

Dementia Subtypes And Their Association With Survival And Causes Of Death In Nursing Home Residents

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Conclusion

- Survival after nursing home admission did not differ significantly between dementia disorders after adjustment for demographic and clinical factors.
- Advanced stage of dementia, overall health status and comorbidity burden may be more important determinants of mortality than the dementia disorder itself

Aim

To describe and compare all-cause mortality and causes-of-death among nursing home residents with different dementia disorders.

Methods

This nationwide, registry-based study used data from the Swedish Registry for Cognitive/Dementia Disorders (SveDem) spanning from 2012 to 2021.

The cohort included 3 522 nursing home residents diagnosed with different dementia disorders (64.8% female) with a median age of 83.1 years (SD 7.5 years).

All-cause mortality was analysed using Kaplan–Meier methods and Cox proportional hazards regression. Causes-of-death were described overall and by dementia diagnosis.

Results

All-cause mortality

Median survival following nursing home admission was 3.75 years (interquartile range [IQR] 2.25–5.84).

In Alzheimer’s disease (AD) survival was a higher (3.91 years), shorter survival in vascular dementia (VaD) (3.31 years) and Lewy body dementia (LBD) (3.37 years).

After adjustments (age, sex, comorbidity burden and medication use) there were no differences in survival between the dementia disorders. (Table 1).

Nursing home residents with VaD and LBD had a higher cumulative incidence of death compared with those with AD, such as residents with frontotemporal dementia (FTD) and other dementia types appeared to have the lowest cumulative incidence of death (Figure 1).

	N (%)	Median survival, years (IQR)	Crude HR (95% CI)	Adjusted HR ¹ (95% CI)
All dementias	5 322 (100)	3.75 (2.25–5.84)		
Alzheimer’s disease	2 523 (47.4)	3.91 (2.30–6.01)	Ref.	Ref.
Vascular dementia	1 072 (20.1)	3.31 (1.97–5.56)	1.20 (1.09-1.32)	1.02 (0.92-1.13)
Lewey body dementia	160 (3.0)	3.37 (2.25–4.52)	1.28 (1.02-1.60)	1.09 (0.85-1.40)
Frontotemporal dementia	65 (1.2)	4.55 (2.33–6.17)	0.81 (0.55-1.17)	1.12 (0.77-1.64)
Dementia underspecified	1 350 (2.9)	3.73 (2.38–5.64)	1.09 (1.00-1.20)	1.02 (0.93-1.12)
Other dementia types	152 (2.8)	4.86 (3.05–7.36)	0.76 (0.60-0.97)	0.90 (0.70-1.16)

Table 1. Number of events, median survival time, and hazard ratios for mortality nursing home residents with different dementia disorders

¹Variables included in the adjusted model: dementia diagnosis, age, sex, Charlson Comorbidity Index and medication

