

Methods Cross-sectional data from The Irish Longitudinal Study on Ageing (TILDA), a population-based study of 8175 people aged ≥ 50 years was analysed. Those in employment were grouped according to the occupational social classification, an internationally recognised categorisation widely used to analyse social and health variations. Statistical analyses were performed using SPSS (V22.0, SPSS Inc, IL). Tests for main effects were conducted using an ordinal logistic regression using a generalised linear model. The relationship between self-rated health and social class was examined with age, gender, educational status, medical history and multiple lifestyle factors (body mass index (BMI), smoking, alcohol consumption, physical activity) as the independent variables.

Results 30% (2440/8175) of the TILDA cohort were in employment at the time of the study and therefore included in the analysis. There was a statistically significant association between self-rated health and occupational social class after adjusting for independent variables as described above (p-value 0.014).

Conclusion There is a strong cross-sectional association between self-rated health and occupational social class in those at work over 50 years of age in Ireland. This association is preserved after adjusting for gender, age, past medical history, lifestyle behaviours and educational status. Further research is required to establish if this association persists among retirees. This study confirms the need to tailor health promotion and well-being programs to the different occupational social groups to maximise potential health benefits and to preserve employment among older workers

1328 ATTITUDES TOWARD WORKING CONDITIONS: ARE EUROPEAN UNION WORKERS SATISFIED WITH THEIR WORKING HOURS AND WORK-LIFE BALANCE?

¹Nuria Matilla-Santander*, ¹Cristina Lidón-Moyano, ¹Adrián González-Marrón, ¹Kailey Bunch, ¹Juan Carlos Martín-Sánchez, ^{1,2}Jose M Martínez-Sánchez. ¹Group of Evaluation of Health Determinants and Health Policies, Sant Cugat del Vallès, Spain; ²Tobacco Control Unit, Hospital de Llobregat, Spain

10.1136/oemed-2018-ICOHabstracts.110

Introduction Neoliberal economic globalisation has changed the definition of standard employment and this could be affecting work-life balance. The objective of this study is to describe the satisfaction with working hours and satisfaction with work-life balance and their association in the European Union (EU-28).

Methods This is a cross-sectional study based on data from the Flash Eurobarometer 398 among workers of the EU-28 from 2014 (n=13,683). We calculated percentages and their 95% confidence intervals (95% CI). We also fit a multi-level generalised linear model (GLM) using the Poisson family, in order to calculate the adjusted prevalence ratios (aPR) of satisfaction with work-life balance based on working hours. All analyses were stratified for individual, employment and welfare regime country classification.

Results Satisfaction with working hours and work-life balance was 80.62% and 74.48%, respectively, and was significantly higher among women. The highest percentages of satisfaction were found in Nordic welfare regime countries (90.2% and 85.3%, respectively). There was a statistically significant association between satisfaction with working hours and work-life balance (aPR=2.63, 95% CI: 2.28 to 3.04), and the magnitude of the association differed by individual and employment characteristics and welfare regime country classification. The

main reasons declared for dissatisfaction were 'excessive working hours' (48.7%), 'shift work' (27.9%), and 'inability to influence the work schedule' (28.3%). Differences were observed according to sex and type of welfare regime.

Conclusion European Union workers are highly satisfied with their working hours and work-life balance, and there is a strong association between satisfaction with work-life balance and working hours. There are still differences between sexes and welfare regimes. The Nordic model of social policies should be considered to improve satisfaction with work-life balance in the rest of the EU-28.

247 THE EFFECTS OF OCCUPATION ON THE EVOLUTION OF BMI IN A BELGIAN EMPLOYEE POPULATION

¹Martijn Schouteden*, ¹Matthias Coene, ¹Chris Verbeek, ¹Marc Beurms, ^{1,2}Lode Godderis. ¹Idewe, External Service for Prevention and Protection at Work, Belgium; ²Katholieke Universiteit Leuven, Centre for Environment and Health, Belgium

10.1136/oemed-2018-ICOHabstracts.111

Introduction During medical investigation, occupational health physicians collect huge amounts of scattered data about their patients. Recently, these data have been integrated into a single data warehouse. In the current study, this data warehouse has been addressed to study the evolution of BMI, and investigate how this trend is effected by the occupation of the employee, controlled for gender and age.

