

MEDIA RELEASE

Date of Issue: 28 August 2024

IMH study shows decrease in prevalence of dementia and improvement in treatment gap among older adults in Singapore over the past decade.

1. The second Well-Being of the Singapore Elderly (WiSE) study, led by the National Healthcare Group (NHG)'s Institute of Mental Health (IMH), saw a decrease in the prevalence of dementia among older adults aged 60 years and above. It dropped from 10% (1 in 10 persons) in 2013 to 8.8% (1 in 11 persons) in 2023. The study also found that the treatment gap of dementia has improved by 19.1%-points since the last WiSE study, suggesting that more cases were being diagnosed and treated.
2. IMH initiated this nationwide cross-sectional study in 2022 to track changing trends in the prevalence of dementia and depression among older adults in Singapore in the last 10 years since the first landmark study in 2013. The study also examined the burden on caregivers of persons with dementia and the treatment gap of dementia (proportion of people who have the condition, but did not receive treatment for it).
3. The WiSE study was funded by the Ministry of Health (MOH) and involved clinicians and experts from other institutions, namely, MOH, Changi General Hospital, National University of Singapore, King's College London, and Greenwich University, London. It involved 2,010 participants (Singapore Citizens and Permanent Residents) aged 60 years and older, who were randomly selected from a national administrative database, regardless of their disease status or care needs. The participants' caregivers were also recruited, where possible, to act as informants. IMH researchers conducted face-to-face interviews from March 2022 to September 2023 to collect information on sociodemographic characteristics, activities of daily living and care needs of the participants. Physical and neurological examinations were also carried out as part of the study to assess cognition, memory and neurological functions.
4. While the prevalence of dementia has dropped, the WiSE study showed that the number of older adults with the condition rose from 51,934 in 2013 to 73,918 in 2023¹. This is largely due to the increase in the local older adult population during this period.
5. "Dementia is a leading cause of disability and care needs among older adults. It not only affects the health and quality of life of those who have it, but also places significant physical, emotional, and economic strain on families and caregivers," says Prof Chong Siow Ann, Senior Consultant, Research Division and Department of Psychosis, IMH, and principal investigator of the study. "Over the past decade, the Singapore government has introduced a slew of initiatives to promote active ageing, early detection and treatment

¹ The number of older adults with dementia was calculated by applying the prevalence rate to the older adult population size at the two time-points i.e. 2013 and 2023.

of chronic conditions that could contribute to cognitive impairment, and improve awareness of cognitive health. These efforts may have helped to bend the curve. As Singapore's population continues to age, the number of people with dementia will grow and this will pose a challenge in terms of healthcare resources and caregiver burden. It is important that we do not ease up, but instead continue to strengthen our efforts to reduce the impact of dementia."

6. "When we compare the characteristics of the population across the two studies, what stands out is the change in employment status and education level. We observed that more older adults in Singapore were employed and had higher education in 2023 as compared to 2013. Furthermore, the prevalence of stroke, which is a risk factor for dementia, has decreased from 2013 to 2023 according to the WiSE study. General preventive efforts, such as improved education, employment, healthier diet and lifestyle, as well as more targeted interventions like prevention of stroke and early rehabilitation of stroke patients could have lowered the dementia prevalence," says Dr Mythily Subramaniam, Assistant Chairman, Medical Board (Research), IMH and co-investigator of this study.

KEY FINDINGS

7. Dementia

a) Prevalence and treatment gap

- In 2023, 1 in 11 older adults (8.8%) aged 60 years and over had dementia, compared to 1 in 10 (10%) in 2013. The drop in prevalence was not statistically significant.
- Treatment gap has improved by 19.1%-points since the last WiSE study, with a significant decrease in the rate of undiagnosed dementia from 70.6% in 2013 to 51.5% in 2023. This means that more cases are being diagnosed and treated.

b) Factors associated with dementia

- The risk of dementia increased with age. Individuals aged 75 – 84 years and those above 85 years were 3.1 and 11.2 times more likely, respectively, to have dementia than those who were 60 – 74 years old.
- Retirees and homemakers were 11.3 times and 9.4 times more likely, respectively, to have dementia compared to those who were employed.
- Individuals with a history of stroke or depression were 6.5 times and 2.8 times more likely to have dementia.

c) Care needs

- Care needs were determined from the perspective of an unpaid caregiver, such as family members or friends who were looking after the older adult. This includes providing financial support and supervising older adults in their activities of daily living (e.g., grooming and feeding).

