Midlife work ability predicts disability in old age – A 28-year prospective study

Objective
To investigate if midlife work ability predicts disability in self-care activities of daily living (ADL) and instrumental activities of daily living (IADL)

Design
FINNISH LONGITUDINAL STUDY OF MUNICIPAL EMPLOYEES (FLAME)
- Population-based, prospective 28-year follow-up
- Targeted municipal employees, aged 44-58 years
- In 1981 baseline n=6257 (out of N=7344)
- At last follow-up in 2009 n=3093 (73.1% of survivors)
- Postal questionnaires, 5 data collection waves

Outcomes
5 ADL tasks: transferring to and from bed, dressing, bathing, toileting, feeding

ADL index:
1 = independent without difficulties
2 = some difficulties in at least one task
3 = a lot of difficulties in or unable to perform at least one of the tasks of transferring, dressing or bathing
4 = a lot of difficulties in or unable to perform toileting and/or feeding
OUTCOMES
7 IADL tasks: light household tasks, doing laundry, preparing food, shopping, handling finances, administering and taking medication, using the telephone

IADL index:
1 independent without difficulties
2 some difficulties in at least one of the task of coping with light housework, doing laundry or preparing food
3 some difficulties in at least one of the task of using the telephone, administering and taking medication, handling finances or shopping
4 a lot of difficulties or unable to perform at least one of the tasks of coping with light housework, doing laundry or preparing food
5 a lot of difficulties in or unable to perform at least one of the tasks of using the telephone, administering and taking medication, handling finances or shopping

Risk for IADL disability according to midlife professional group and work ability*

*adjusted for age+marital status+alcohol intake+smoking+exercise+main chronic diseases

CONCLUSIONS
- Work ability in midlife predicted disability 28 years later, after adjusting with chronic diseases and lifestyle factors in midlife
- Results more pronounced in women than men and for IADL disability than ADL disability
- Results expand the current knowledge on long-term effects of work on later life functioning
- Improving the working life conditions and focusing on timely early prevention could have far-reaching effects for the aging population
- Work demand should be adjusted to employee resources to help to ensure better functional ability for people also years after their retirement
Thank you for your attention!

Clas-hakan.nygard@uta.fi