Conclusions The present study shows that the risk of cancer is highly dependent on occupation and specific occupational exposures.

03D.3 MEDICATION AS PROXY OF WORK-RELATED HEALTH PROBLEMS

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Introduction In order to investigate the impact of work on health, we hypothesize that medication consumption registered in medical files of workers could serve as a proxy for work-related health problems. In this study, we describe variations in prevalence of specific medication groups between sectors, adjusting for age and gender. In addition, we investigated whether a change in job/sector can have an impact on medication use.

Method Logistic regression analysis is being performed to investigate the effect of occupational sector on the prevalence of specific medication groups, adjusted for year, age and gender. For this, an occupational surveillance dataset of 6 86 434 workers collected between 2011 and 2017 was used. Additionally, regarding the impact on job changes on medication use, analyses are currently being performed by comparing prevalence of specific medication groups in 2011 with 2017 for those employees who changed job during this time period.

Results and discussion In 2011 30,6% male and 49,8% female workers used medication. These figures rose to 43,1% and 67,3% respectively in 2017. The use of medication increased with age: in 2017 38,2% for workers <25 year, 43,6% for 25–34 year old employees, 48,7% between 35–44 year, 61,6% between 45–54 year and 74,1% for older workers ≥55 year. Big differences were observed between sectors. Medication use was highest in health care (67,1% in 2017), government and education. These differences remained after adjustment for age and gender. 9,8% and 9,1% of the workers were treated for respectively pain and neuropsychological disorders in 2017.

Conclusion Significant differences in workers' medical consumption were observed between sectors. This information is now being used for the implementation of a sector-oriented health surveillance program.

03D.4 INNOVATIVE APPROACHES TO DATA ACQUISITION, STANDARDIZATION, POOLING AND ANALYSES OF OCCUPATIONAL HEALTH INFORMATION

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Occupation and employment is a major determinant of health and healthy aging. Despite the temporal increase in time spent in employment and profound changes in working life, there is limited coordinated research on occupation and health.

We recently estimated that in Europe alone there is information available on more than 30 million individuals that could be used to study the association between working life and health. However, lack of standardization, inability to code large numbers of job-entries and inabilities to share data have

hindered progress. In order to unlock the vault of occupational-health information novel ways of data acquisition, standardization, pooling and analyses have to be developed and implemented. The ability of pooling studies would greatly improve occupational health studies by increasing sample size for robust inference, and would allow risk stratification, identification of new risks, exploration of interactions with work and non-work-related factors and detailed analyses on the shapes of the exposure-response curves.

In recent years we have seen progress in several different methodological aspects. Currently, new tools are available to collect information on work and work exposures. These include amongst others the use of sensors and mobile phone applications. Standardization of occupational information is essential for comparison of results between studies and for pooling of studies. This could be achieved by using common occupational coding schemes, use of automatic coding instruments and common exposure assessment tools. Virtual pooling of data has become possible by using data-shields which instead of bringing the data to the analyses bring the analyses to the data allowing federated analyses.

As part of the OMEGA-NET symposium we will discuss the need for new tools and avenues of how to bring occupational health information together. We will present our inventory of novel tools to aid this process, and will discuss future needs.

03D.5 NATIONAL POLICIES AND SOCIAL INEQUALITIES IN EXIT PATHS FROM WORKING LIFE IN SWEDEN

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We investigated the impact on work life exits from reduced access to disability pension (2006), and financial incentives to extend working life.

Method and material We used labour statistics, social insurance, and income data, for all employees in Sweden, to compare occupational groups (SSYK, based on ISCO-88), and blue and white collar workers, with regard to i) lost years in working life due to death, disability pension and long-term sick-leave preceding disability pension 2007–2010, ii) granted disability pensions 2007–2011, and iii) premature age pension in 2004 and 2011.

Results Years lost in working life were similar for men and women in the same 1-digit SSYK occupational group, somewhat higher for those born outside Sweden, but showed a clear gradient from white to blue collar occupations, e.g. on average 0.39 ys versus 2.40 ys lost for Legislators/senior officials/managers and in Elementary occupations, respectively (women born in Sweden).

In 2006 the prevalence of disability pension in the age group 50–64 was 3.61% among women and 2.49% among men, with 10/10 of the highest prevalence occupations (4-digit SSYK code) in men, and 9/10 in women, being blue collar ones. Approved applications decreased 2006–2011 by 74.4% in women, and 64.3% in men; for mental disorders (ICD-10-

SE; F00-F99) 64.9% in women and 48.8% in men, for musculoskeletal disorders (M00-M99) 91.1% and 90.0%, respectively.

The prevalence of premature age pension increased between 2004 and 2011: men 2.5% to 6.4%, women 1.7% to 5.5%. Blue collar occupations were most affected.

