

Is antidepressant use risk for head injuries in persons with Alzheimer's disease – matched cohort study

Sirpa Hartikainen
Professor of Geriatric Pharmacotherapy
University of Eastern Finland



CONFLICT OF INTEREST DISCLOSURE

I have the following potential conflicts of interest to report

- Lecture fee from MSD
- Lecture fee form Professio

Introduction

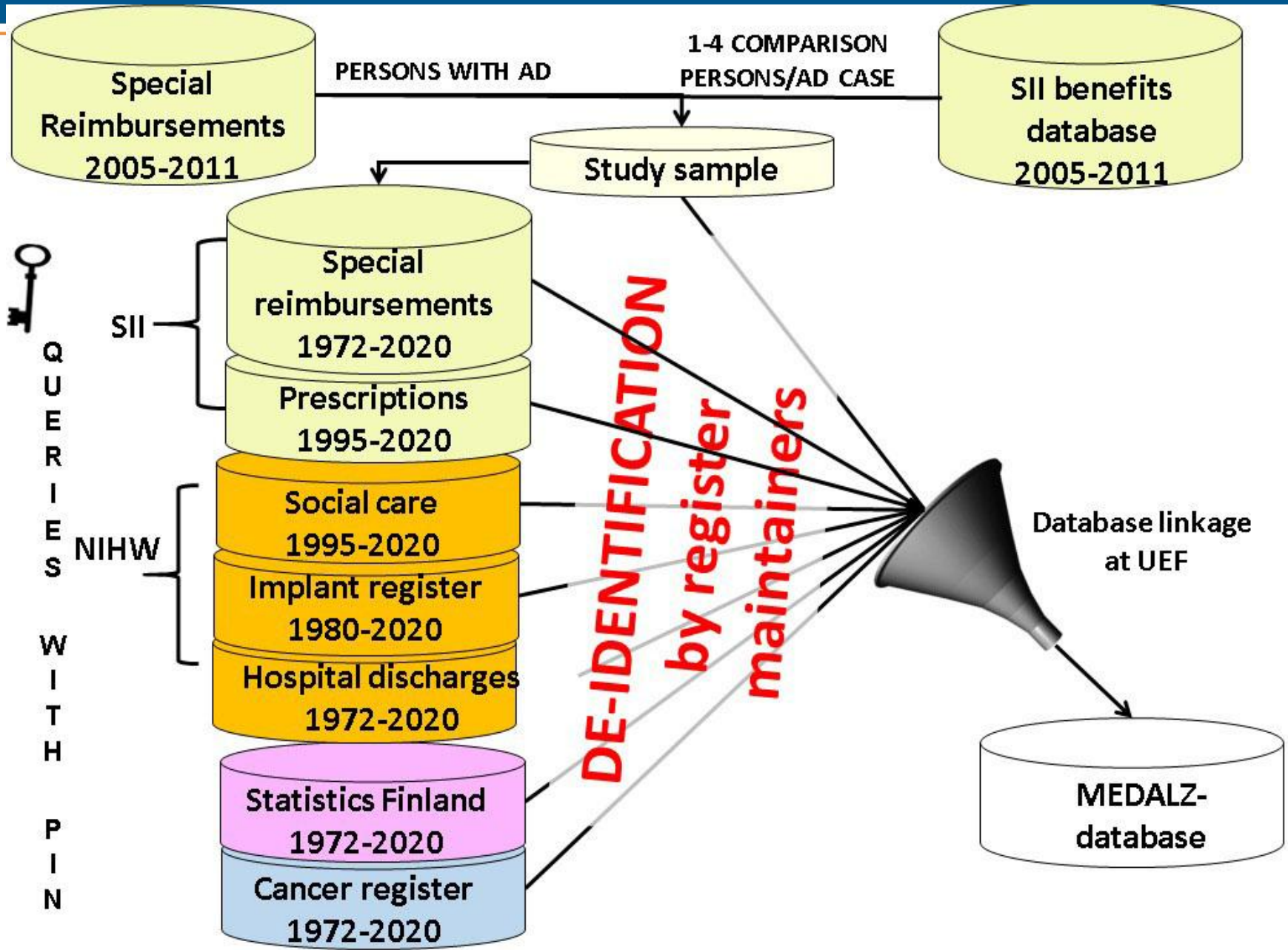
- All psychotropic drugs are associated with an increased risk of falls and injurious falls among older persons
- Older persons are at increased risk for traumatic brain injury (TBI) (Fu et al. 2015)

Objective

- To investigate the risk of head and brain injuries associated with antidepressant use among community-dwelling persons with Alzheimer's disease

