

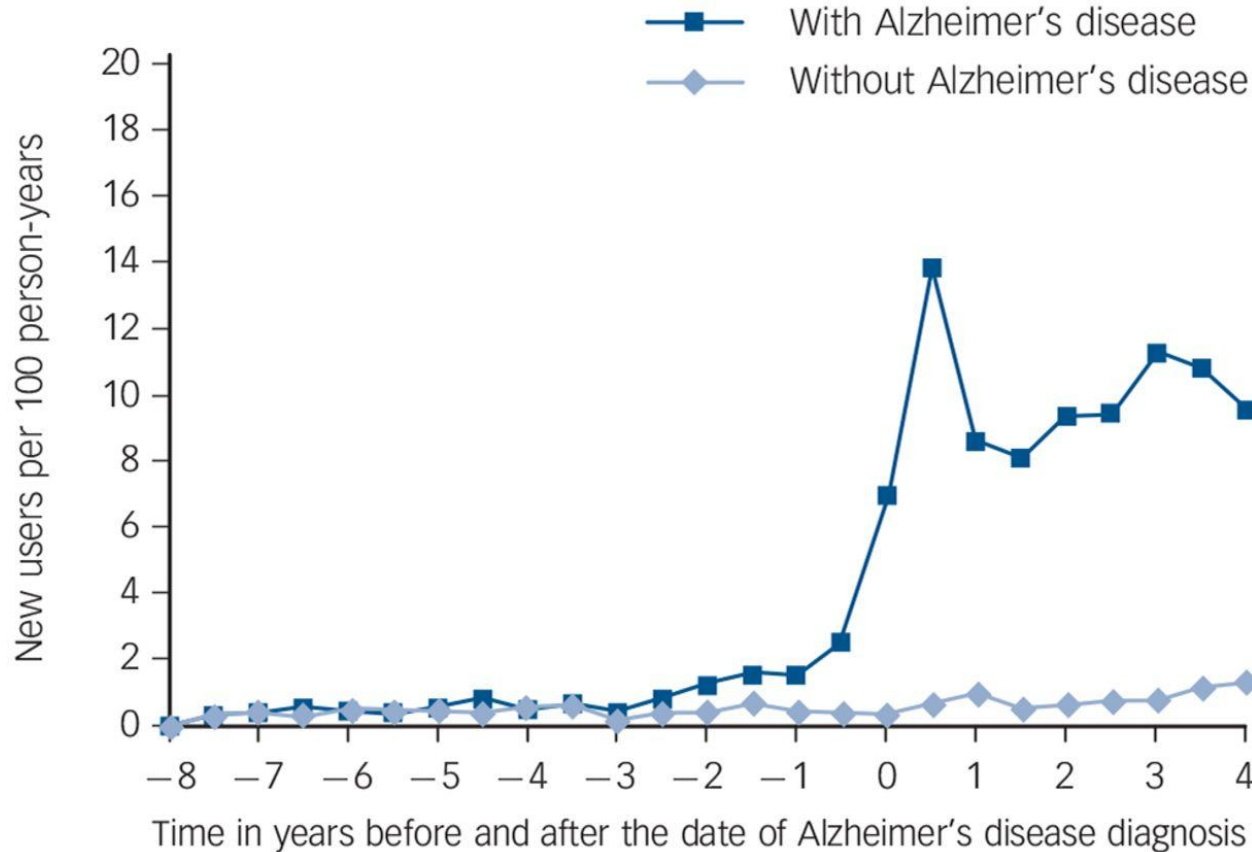
**Impact of opioid initiation on
antipsychotic and benzodiazepine and
related drug (BZDR) use among
persons with Alzheimer's disease
–an interrupted time series analysis**

Aleksi Hamina, MSc (Pharm)



No conflicts of interest to report

Neuropsychiatric symptoms in AD are common – so is symptomatic pharmacotherapy



Does treating pain decrease neuropsychiatric symptoms?