Methods Around 78 000 employees were followed-up from 1993 onwards, with following variables: BMI, age, sex, and isco encoded occupation. Multilevel analyses was performed to study the evolution of BMI, with time and time² as time-varying variable, and sex, age at start of measurement and occupation as time-independent variables. Including time² allows for modelling curvilinear trends over time. Random effects were allowed for the intercept and time-varying variables.

Result Over the 23 years of follow-up, we observed a high drop-out of around 90%. Nonetheless, all occupations were still represented at the last measurement. 52.8% was male, mean age was 34.34 years (SD=9.43) at the start of the study. Analyses showed that BMI increases curvilinear with age: the younger, the steeper the curve; Males have higher BMI than females. Occupation also has an effect: Highest BMI was observed with Service personnel of machinery and installations assemblers; the increase of BMI was highest for Leading functions. Random effects showed large inter-individual differences in BMI at starting point and on effect of time.

Discussion We've illustrated how the data warehouse can be accessed to answer substantive research questions. Differences in evolution of BMI seems to be related to occupation. The strong curvilinear effect probably indicates healthy worker effect. The high dropout might be explained by employees changing companies, companies changing external service, and/or the reach of retirement age.

253 THE ASSOCIATION OF AGE AND CHRONOTYPE IN DAY AND ROTATING SHIFT WORKERS OF A LARGE GERMAN CHEMICAL COMPANY

M Schuster*, M Claus, S Webendörfer, C Oberlinner. Corporate Health Management, BASF SE, Ludwigshafen, Germany

10.1136/oemed-2018-ICOHabstracts.112

Introduction The aim of the present study was to evaluate the association between chronotype and age in day and rotating shift workers.

Methods The present cross-sectional study was carried out between October 2012 and February 2015 in a large German chemical company. Employees participating in a regular voluntary occupational health check-up were requested to complete a written questionnaire, which included items on sleeping behaviour extracted from the Munich Chronotype Questionnaire. Inclusion criteria comprised a fully completed questionnaire, not having used an alarm clock on free days, and being employed either as a day or rotating shift worker. Senior executive managers, trainees and interns were excluded. We used univariable and multivariable linear regression analyses to assess the association between age and chronotype (in minutes) in the whole sample and stratified by shift status.

Result Altogether 10 348 persons completed the questionnaire, of which 4040 (39.0%) met the inclusion criteria. Participants were on average 41.8 years old (SD: 10.2), mainly male (75.4%) and engaged in day work (82.3%). Mean chronotype was 03:23 (SD: 54 min.) in the total sample, 03:16 (SD: 55 min.) in day and 03:57 (SD: 35 min.) in rotating shift workers. With increasing age, chronotype declined from 04:00 (≤ 29 years) to 03:08 (≥ 50 years) in the whole sample, and from 03:54 to 02:59 in day and 04:25 to 03:45 in rotating shift workers. Univariable and multivariable linear regression analyses correspondingly showed a significant decline of chronotype with age in both, day and rotating shift workers.

Discussion While day workers could benefit from a chronotype decrease, rotating shift workers could build up an intolerance regarding night work with increasing age. Shift workers might benefit from specific targeted prevention programs including sleep hygiene trainings.

966 FREE OF CHOICE OPTIONS TO REDUCE SITTING: DOES IT WORK?

^{1,2}V Hermans*, ³S De Swerdt, ⁴J Seghers, ^{1,5}L Godderis, ^{1,6}L Daenen. ¹Knowledge, Information and Research Center, IDEWE Group (External Service for Prevention and Protection at Work), Leuven, Belgium; ²Department of Experimental and Applied Psychology, Work and Organisational Psychology (WOPS), Faculty of Psychology and Education Sciences Vrije Universiteit Brussel, Brussel, Belgium; ³Faculty of Economics and Business, KU Leuven, Brussel, Belgium; ⁴Department of Kinesiology, Physical Activity, Sports & Health Research Group, KU Leuven, Leuven, Belgium; ⁵Environment and Health, Faculty of Medicine, KU Leuven, Louvain, Belgium; ⁶Department of Rehabilitation Sciences and Physiotherapy, Human Physiology and Anatomy (KIMA), Faculty of Physical Education and Physiotherapy, Vrije Universiteit Brussel, Brussels, Belgium