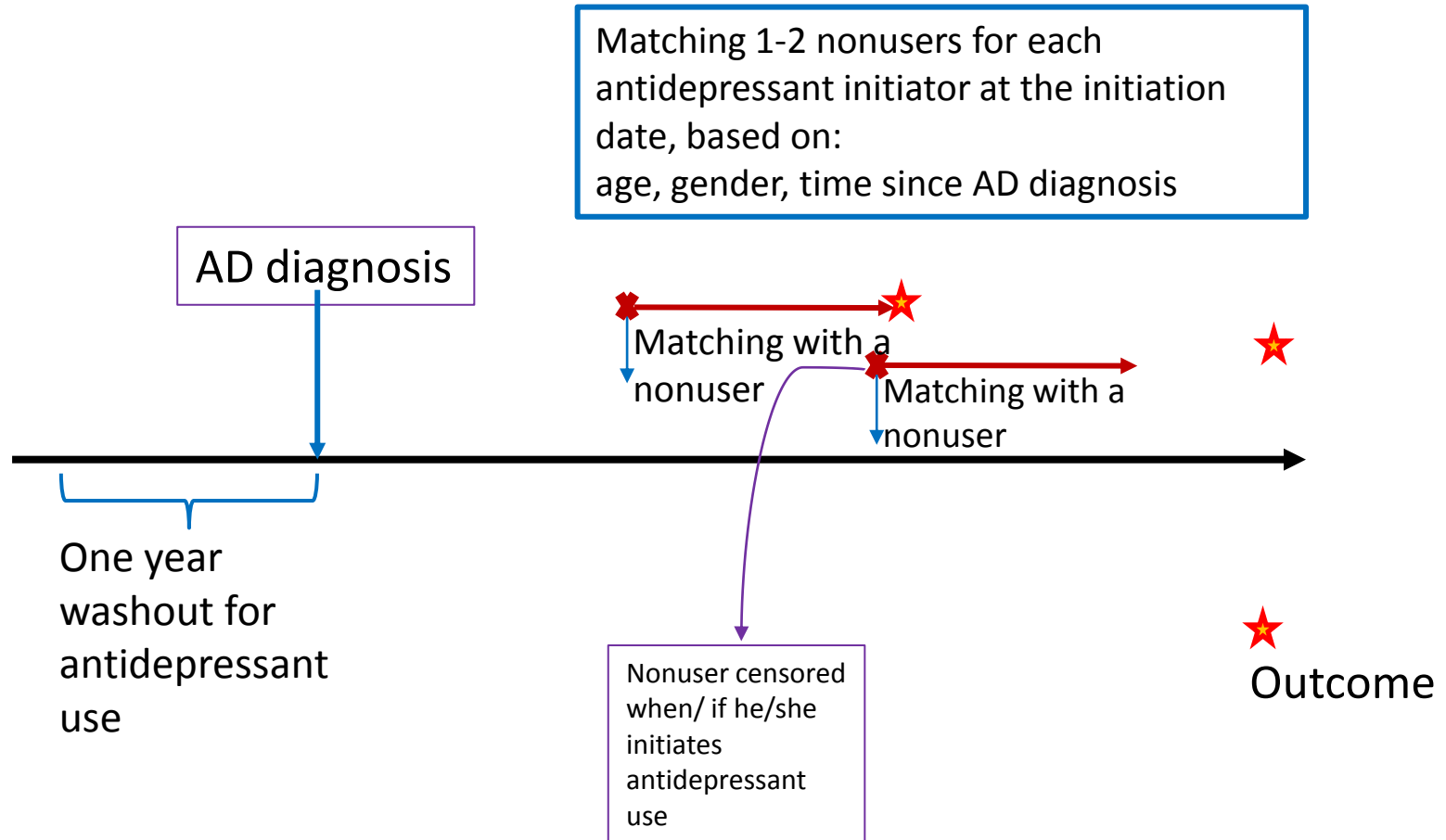
MEDALZ cohort

- All persons diagnosed with Alzheimer's disease (AD) in Finland 2005-2011, based on Finnish health-care registers N=70,718



Study design

-matched cohort among AD persons



Exposure and outcomes

- Antidepressant use was classified by ATC-codes
 - Any antidepressant (N06A),
 - SSRIs versus other antidepressants
- Diagnosis according ICD-10
 - Head injuries (S0*)
 - Traumatic brain injuries (TBIs, S06 Intracranial injury)
 - from Hospital Discharge and Causes of Death registers
- Cox proportional hazard models adjusted by age, gender, comorbidities and drug use

