

Dementia — a neglected non-communicable disease and leading cause of death

Lewis Arthurton*¹, Paola Barbarino*¹ Robert Anderson², Ben Schlaepfer², Nazak Salehi² and Martin Knapp²

1. Alzheimer's Disease International, London, UK
2. Care Policy and Evaluation Centre, London School of Economics and Political Science, London, UK

*co-lead authors

STANDFIRST

Dementia is largely excluded from discussion of non-communicable diseases, limiting its inclusion in health policies and allocation of resources, yet is already a leading cause of mortality and its impact is set to increase. Alzheimer's Disease International calls for changes in policies to address the impact of dementia now and in the future.

According to the WHO, more than 55 million people currently live with dementia, and this number is set to increase by almost threefold to 139 million by 2050¹. Furthermore, data reported by the WHO indicate that dementia is currently the seventh leading cause of death globally, and the fifth leading cause among non-communicable diseases (NCDs)². Despite these statistics, dementia continues to be neglected within the broader NCD agenda, with consequences for health policies that affect people living with dementia now and risk a lack of preparation for increases in the prevalence, impact and costs of dementia over the coming years.

Whereas conditions such as cancer, cardiovascular disease and diabetes mellitus receive substantial policy attention and resources, dementia is often excluded from discussions of NCDs, leading to its omission from key strategies and frameworks. Critically, this omission results in a deprioritized response, particularly in the areas of risk reduction and prevention, where interventions could strongly influence future incidence and prevalence⁹. The real-world consequences are considerable.

For example, in February 2024, the WHO published a draft report entitled *Strengthening services for NCDs in all-hazards emergency preparedness, resilience and response*³ ahead of the 4th United Nations High-level Meeting on NCDs in 2025. The aim of this report is to provide technical assistance to strengthen responses to NCDs in humanitarian emergencies. The report includes recommendations for diabetes mellitus, cancer, cardiovascular diseases and other NCDs, but dementia is not included. The report does not just lack recommendations or case studies on how to care for individuals with dementia during a crisis — the topic is entirely absent. Yet evidence from the ongoing conflict in Ukraine highlights the fact that people with dementia are one of the most vulnerable populations during humanitarian crises⁴. The situation faced by people with dementia in Ukraine was even raised during a parliamentary debate in the United Kingdom⁵.

Dementia is also being omitted from the discussion of NCDs beyond the context of humanitarian crises and at the highest level. For example, the WHO (2022) report entitled *Invisible numbers: The true extent of non-communicable diseases and what to do about them*⁶, which was published during the September 2022 United Nations General Assembly, included an analysis of the growing risk of death due to NCDs, but this analysis focused exclusively on causes of death below 70 years of age. Cardiovascular diseases, cancer, diabetes mellitus, chronic respiratory diseases and mental health were included, but conditions that particularly affect the rapidly growing global population of people aged >70 years⁷, including dementia, were ignored. Given that all-age mortality data indicate that

dementia accounts for a greater proportion of mortality than diabetes mellitus and mental illness each year¹, this omission is perplexing.

The importance of recognizing dementia as being among the NCDs with the highest mortality becomes clear when examining previous estimates of future mortality⁸. Extraction of estimates of future mortality for dementia at global and national levels enables comparisons to be made with other communicable diseases and NCDs.

On the basis of these projections, a different mix of NCDs emerges among the top predicted causes of mortality in 2040, and dementia takes a prominent position across all countries. Indeed, comparison of projected mortality figures for 143 diseases categorized as level 3 in the International Classification of Diseases shows that dementia is expected to be the third leading cause of death globally by 2040, surpassed only by ischaemic heart disease and stroke. At a national level, dementia is projected to be among the top 10 leading causes of death in 166 of the 195 countries and territories for which calculations are possible. Among these countries, it is projected to rank in the top five causes of death in 121, the top two in 53, and will be the leading cause of death in 19 countries. These data also demonstrate that low-income countries will also increasingly experience significant increases in dementia-related mortality.

Furthermore, projected data indicate that dementia will be the fifth leading cause of years of life lost globally by 2040, surpassed only by ischaemic heart disease, stroke, lower respiratory infections and chronic obstructive pulmonary disease. This projection challenges the misconception that dementia is solely a disease of older people and an end-of-life condition, and further highlights the importance of acknowledging dementia as an NCD with a major impact.

