



MC Slotervaart



Trajectories Of Long-term Exposure To Anticholinergic And Sedative Drugs: A Latent Class Growth Analysis

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CONFLICT OF INTEREST DISCLOSURE

I have no potential conflict
of interest to report

Problem definition & Study Aim



Ness et al., 2006, Am J Geriatr Pharm; Johnnell, 2009, Int J Geriatr Psychiatr

Approach

Longitudinal Aging Study Amsterdam (LASA)

- A Dutch nationally representative cohort study
- Of older community-dwelling adults aged 55-85 y
- Data collection 20 years (1992-2012) at 7 occasions
- Men and older people oversampled to counteract selective drop-out
- Detailed assessment of **drug use** including verification with medication containers



ORIGINAL INVESTIGATION

A Drug Burden Index to Define the Functional Burden of Medications in Older People

Sarah N. Hilmer, MD, PhD; Donald E. Mager, PharmD, PhD; Eleanor M. Simonsick, PhD; Ying Cao, MB; Shari M. Ling, MD; B. Gwen Windham, MD; Tamara B. Harris, MD, MS; Joseph T. Hanlon, PharmD, MS; Susan M. Rubin, MPH; Ronald I. Shorr, MD, MS; Douglas C. Bauer, MD, MPH; Darrell R. Abernethy, MD, PhD

$$\mathbf{DBI} = \sum \frac{D}{D + \delta}$$

Latent Class Growth Analysis

#1 You start with a 1 trajectory model, then model with 2 trajectories, then 3....etc.

#2 You inspect “Goodness of fit” statistics

- Bayesian Information Criterion
- Entropy
- Bootstrapped Likelihood Ratio Test

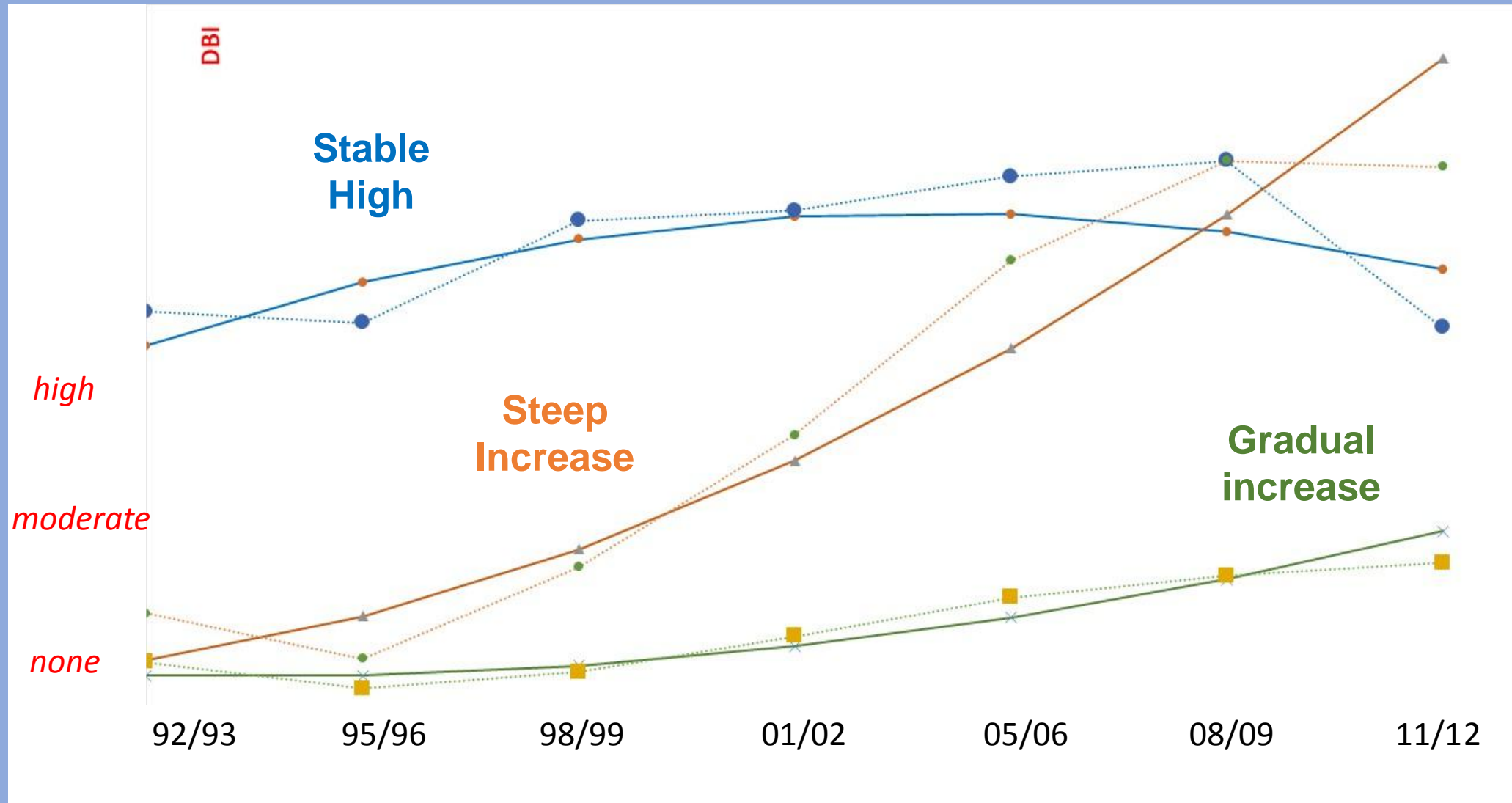
#3 Select the model with best “goodness of fit”

Results

Key data

- N = 763 complete all follow-ups
- 61% women
- M age y 83 (SD 6)
- M drugs prescribed 3.4 (SD 3.6)
- Co-morbidity present: Heart Disease (40%) and Osteoarthritis (61%)

3 trajectories of exposure



Conclusions

Three trajectories of long-term anticholinergic and sedative exposure were identified

Thank you

*Nous remercions l'organisation
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