

Large study shows early-onset dementia more common than previously reported

July 25 2024



Credit: Pixabay/CC0 Public Domain

A new major study by the University of Eastern Finland, the University of Oulu and Neurocenter Finland explored early-onset dementia in the

working-age population in Finland. The study cohort was one of the largest in the world to date, and the findings were [published](#) on 24 July 2024 in *Neurology*.

Current epidemiological data on early-onset dementia is scarce and based on small study cohorts, with no recent data from Finland available. For the present study, researchers analyzed patient data registries of Kuopio and Oulu University Hospitals from 2010 to 2021, reviewing all working-age patients diagnosed with dementia during this time period.

Both incidence, which is the number of new cases, and prevalence, which is the total number of people affected, were explored. The patient charts of a total of 12,490 individuals were reviewed and classified into diagnostic groups using uniform criteria. The two hospitals diagnose practically all cases of early-onset dementia in their respective provinces, which makes the data highly robust.

Incidence of early-onset dementia is higher than previously reported

The study observed higher incidence rates of early-onset dementia than previously reported in international studies. In the age group 30–64 years, the incidence of early-onset dementia was 20.5 cases per 100,000 person years; and 33.7 cases per 100,000 person years in the age group 45–64 years.

Alzheimer's disease was the most prevalent subtype (48%), followed by frontotemporal dementia spectrum disorders (23%), and Lewy body spectrum disorders (6%). These numbers are higher than in previous smaller publications from other countries.

"The higher incidence rates observed in our study may be attributed to

our methodology, which allowed us to capture nearly all EOD cases from the study areas. Additionally, heightened awareness of [dementia](#) among the public and [health care professionals](#) in Finland may also contribute to the high number of diagnosed cases," says Associate Professor Eino Solje of the University of Eastern Finland, the study Principal Investigator (PI).

"A strength of the present study is that all diagnoses were retrospectively and manually reviewed from patient charts, allowing for the removal of incorrect diagnoses and also the consideration of diagnoses that changed during the follow-up period," Solje says.

The researchers found that in the working-age population, the incidence of Alzheimer's disease increased consistently, while the incidence of other dementias remained unchanged.

"The incidence of Alzheimer's disease nearly doubled. This cannot be explained simply by better diagnostics and earlier seeking of treatment, as we did not see an increase in the incidence of other dementias," says Docent Johanna Krüger, PI of the study at the University of Oulu, the first author of the article.

A new model for collaboration

The study is the first from an extensive project that combines exceptionally broad real-life patient data with various registries.

The project involves unique collaboration between the University of Oulu and the University of Eastern Finland, as well as across different scientific disciplines, involving, e.g., scholars of medicine and law.

"Combining extensive patient data with various registries enables a higher standard of science. For instance, we are now seeing that data

from carefully analyzed patient charts yields very different results than mere registry-based data," notes Professor Mikko Aaltonen from the University of Eastern Finland Law School.

The project is also led in a new way. Research is funded by companies, which also have the opportunity to engage in dialogue in the project's scientific steering committee, under the coordination of Neurocenter Finland.

"The model makes it possible to leverage private sector resources in the implementation of scientific projects that will benefit all. With Neurocenter Finland coordinating collaboration between the different parties, researchers can better devote their time to solving scientific problems," says Eero Rissanen, Director of Neurocenter Finland.

More information: Johanna Krüger et al, Incidence and Prevalence of Early-Onset Dementia in Finland, *Neurology* (2024). [DOI: 10.1212/WNL.0000000000209654](https://doi.org/10.1212/WNL.0000000000209654)

Provided by University of Eastern Finland

Citation: Large study shows early-onset dementia more common than previously reported (2024, July 25) retrieved 26 July 2024 from <https://medicalxpress.com/news/2024-07-large-early-onset-dementia-common.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--