

Cognitive Impairment, No Dementia And Hospitalizations: The Role Of Formal And Informal Care

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CONCLUSIONS

Older adults with cognitive impairment had higher risk of avoidable hospitalization. Formal care use appeared to attenuate this risk, highlighting the importance of accessible, coordinated care for cognitive impairment.

BACKGROUND

Older adults with cognitive impairment, no dementia (CIND) may have an increased risk of hospitalization before dementia develops. However, evidence on avoidable hospitalization and whether formal and informal care modify this risk remains limited.

RESEARCH QUESTIONS

- Is CIND associated with hospitalizations?
- Does CIND accelerate time to first hospitalization?
- Do formal and informal care attenuate these associations?

STUDY DESIGN

- Population-based cohort study using The Swedish National study on Aging and Care in Kungsholmen (**SNAC-K**)
- Baseline: **2001–2004**; follow-up until **2016**

EXPOSURE

- **CIND:** No dementia. Cognitive performance ≥ 1.5 SDs below age group-specific means in at least 1 of 5 cognitive domains

OUTCOMES

- First **avoidable (AH)** and **non-avoidable (non-AH)** hospitalization identified from the Swedish Patient Register

CARE USE

- **Formal care:** home social care and home healthcare
- **Informal care:** support from family, friends, or volunteers

RESULTS

- Among 3,009 dementia-free older adults (mean age 73.2y; 63.1% female), of whom 701 (23.3%) had CIND at baseline.
- CIND was associated with an 18% higher risk of AH (**Table 1**).
- Participants with CIND experienced hospitalization approximately 1 year earlier than those without CIND (**Figure 1**).
- CIND was associated with higher risk of AH among non-users, but lower risk among users of formal care (**Table 2**).

Table 1. Association of CIND with hospitalization.

CIND status	Incidence rate per 100 person-years	HR (95% CI)
Avoidable hospitalization		
No CIND	2.84	Reference
CIND	4.36	1.18 (1.01–1.37)
Non-avoidable hospitalization		
No CIND	11.30	Reference
CIND	14.34	0.99 (0.90–1.09)

Flexible parametric survival models adjusted for sex, education, chronic disease count, living alone, social network, smoking, alcohol consumption, and BMI

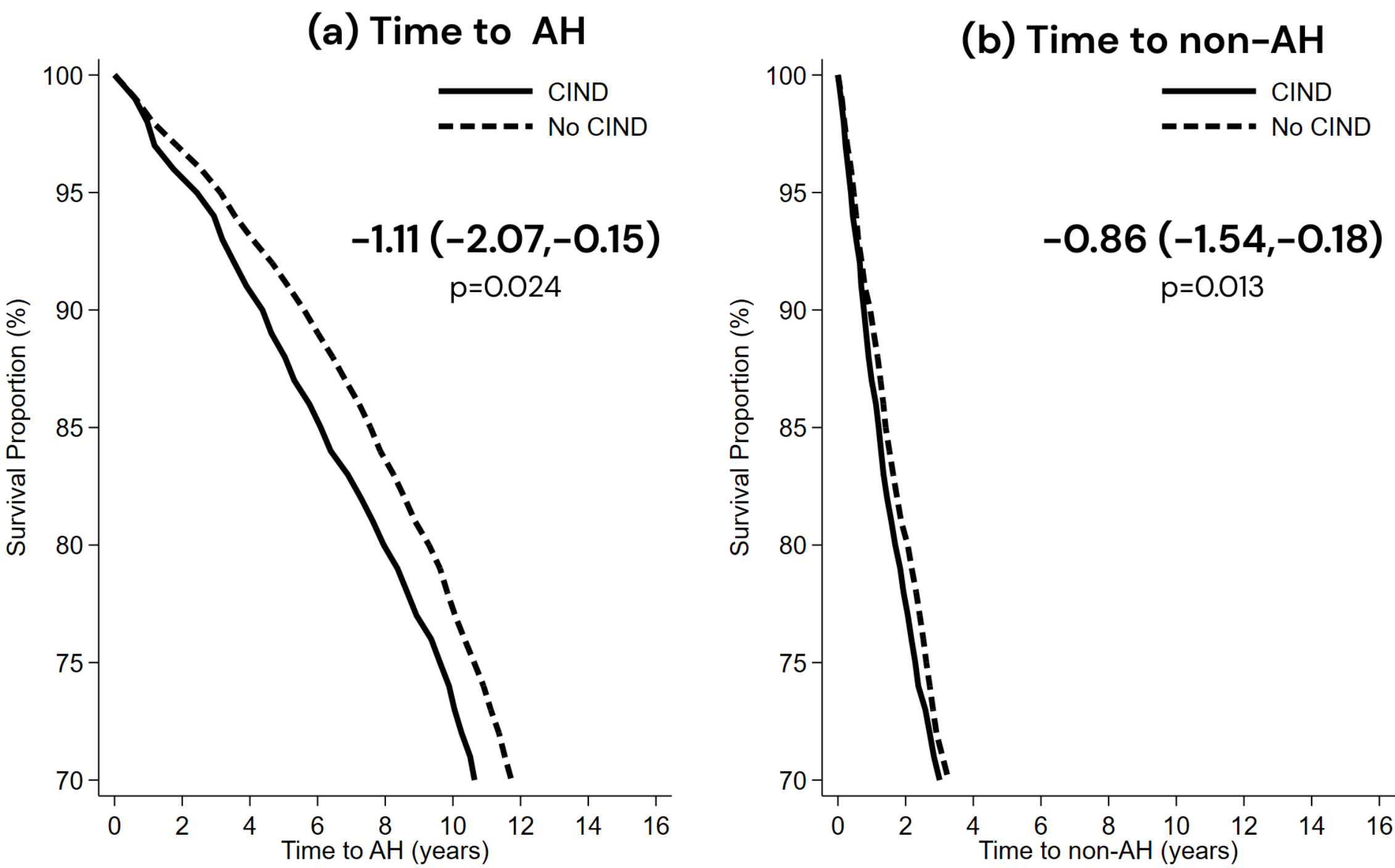
Table 2. Stratified analyses by care use.

CIND status	Formal care use				Informal care use			
	N	HR (95% CI)	N	HR (95% CI)	N	HR (95% CI)	N	HR (95% CI)
Avoidable hospitalization								
No CIND	2074	Reference	234	Reference	2036	Reference	272	Reference
CIND	576	1.37 (1.16–1.62)*	125	0.62 (0.44–0.88)*	587	1.22 (1.03–1.45)	114	0.92 (0.65–1.30)
Non-avoidable hospitalization								
No CIND	2074	Reference	234	Reference	2036	Reference	272	Reference
CIND	576	1.06 (0.95–1.18)	125	0.75 (0.59–0.96)	587	0.98 (0.88–1.09)	114	1.02 (0.80–1.32)

Flexible parametric survival models adjusted for sex, education, chronic disease count, living alone, social network, smoking, alcohol consumption, BMI, and the other type of care use

* Significant multiplicative interaction between CIND and care use

Figure 1. Time to first hospitalizations



Laplace regression models adjusted for sex, education, disease count, living alone, social network, smoking, alcohol consumption, and BMI.

FULL TEXT



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