10.1136/oemed-2018-ICOHabstracts.113

Introduction Increased cardiovascular diseases, obesity and diabetes are sedentary lifestyle. To tackle this problem, strategies to reduce sitting such as sit-stand tables, very low quality of evidence for the interventions. This study impact of a intervention reduce sitting

Methods An RCT-study was conducted in the office environment of a pharmaceutical company.: presentation of importance of good ergonomics/movement at the office and a check of the ergonomic set-up of the workstation. the experimental group (19) could use sit-stand tables, desk bikes and sit-stand chairs for 4 weeks. Iso a weekly motivation email was sent. Sitting time was measured using ActivPAL™ accelerometers before and after the 4 weeks intervention both groups. Data were analysed using SPSS.

Results significant decrease in sitting time was the experimental group The reduction in sitting time was of the subjects attributed the reduction in sitting time to the use of sit-stand tables. of the desk bikes and sit-stand supports was. Half of the subjects revealed that these devices were no important contributors to reduced sitting.

Conclusion A decreased sitting time in the intervention group, subjectively mainly attributed to the use of sit-stand supports. this further.

1068 MUSCULOSKELETAL PAIN PREDICTS ILL-HEALTH RETIREMENT AMONG KOREAN WORKERS

Se-Young Lee, Jun-Pyo Myong, HyoungRyoul Kim, Youn-Mo Cho, Mo-Yeol Kang*. Department of Preventive Medicine, College of Medicine, The Catholic University of Korea, Seoul, Korea

10.1136/oemed-2018-ICOHabstracts.114

Introduction The aim of this study is to investigate the effect of musculoskeletal pain on IHR (ill-health retirement) among Korean workers.

Methods Data were collected from a sample from the first to fourth phases of the Korean Longitudinal Study of Ageing (KLoSA) which conducted in 2006, 2008, 2010, 2012, and 2014. IHR were defined as those who retired due to their health problems before their scheduled or regular retirement age in one of the follow-up surveys. Pain during the preceding month in multiple locations was combined into four sites (shoulder, upper extremities, low back, lower extremities). Hazard ratios (HR) of IHR were estimated by Cox regression, after adjusting for age, job category, annual income, history of disease (HTN and DM), BMI and smoking status.

Results The HR of IHR (n=477) was 1.49 (95% confidence interval 1.01–2.20) for any site of pain among male workers, and 1.75 (1.23–2.49) among female workers. Risk of IHR was highest when workers had upper extremities pain (Male, HR=2.71; Female, HR=1.88). Musculoskeletal pain in the other sites was also predictive of IHR. Subgroup analysis according to socioeconomic status showed that the association between musculoskeletal pain and IHR is greater in white collar worker and high income groups than the others (white collar, HR=2.15; high income, HR=2.93).

Conclusions Musculoskeletal pain independently predicted IHR. Moreover, our results revealed that socioeconomic status modified these effects of musculoskeletal pain on IHR. Employees with musculoskeletal pain may need specific support to maintain their work ability.

356 WORKERS AGE 55 AND OLDER WORKING WITH PAIN

^{1,2}Marie-Christine Richard*, ^{1,2}Marie-José Durand. ¹Faculty of Medicine, Université de Sherbrooke, Longueuil, Québec, Canada; ²Centre de recherche-Hôpital Charles-Le Moyne, Longueuil, Québec, Canada

10.1136/oemed-2018-ICOHabstracts.115

Introduction The average worker in industrialised countries is ageing. The baby boomer generation (born 1946–1965) is gradually reaching retirement age. In Canada, the share of workers in the age 55+ age group is expected to attain 24% in 2031. There is also a shortage of young workers to replace retirees. Although data suggest that at least one in five older workers suffers from chronic musculoskeletal pain, most will