Conclusions The socioeconomic divide in lost years of working life between white and blue collars prevailed. There was an apparent flow from disability to premature age pension, in particular in female blue collars. The findings indicate the budgetary savings of disability pensions transferred the economic burden of disease to individuals, and mainly to female blue collar workers.

03D.6 INVENTORY OF OCCUPATIONAL, INDUSTRIAL AND POPULATION COHORTS IN SWITZERLAND

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Context Given the importance of harmonization in occupational epidemiology (OE) research, an European network, OMEGA-NET, is developing an inventory of occupational, industrial and population cohorts in Europe. We inventorized existing cohorts in Switzerland and assessed their relevance for OE.

Methods We identified cohorts based on the review of data repositories and publications of the leading occupational and public health institutions in Switzerland. Cohorts were considered relevant for OE if data on occupation were available. The quality of these data was assessed critically.

Results In Switzerland, we found no industrial cohort, one retrospective occupational cohort exposed to magnetic fields [20,141 Swiss Federal Railway workers, cancer morbidity follow-up=1972–2002] and four population-based cohorts relevant for OE: the census-based Swiss National Cohort (SNC) [5.8 million adult residents in Switzerland, mortality by cause follow-up=1990–2014], the Study on Air Pollution And Lung Disease In Adults (SAPALDIA) [n=9,561, lung function and morbidity follow-up=1991-present], CoLaus|PsyCoLaus [6,700 35–75 year-old residents of Lausanne, cardiovascular and mental morbidity follow-up=2003-present], the Swiss Kidney Project on Genes in Hypertension (SKIPOGH) [1134 residents of Lausanne, Geneva and Berne, kidney and metabolic morbidity follow-up=2009-present].

Occupation was coded using the International Standard Classification of Occupations (ISCO) only in the SNC (ISCO-68 and ISCO-88) and SAPALDIA (ISCO-88). In SKIPOGH, the Belgian Classification of occupations was used. In CoLaus|PsyCoLaus, occupation remains uncoded. Noteworthy, the percentage of missing occupations is 43%, non-reported, 65% and 61%, respectively.

Conclusion Having detailed high-quality data on multiple health outcomes, the identified Swiss cohorts may represent a valuable contribution to OE research. However, in absence of standardisation in collecting and coding of occupational data in these cohorts, their use in OE is still challenging. Planned harmonization efforts in frame of OMEGA-NET will be beneficial for improving the quality of these data and OE research in Switzerland and abroad.

03D.7 CONSTANCES: A POPULATION-BASED COHORT FOR OCCUPATIONAL EPIDEMIOLOGY

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The CONSTANCES general-purpose population-based cohort is intended to serve as an epidemiological research infrastructure accessible to the epidemiologic research community. CONSTANCES also provides useful public health information to the public health authorities. CONSTANCES was designed as a randomly selected sample of French adults aged 18–69 years at inception; 2 00 000 subjects will be included over a six-year period. At inclusion, the selected subjects are invited to complete questionnaires, including a lifetime job history, and to attend a Health Screening Centre (HSC) for a comprehensive health examination. A biobank is being set up. The follow-up includes a yearly self-administered questionnaire, and a periodic visit to an HSC. Social and health data are collected from the French national administrative databases. Data collected for participants include social and demographic characteristics, socioeconomic status, life events, and behaviours. Regarding occupational factors, a full job history and a wealth of data on employment and organizational, chemical, biological, biomechanical and psychosocial lifelong exposure are collected at inception and during the follow-up. The health data cover a wide spectrum: self-reported health scales, reported prevalent and incident diseases, long-term chronic diseases and hospitalizations, sick-leaves, handicaps, limitations, disabilities and injuries, healthcare utilization and services provided, and causes of death. To consider non-participation at inclusion and attrition throughout the longitudinal follow-up, a cohort of non-participants was set up and will be followed through the same national databases as participants.

Inclusion began in 2012 and more than 1 80 000 participants were enrolled by July 2018. Several projects on occupational risks are already in progress, and an Occupational Health Users Club was established. This platform and its potential contributions will be described, as well as the means for international investigators to access it.

03D.9 PSYCHOSOCIAL CONTEXT, SOMATIC COMPLAINTS, WORK ABILITY, AND JOB SATISFACTION IN ANAESTHESIA HEALTH PROFESSIONALS. SETTING UP A PROSPECTIVE COHORT STUDY

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Background Psychosocial context, characterized by the levels of job demands, shift/night work, burnout, and teamwork, as well as presence of certain somatic complaints (chronic respiratory, skin, and musculoskeletal symptoms) and health disorders could affect the work ability and job satisfaction of health professionals (HPs).