teacher, the accomplished Singaporean artist Mr Liu Kang, imparted essential foundational skills upon him.”

Mr Lim is respected for his wisdom, diligence, and kindness. Rarely does he speak ill of others, and his artistic prowess is evident in his constant exploration of new ideas. Both artists and calligraphers in our community hold him in high regard.



“ Mr Lim was always very passionate when we travelled together to different parts of the world to paint and draw. One such journey, two decades ago, took us to the mystical Angkor Wat. As our tour bus arrived, Mr Lim's excitement became obvious, and his anticipation for creating his next masterpiece was almost tangible. We got to the grand gate of a temple, and he saw some exquisite architecture he was eager to paint. He was in his 80s then, while I was significantly younger. I dutifully assisted in setting up his easel, standing by to ensure his comfort as we painted together. The rest of our group ventured deeper into the temple, but he remained wholly absorbed in his art. As Mr Lim completed his painting, time had vanished, leaving no opportunity to explore the temple further. Yet, he seemed satisfied and happy, for his canvas had beautifully preserved what stirred his artistic soul. ”



**Scene at Angkor Wat**  
Ink on rice paper  
2008

“ Over the past few years, periods of poor health led him to announce his intention to retire from painting. However, the moment he regained his strength, Mr Lim eagerly picked up his brushes to continue his lifelong artistic journey. What's truly inspiring is his relentless pursuit of growth and innovation, as he constantly strives to surpass his own creative boundaries.

With age, Mr Lim remains undeterred, exploring a myriad of artistic styles, mediums, and materials. He adapts to his changing physical abilities, available resources, and living conditions with grace and resilience. He once revealed, "If there's a next life, I still want to be an artist." This powerful statement is a testament to his unwavering passion for the world of art.



Lim Tze Peng working on the Singapore River Series at the age of 100.



**Inroad Series**  
Ink on rice paper  
2009



**Calligraphy**  
Ink on rice paper  
2014

遥夜泛清瑟，西风生翠萝。  
残萤委玉露，早雁拂银河。  
高树晓还密，远山晴更多。  
淮南一叶下，自觉老烟波。

*The night is long and cold; the west wind rustles the green vines.  
Fireflies rest on pearly dewdrops, while the early geese brush past the Milky Way in the autumn sky.  
At dawn, the tall trees seem denser, and the distant mountains become clearer under the sun.  
Here, on the southern banks of the Huai, a leaf falls on my head. I perceive the surging waves on Lake Dongting.*

“ In recent years, Mr Lim has developed a distinct art form known as *hu tu zi* (糊涂字), or “muddled calligraphy,” by merging painting and calligraphy. Within these pieces, the calligraphic characters become nearly indiscernible, engulfed by the unrestrained force of the brushstrokes that often abstractly convey the text’s original meaning.”



**Calligraphy**  
Ink on rice paper  
2019

酒逢醉返 *When wine is present, intoxication returns.*



**Calligraphy**  
Ink on rice paper  
2019

字乃心画  
*Calligraphy is the painting  
of the heart*

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Terence Teo and Lim Tze Peng

“ As a gallery owner, I've had the pleasure of selling many calligraphies and paintings by Mr Lim over the years. Despite his unwavering confidence in his own artistic abilities, he remains inquisitive about others' perceptions of his work and humbly seeks my advice and ideas occasionally. ”



**THINK**

# When we talk about ageing, are we talking about our future selves?



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