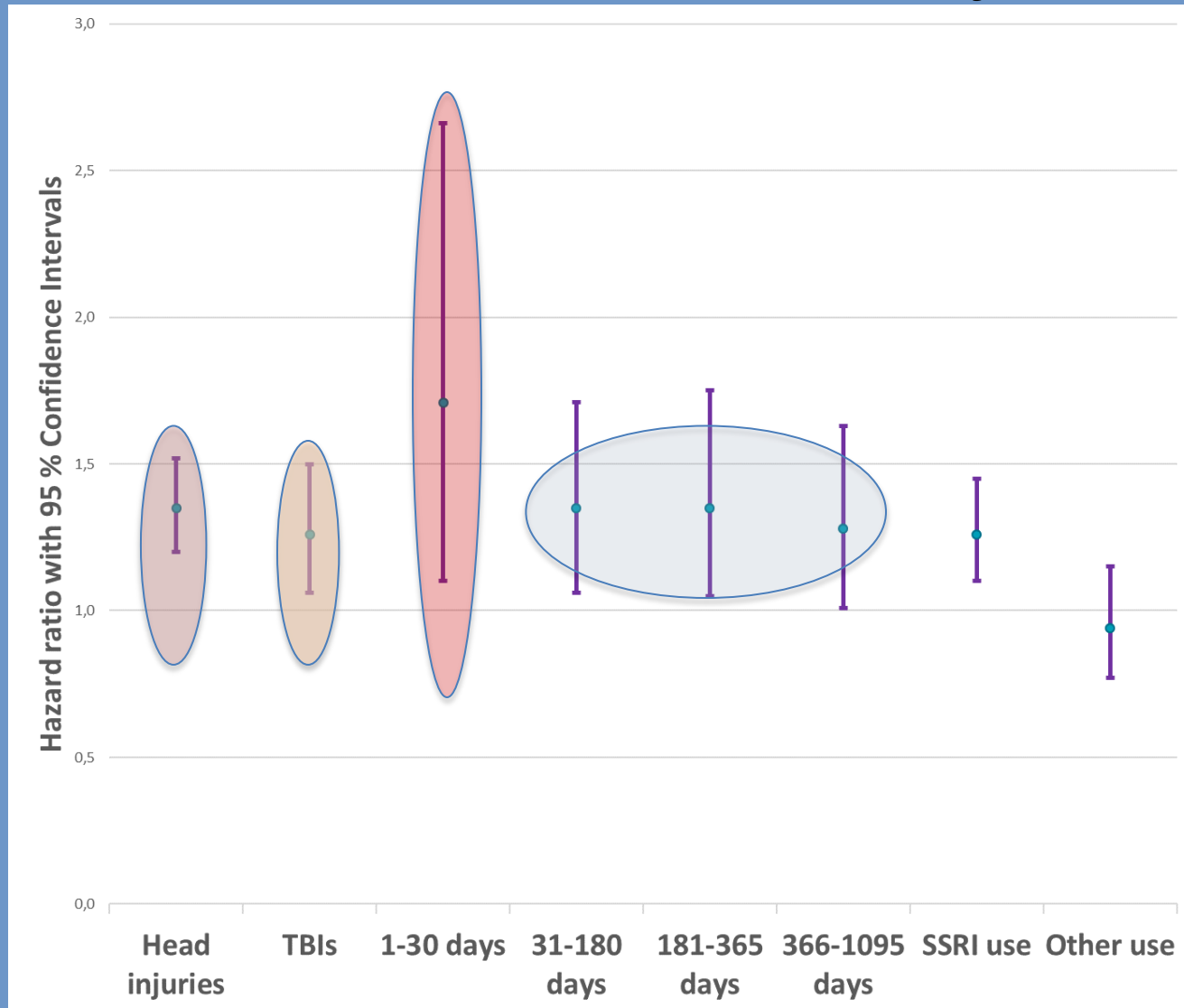
Results

- 10,910 new antidepressant users and 21,820 matched nonusers were included
 - 69% women, mean age of antidepressant users and nonusers was 79.5 (*due to matching*)
 - Median follow-up 249 days (IQR 77-642) for users and 656 days (IQR 316-1155) for nonusers
- 1,373 head injuries were recorded and 677 (49%) of them were TBIs

Results

- Age-adjusted head injury rate per 100 person-years was
 - 2.98 (95% CI 2.49-3.06) during antidepressant use
 - 2.43 (95% CI 2.06-2.35) during nonuse
- Age-adjusted TBI rate per 100 person-years was
 - 1.33 (95% CI 1.13-1.53) during antidepressant use
 - 1.10 (95% CI 1.00-1.20) during nonuse

Hazard ratio on antidepressant use and head and traumatic brain injuries



HR for head injuries is

HR for TBIs

Duration of use and antidepressant classes

Conclusions

- Among persons with Alzheimer's disease antidepressant use was associated with severe injurious falls, causing head or brain injuries
- Antidepressants seem not to be "safer choice" for treating neuropsychological symptoms of dementia

Published in Alzheimer's Research & Therapy
2017

The team working with this article

Heidi Taipale, Marjaana Koponen, Antti
Tanskanen, Piia Lavikainen, Reijo Sund, Jari
Tiihonen, Sirpa Hartikainen

Thank you for your attention!



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