- Older adults with dementia had significantly higher care needs than those without the condition. Around 88% of the older adults with dementia required care compared to 15.6% of those without dementia.
- 62.3% of individuals with dementia required care “most of the time,” compared to 5.1% of those without dementia.

d) Care burden and psychological distress among caregivers

- Care burden refers to the physical, emotional, financial, and social strain that comes with providing care for someone with dementia, while psychological distress refers to the emotional or mental state of caregivers, such as feeling stressed or anxious.
- Caregivers of individuals with dementia had a significantly higher care burden than caregivers of those without dementia (37% vs. 18.2%).
- Psychological distress of caregiving was significantly higher among caregivers of individuals with dementia than those without (11.9% vs. 6.5%).

8. Depression

a) Prevalence

- The prevalence of depression increased from 3.7% (1 in 27) in 2013 to 4.4% (1 in 23) in 2023. This translates to 20,938 older adults in 2013 and 42,089 in 2023. This increase is not statistically significant.

b) Factors associated with depression

- Older adults who were divorced/separated (compared to those who were married) and those who had below-primary education (compared to those with tertiary education) had a higher likelihood of depression (3.6 and 4.2 times, respectively).

9. Dr Ng Li Ling, Senior Consultant, Department of Psychological Medicine, Changi General Hospital, says, “This 19.1% reduction in the treatment gap of dementia since the last WiSE study is extremely heartening. This positive change is the result of the multi-pronged efforts of various agencies, including healthcare institutions and social service organisations, and, in particular, the coordinated community-wide efforts to improve the awareness and knowledge of dementia. Memory clinics have been set up across Singapore for those experiencing memory complaints to receive assessments, specialised care, and support. The training of primary care providers in building capabilities has also better enabled them to identify the early signs of cognitive decline and symptoms of dementia, and not attribute it to ‘normal ageing’. These efforts have made a significant difference in reducing the treatment gap.”

COMPARISON OF FINDINGS BETWEEN WISE 2013 AND 2023 STUDIES FOR DEMENTIA

DEMENTIA		
Survey Year	WiSE 2013	WiSE 2023
Older adult population (aged 60 and above)	517,369	838,800
Prevalence	10.0%	8.8% ↓
(60 – 74 years)	3.4% (1 in 29)	3.0% (1 in 33)
(75 – 84 years)	21.6% (1 in 5)	18.2% (1 in 5)
(85 and above)	56.2% (1 in 2)	48.6% (1 in 2)
Number of older adults with dementia	51,934	73,918
Treatment gap	70.6%	51.5% ↓
Care needs	Needs care most of the time = 57.4% Needs care some of the time = 31.8%	Needs care most of the time = 62.3% ↑ Needs care some of the time = 25.6% ↓

– END –

About the Institute of Mental Health (IMH)

The Institute of Mental Health (IMH), a member of the National Healthcare Group, is the only tertiary psychiatric care institution in Singapore. Located on the sprawling 23-hectare campus of Buangkok Green Medical Park in the north-eastern part of Singapore, IMH offers a multidisciplinary and comprehensive range of psychiatric, rehabilitative and therapy services in hospital-based and community-based settings. The 2,000-bedded hospital aims to meet the needs of three groups of patients – children and adolescents (aged below 19 years), adults and the elderly. Besides providing clinical services, IMH dedicates resources to carry out mental health promotion and raise mental health literacy. IMH also leads in mental health research and training the next generation of mental health professionals in Singapore. For more information, please visit www.imh.com.sg.

Follow us on

[Facebook](#) | [LinkedIn](#) | [Instagram](#) | [YouTube](#)

Annex A

RESEARCHERS INVOLVED IN THE 2ND WELL-BEING OF THE SINGAPORE ELDERLY STUDY

Principal Investigator:

- Prof Chong Siow Ann, Institute of Mental Health

Site-Principal Investigators:

- Dr Ng Li Ling, Changi General Hospital

- A/Prof Rathi Mahendran, National University Health System

Co-Investigators:

- A/Prof Mythily Subramaniam, Institute of Mental Health
- Dr Chow Wai Leng, Ministry of Health
- Dr Tey Su Hui Jeannie, Ministry of Health
- Dr Asharani PV Nair, Institute of Mental Health
- Dr Fengyuan Yao, Institute of Mental Health
- Dr Edimansyah Abdin, Institute of Mental Health
- Mr Chua Boon Yiang, Institute of Mental Health
- Dr Janhavi Vaingankar, Institute of Mental Health
- Dr Harish Magadi, Institute of Mental Health
- Prof Martin Prince, King's College London
- Prof Paul McCrone, Greenwich University, London