

ACTIVE AGEING  
AT WORK

CONFERENCE ABSTRACTS

# Work, Well-being and Wealth

26-28 August 2013

Hotel Crowne Plaza, Helsinki, Finland

## Development and validation of a physical and psychosocial job-exposure matrix among older workers

by Rijs KJ, MSc, Van der Pas S, PhD, Geuskens GA, PhD, Cozijnsen R, PhD, Koppes LLJ, PhD, Van der Beek AJ, PhD, Deeg DJH, PhD

**Objectives** We developed a general population job-exposure matrix (GPJEM), including physical and psychosocial demands as well as psychosocial resources, applicable to older and retired workers and evaluated its validity by examining associations with health.

**Methods** Physical and psychosocial work exposures reported by 55–64-year-olds were derived from the Netherlands Working Conditions Survey and linked to the Netherlands Standard Classification of Occupations 1992. A GPJEM with low, moderate, and high probability of exposure to demands and resources was developed. To examine associations with health, two groups of the Longitudinal Aging Study Amsterdam were selected; current (N=551; 55–64 years) and former workers (N=1676; 55–84 years). Linear and logistic regression models were applied.

**Results** Use of force and work in uncomfortable positions were significantly associated with functional limitations and self-perceived health (SPH), but not hip or knee osteoarthritis (OA), among current and former workers. A moderate probability of repetitive movements was associated with functional limitations among former workers. A high probability of repetitive movements was associated with functional limitations among current and former workers as well as with SPH and OA among former workers. Respondents formerly exposed to iso-strain (ie, high psychosocial demands and low psychosocial resources) had significantly higher diastolic blood pressure and more often hypertension. No such associations were found among current workers. No association was found with cardiovascular disease.

**Conclusions** The results suggest the GPJEM accurately classifies jobs according to physical demands and, although less clearly, iso-strain.

**Key terms** ageing worker; job-exposure matrix; Karasek model of job stress; psychosocial work demand; psychosocial work resource; physical demand; retiree.

**Correspondence to:** KJ Rijs, EMGO Institute for Health and Care Research, Department of Epidemiology and Biostatistics, VU University Medical Center Amsterdam, the Netherlands. [E-mail: k.rijs@vumc.nl]