- Yeah, maybe
 - Mixed, but overall positive results

Manfredi et al. *Int J Geriatr Psychiatry*. 2003 Aug;18(8):700-5.

Husebo et al. *BMJ*. 2011 Jul 15;343:d4065

Chibnall et al. *J Am Geriatr Soc*. 2005 Nov;53(11):1921-9.

Husebo et al. *Am J Geriatr Psychiatry*. 2014 Jul;22(7):708-17.

Husebo et al. *Int J Geriatr Psychiatry*. 2014 Aug;29(8):828-36.

Does opioid initiation impact the use of antipsychotics and BZDRs?

70,718 community-dwelling
persons with AD (2005-2011)

Matched cohort of
non-initiators

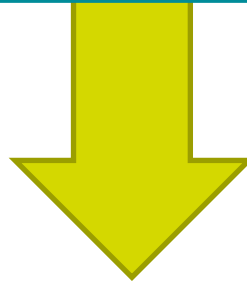


MEDICATION USE &
ALZHEIMER'S DISEASE

Opioid initiators in
2010-2011

Nationwide
Prescription Register
Hospital Discharge Register

Tolppanen et al BMJ Open.
2016 Jul 13;6(7):e012100



Nationwide Prescription Register

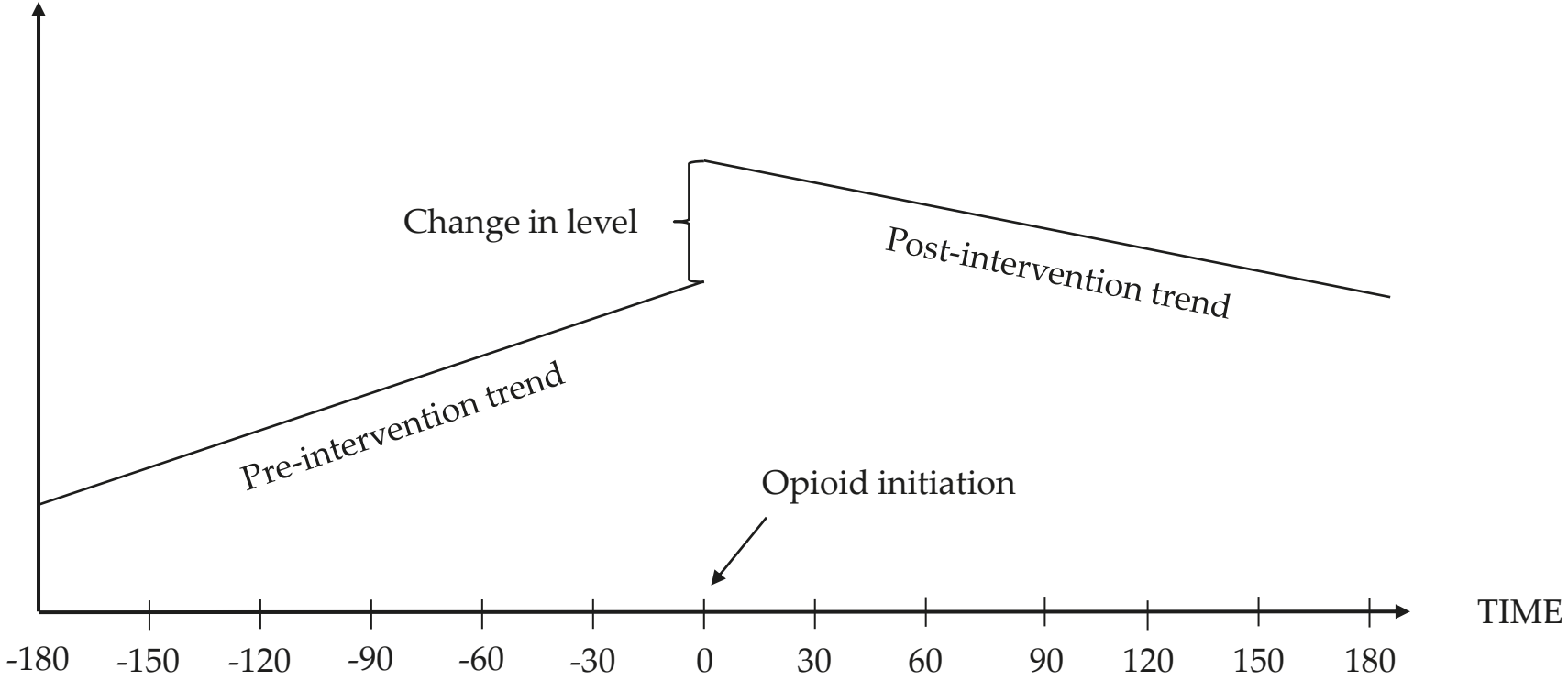
- No over-the-counter (OTC) medicines
- Only Reimbursed medicines