The omission of dementia from major health policy NCD frameworks will mean that adequate strategies are not developed, and adequate resources will not be allocated to cope with its growing impact. Without proactive measures, health and long-term care systems worldwide – indeed, societies and economies more broadly – will be unprepared to manage the projected increases in prevalence and mortality by 2040. The consequences will affect not just the older population but people of all age groups owing to the overall impact on society and, in particular, the high burden placed on family and informal caregivers.

We hope that as the body of evidence for the future impact of dementia grows, policy makers will respond accordingly with action and communication. The continued absence of dementia from NCD dialogue and policy undermines efforts to implement risk-reduction strategies, a barrier that is frequently encountered by Alzheimer's Disease International member associations. The omission also discourages allocation of resources to the development and deployment of pharmacological and non-pharmacological treatments for dementia, to care services, and to the support of family caregivers. Even now, dementia is not featuring in the public discussions ahead of the next UN General Assembly High-level meetings on NCDs, which are taking place throughout 2024 and 2025. Similarly, dementia was not expressly included in discussions at the WHO World Health Assembly in May 2024. We urge policymakers to reflect on the projected impact of dementia and to act — to ignore the challenge and remain unprepared would be unforgivable.

Acknowledgements

Lewis Arthurton and Paola Barbarino are employees of Alzheimer's Disease International.

The authors who performed the analyses reported in this paper as well as their contributions to the manuscript were funded by the Care Policy and Evaluation Centre, London School of Economics and Political Science.

The authors have no competing interests.

References

- ¹ World Health Organization (2021a) *The top 10 causes of death*. <https://www.who.int>.
- ² World Health Organization (2021b) *Global Status Report on the Public Health Response to Dementia*. Geneva: WHO <https://www.who.int/publications/i/item/9789240033245>
- ³ World Health Organization (2024) Strengthening services for NCDs in all-hazards emergency preparedness, resilience and response: WHO <https://www.who.int/publications/m/item/strengthening-services-for-ncds-in-all-hazards-emergency-preparedness--resilience-and-response>
- ⁴ Médecins Sans Frontières(2022) Ukraine: The toll of war on the elderly and people with disabilities: <https://www.doctorswithoutborders.org/latest/ukraine-toll-war-elderly-and-people-disabilities>
- United Nations (2021) Decade of Healthy Aging. <https://www.decadeofhealthyageing.org/>
- ⁵ Hansard (2024) Dementia Services in Ukraine Volume 743: debated on Wednesday 10 January 2024: <https://hansard.parliament.uk/commons/2024-01-10/debates/5FF4ACBF-833E-482C-A6D2-397E84844A9E/DementiaServicesInUkraine>
- ⁶ World Health Organization (2022) *Invisible numbers: The true extent of non-communicable diseases and what to do about them*. Geneva: WHO <https://iris.who.int/bitstream/handle/10665/362800/9789240057661-eng.pdf?sequence=1>.
- ⁷ United Nations (2022) World Population Prospects 2022. <https://population.un.org/wpp/>
- ⁸ Foreman KJ, Marquez N, Dolgert A, et al. (2018) Forecasting life expectancy, years of life lost, and all-cause and cause-specific mortality for 250 causes of death: reference and alternative scenarios for 2016–40 for 195 countries and territories. *The Lancet* 392:2052–2090.
- ⁹ Livingston, Gill et al. (2024) Dementia prevention, intervention, and care: 2024 report of the *Lancet* standing Commission. *The Lancet* 404:572 - 628

Table 1 | Published and projected causes of mortality and years of life lost in 2021 and 2040.

Rank	Cause of all-age mortality in 2021 ¹	Projected cause of all-age mortality in 2040 ⁸	Projected cause of years of life lost in 2040 ⁸
1	Ischaemic heart disease	Ischaemic heart disease	Ischaemic heart disease
2	COVID-19	Stroke	Stroke
3	Stroke	Alzheimer disease and other dementias	Lower respiratory infections
4	Chronic obstructive pulmonary disease	Chronic obstructive pulmonary disease	Chronic obstructive pulmonary disease
5	Lower respiratory infections	Lower respiratory infections	Alzheimer disease and other dementias
6	Trachea, bronchus and lung cancers	Chronic kidney disease	Chronic kidney disease
7	Alzheimer disease and other dementias	Diabetes mellitus	Road injuries

8	Diabetes mellitus	Tracheal, bronchus and lung cancer	Diabetes mellitus
9	Kidney disease	Hypertensive heart disease	Tracheal, bronchus and lung cancer
10	Tuberculosis	Liver cancer	Diarrhoeal disease