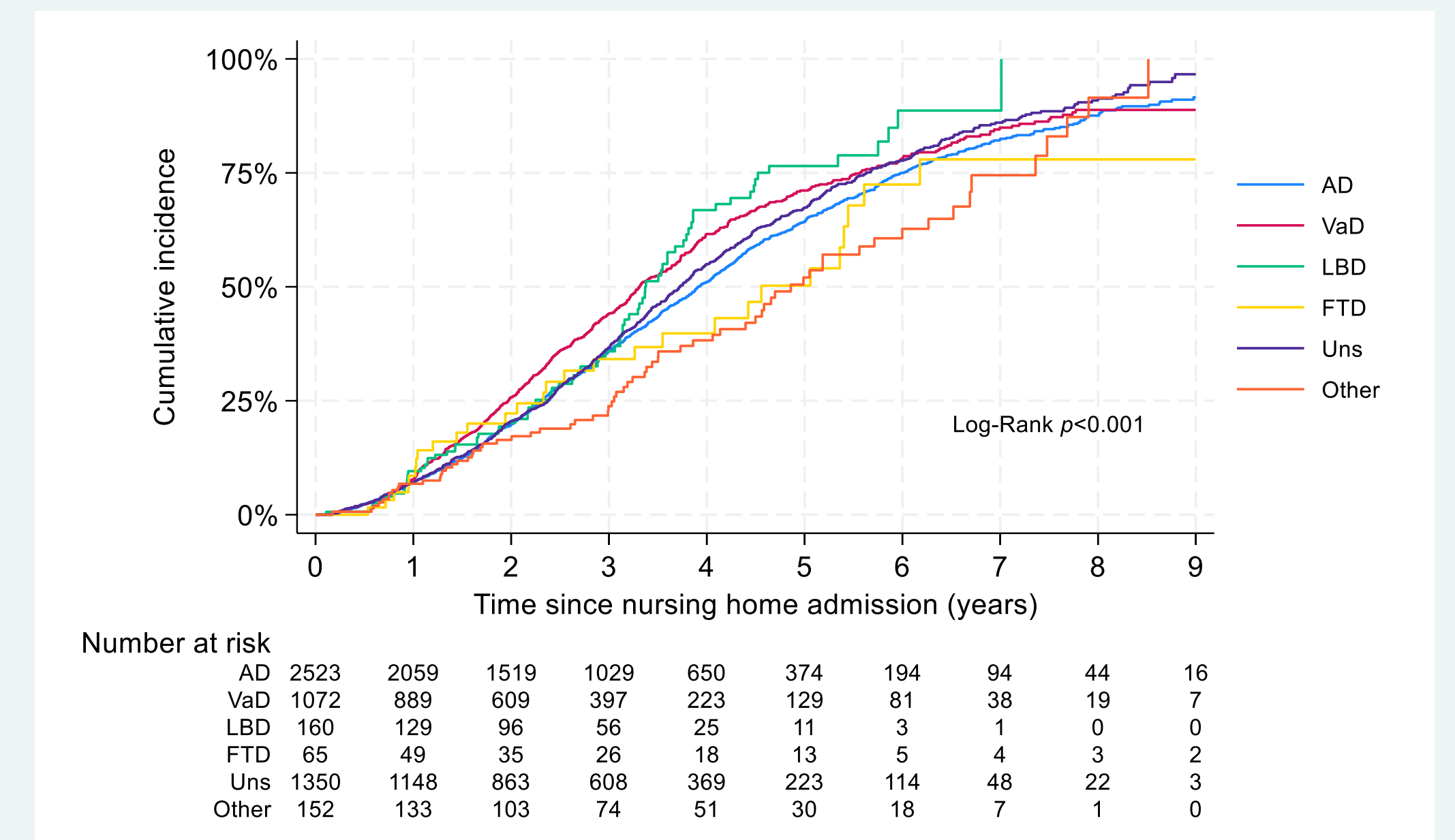


Figure 1. Kaplan–Meier estimates of cumulative incidence of death following nursing home admission, stratified by dementia disorder. Numbers at risk are shown below the x-axis.

Causes-of-death

Overall, dementia was the leading underlying cause-of-death (50.1%), followed by cardiovascular disease (24.6%) and infections (7.8%). The distribution of causes-of-death differed across dementia disorders (Figure 2).

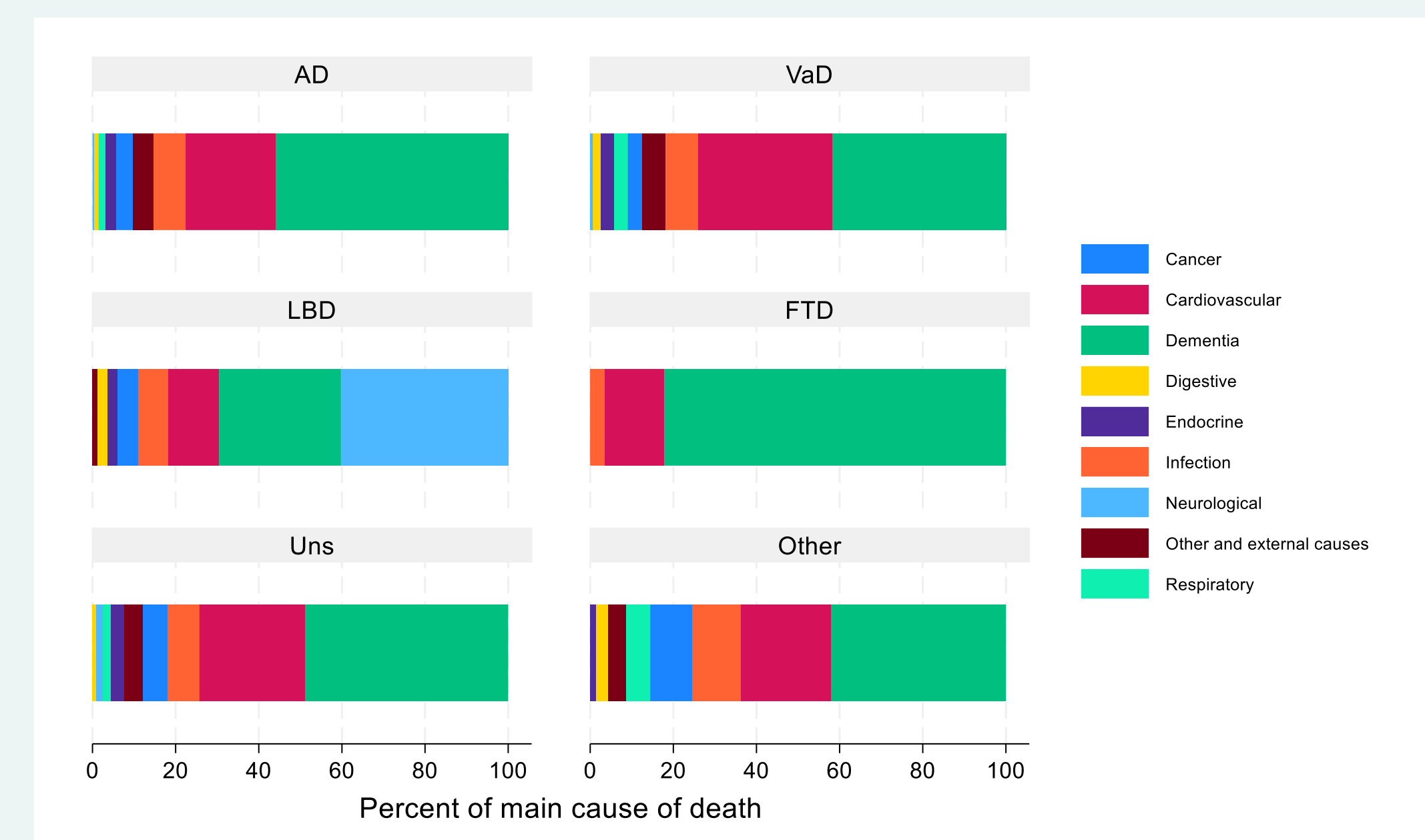


Figure 2. Distribution of causes of death across dementia disorder.



Please contact me if you have any questions about my research or SveDem!

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