Hospital Discharge Register

- No medicines during hospitalization

Methods

OUTCOME
(DRUG USE PREVALENCE)

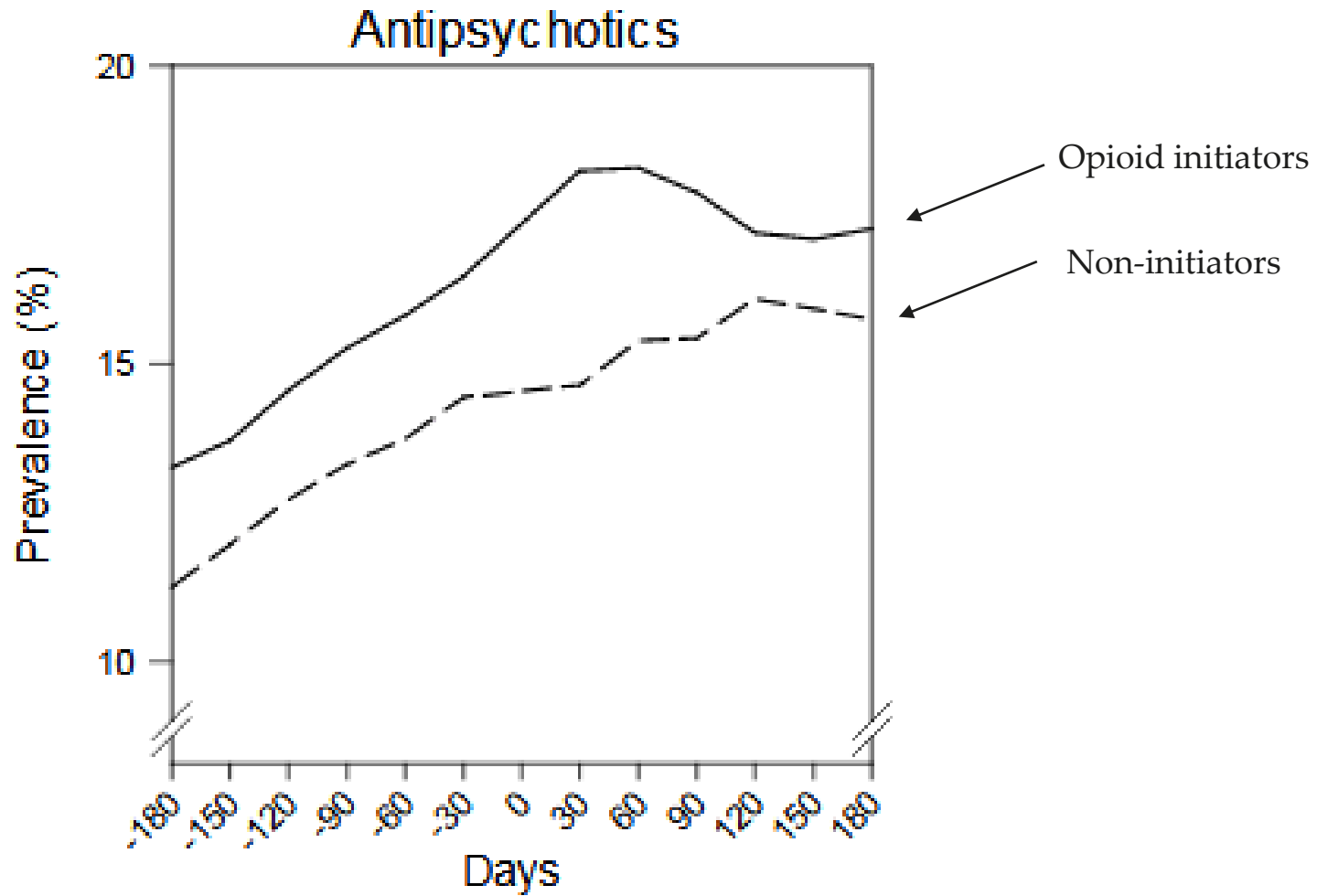


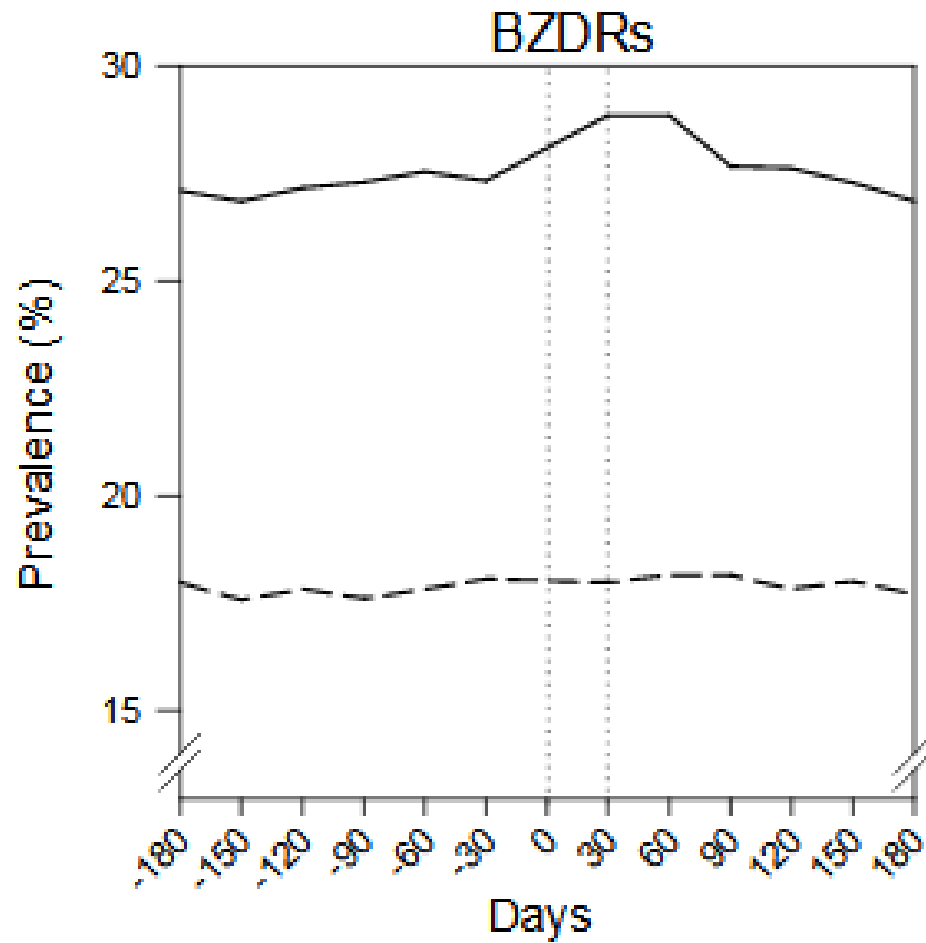
Results - Study population

- 3,327 opioid initiators
- 3,325 non-initiators

- Mean age 82.2 (SD 6.9 years)
- 68% were women

- All studied comorbidities were more common among opioid initiators
 - Eg. prevalence of cancer 8.5% vs. 4.9%

