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# Prevalence of dementias in a cohort of people with intellectual disability and general population – a register-based study

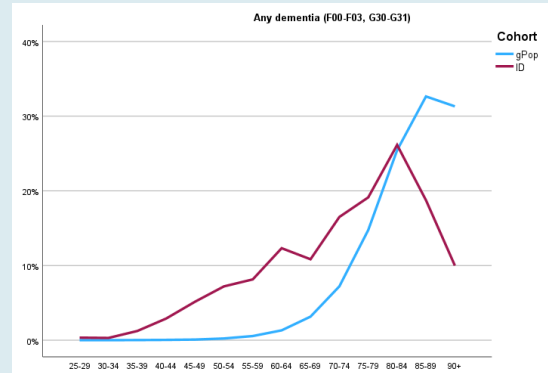
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## Conclusion

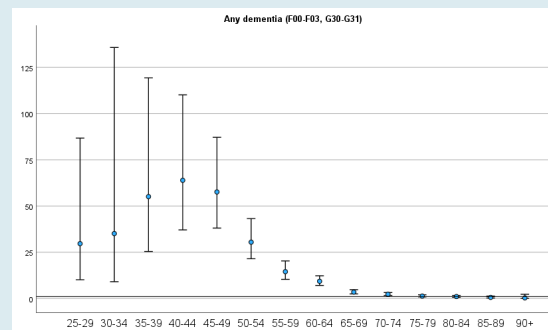
- People with intellectual disabilities (ID) have greater risks of dementia, overall as well as for specific diagnoses, in all age groups except 65+.
- People with ID were younger at their first diagnosis recorded during the study period.
- This needs further attention both clinically and in research to clarify diagnostic challenges and clinical assessments.

## Background & aim

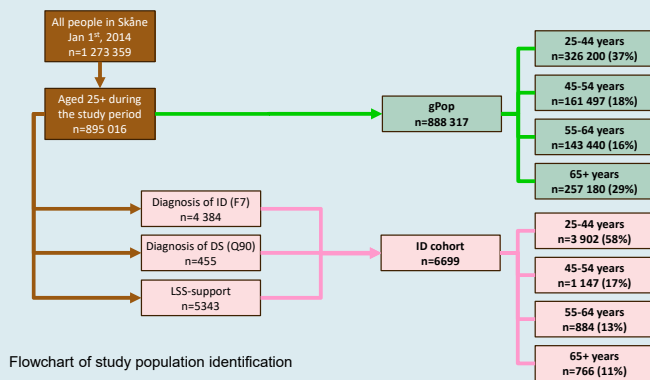
Several studies have shown that people with intellectual disabilities (ID) have more comorbidities and health care utilization than the general population. Previous research suggests that it could be difficult to diagnose dementia in people with ID. This may be due to communication problems, and lack of access to healthcare facilities used by the general population. Nonetheless, people with ID are believed to have an early onset of aging and thus, early onset dementia. Only a few large registry-based studies have compared disease prevalence among people with ID to that in the general populations, and none have investigated the prevalence of dementia. Therefore, this study aimed to explore differences in prevalence of dementia and age at first diagnosis between people with ID and the general population in Skåne, the southernmost region of Sweden.



Prevalence of dementia by five-year age categories



Relative risks (dots) with 95% confidence intervals (lines, some are interrupted) for ID vs gPop



Flowchart of study population identification

## Methods

We identified all people 25+ years living in Skåne on January 1st, 2014. People with diagnosis of ID or Down syndrome, or with LSS support, were included in the ID cohort. The remaining people comprised the gPop (general population) cohort.

We identified all people with at least one diagnosis of F00 (dementia in Alzheimer disease), F01 (vascular dementia), F02 (dementia in other diseases classified elsewhere), F03 (unspecified dementia), G30 (Alzheimer disease), or G31 (other degenerative diseases of the nervous system, not elsewhere classified) during the study period (2014-2021). Analyses were performed using Poisson regression, estimating relative risks (RRs) with 95% Confidence Intervals (CIs). Differences in mean ages were assessed using linear regression models.

## Results

- Adults (25-44 years) with ID were more likely to have any diagnosis of dementia (F01-03, G30-31) (RR 44.1, 95% CI 29.8-65.4).
- More specifically, adults with ID were at greater risks of being diagnosed with Alzheimer's Disease (G30) (RR 132.4, 95% CI 64.3-272.7), unspecified dementia (F03) (RR 132.4, 95% CI 64.3-272.7) as well as other degenerative diseases of the nervous system (G31) (RR 30.4, 95% CI 13.5-68.3).
- Increased risks were seen in all age groups except 65+ years.
- People with ID were younger at first diagnosis recorded during the study period.

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