Cognitive impairment and dementia

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The increasing incidence of cognitive impairment and dementia is a major societal challenge, but new diagnostic and treatment options give cause for some optimism.

In recent decades, life expectancy in Norway has increased substantially - both overall and in terms of life expectancy free from disabilities. The changes apply to both men and women and across education levels (1). However, advanced age remains the most significant risk factor for mild cognitive impairment and dementia (2). Dementia leads to major upheaval, both for those with the disease and for their next of kin, and it has far-reaching societal and economic consequences. The average cost of health and care services for a person with dementia is estimated at NOK 2.9 million over an average course of disease of 8.1 years (3, pp. 52–54). If the costs of informal assistance, productivity losses and disease burden are also included, the total cost of dementia to Norwegian society in 2019 was NOK 96 billion (4, p.4).

In 2021, reliable data on the current prevalence of mild cognitive impairment and dementia were obtained for the first time through the Trøndelag Health Study (the HUNT Study), which recruits participants from the former Norwegian county of Nord-Trøndelag (2). The population is representative of Norway in many respects, but it does not include any cities.

The study by Gjøra et al., now being published in the Journal of the Norwegian Medical Association, reports an estimated prevalence of mild cognitive impairment and dementia in people aged 70 and over in Trondheim of 35.6 % and 16.2 % respectively (5). After
weighting for skewed attrition for age, sex, education and nursing home resident status, these figures are almost identical in the samples from Nord-Trøndelag and Trondheim. This strengthens the assumption that approximately one in every two people aged 70 or over in Norway has mild cognitive impairment or dementia.

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The number of people over the age of 70 in Norway will more than double by 2065, and will exceed 1.6 million in 2010. There is therefore every reason to prioritise the prevention, diagnosis and treatment of cognitive impairment and dementia. Dementia can have various causes, but Alzheimer’s disease is the most common. After few advancements over a long time span, there is now hope that we can obtain disease-modifying medications to treat this disease (6, 7). We therefore need reliable, easily accessible, cost-effective and minimally invasive diagnostic methods for Alzheimer’s disease. Blood-based markers have shown promising results. Plasma markers for tau pathophysiology, which are also being researched by the medical field in Norway, have been shown to correlate with Alzheimer’s disease pathology, distinguish Alzheimer’s disease from other types of dementia, and predict progression from normal cognition and mild cognitive impairment to dementia (8). In addition, Norwegian research on digital cognitive tests and digital follow-up of people with dementia and their families is currently ongoing. There are also plans to test medications that have been approved for other medical conditions, with support from Norway’s national programme for clinical treatment research in the specialist health service.

There are many modifiable risk factors that, collectively, are responsible for around 40 % of all dementia cases, such as low education level, high blood pressure, impaired hearing, smoking, obesity, depression, physical inactivity, diabetes, social isolation, high alcohol consumption, traumatic brain injury and air pollution. Adjusting these risk factors can potentially prevent or delay a dementia diagnosis and help reduce the age-specific incidence of dementia (9).

Cognitive impairment and dementia are complex phenomena, but with individual and societal measures, more people will hopefully be able to live a long life with optimal cognitive health even in old age.

REFERENCES


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