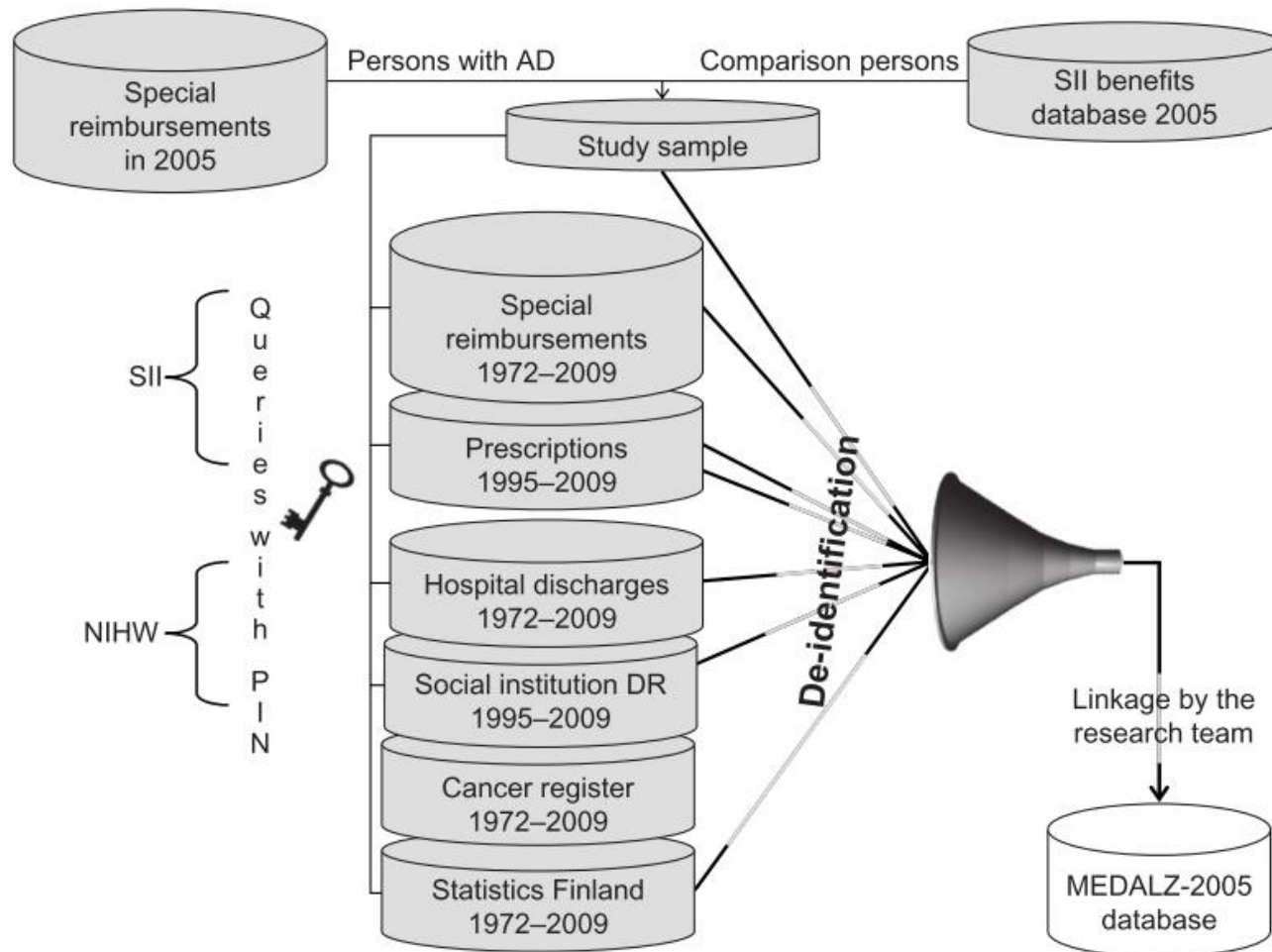


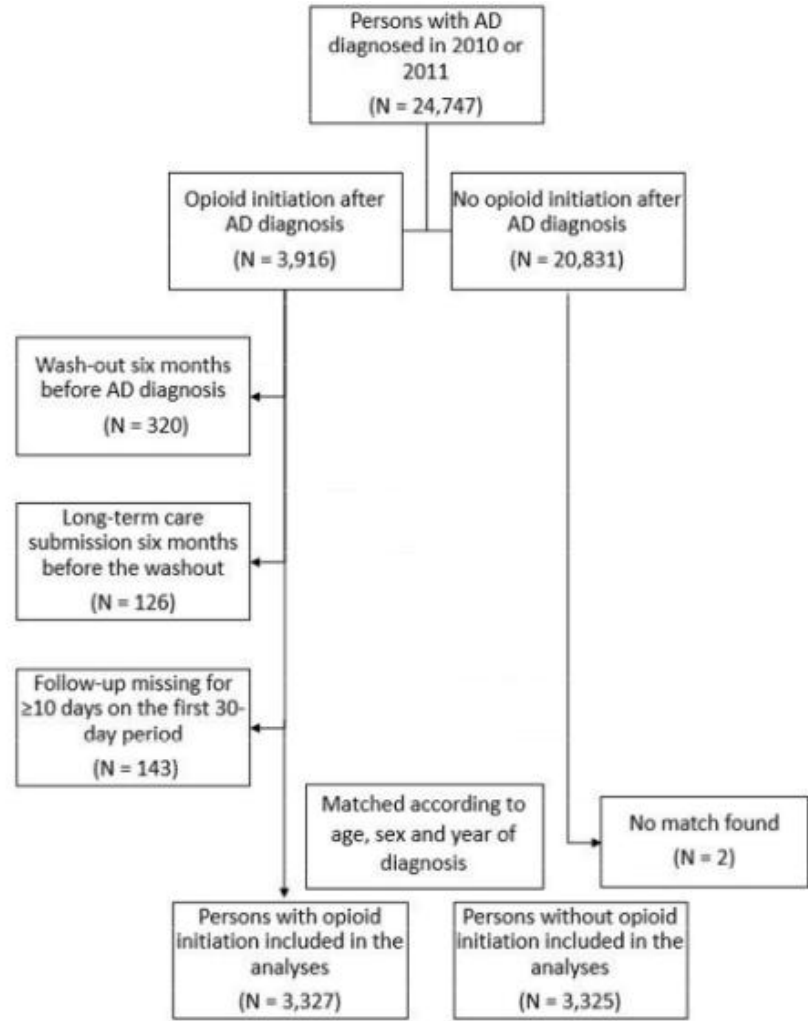


Discussion and conclusions

- Antipsychotic and BZDR use was frequent.
- Opioid initiation resulted in an initial surge – and an overall decrease.
- Decrease in neuropsychiatric symptoms or intentional reduction of sedative load?

aleksi.hamina@uef.fi





	Opioid initiators %, (N)	Opioid non-initiators %, (N)	p-value
Age, mean (years)	82.2	82.2	Matched
Women	68.3 (2,273)	68.3 (2,271)	Matched
Diabetes	17.3 (570)	14.0 (465)	0.0004
Rheumatoid arthritis	5.8 (191)	3.8 (126)	0.0002
History of hip fracture	9.8 (327)	6.2 (205)	<0.0001
Active cancer treatment in the last year	8.5 (283)	4.9 (162)	<0.0001
NSAID use	16.4 (547)	3.6 (120)	<0.0001
Paracetamol use	58.9 (1,959)	21.5 (714)	<0.0001
Bisphosphonate use	9.9 (330)	5.1 (169)	<0.0001

Table 1. Description of the study population. NSAID = non-steroidal anti-inflammatory drugs.