Abstracts

Methods A study group of 1295 women and 1056 men aged 18–29 years was selected from three biennial years of a population cohort. The study group had completed a work environment questionnaire in a survey conducted by Statistics Sweden. Associations between opportunities for recovery at work and excellent work ability were assessed by multiple logistic regression models stratified for gender.

Results Having varied work was associated with excellent work ability in all young men (p<0.0006; prevalence ratio [PR] 1.3) and also specifically in men with high work demands (p=0.019; PR 1.3). For the latter group the possibility of deciding when to perform a work task was also associated with excellent work ability (p=0.049; PR 1.3). Among young women with high work demands, the possibility of deciding one’s working hours was associated with excellent work ability (p=0.046; PR 1.2).

Conclusions For young men, having varied work can contribute to excellent work ability. In addition, for men with high work demands, the possibility of deciding when to perform a work task may be favourable for excellent work ability. For young women with high work demands, the possibility of deciding one’s working hours can contribute to excellent work ability. Employers could use these opportunities for recovery in promoting work ability among young workers.

Oral Presentation

Occupational Medicine (SCOM/Modernet)

WORK-RELATED PHYSICAL RISK FACTORS FOR SPECIFIC SHOULDER DISORDERS: SYSTEMATIC REVIEW AND META-ANALYSIS

Henk van der Molen*, Chiara Foresti, Joost Daams, Monique Frings-Dresen, Paul Kuijer, Corinelle Institute of Occupational Health, Netherlands Centre for Occupational Diseases, Academic Medical Centre, Amsterdam, The Netherlands; School of Occupational Medicine, Department of Medical and Surgical Sciences, University of Bologna, Bologna, Italy

Objective To examine the association between work-related physical risk factors and clinically assessed specific soft tissue shoulder disorders like supraspinatus tendinitis and impingement.

Methods Medline and Embase were searched from 2009 until 24 March 2016 and references were added of a systematic review on this topic describing studies published before 2009. Case-control and cohort studies were included if the soft tissue shoulder disorder was clinically assessed. Meta-analyses and GRADE were performed to assess the evidence and quality for the studies on work-related risk factors.

Results In total seven longitudinal studies including 16 710 patients with specific soft tissue shoulder disorders from a population of 2,427,535 workers from Denmark, Finland, France, Germany and Poland were included in the meta-analysis. Moderate to high evidence was found for associations between arm-hand elevation (OR=2.10, 95% CI 2.01–2.20), arm repetition (OR=1.69, 95% CI 1.03–2.78), hand force exertion (OR=1.57, 95% CI 1.27–1.93), shoulder load (OR=2.01, 95% CI 1.90–2.12) and low evidence for hand-arm vibrations (OR=1.34, 95% CI 1.01–1.77).

Conclusions Arm-hand elevation, arm repetition, hand force exertion and/or hand-arm vibration during work, increase the incidence of specific soft tissue shoulder disorders.

Oral Presentation

Ageing Workforce

PHYSICAL CAPACITY IN MIDLIFE AND LABOUR MARKET ATTACHMENT AMONG OLDER WORKERS: PROSPECTIVE COHORT STUDY WITH REGISTER FOLLOW-UP

Emil Sundstrup*, Ase Marie Hansen, Erik Lykke Mortensen, Otto Poulsen, Thomas Clausen, Reiner Rugulies, Anne Møller, Lars Andersen. National Research Centre for the Working Environment, Copenhagen, Denmark; Department of Public Health, University of Copenhagen, Copenhagen, Denmark; Department of Psychology, University of Copenhagen, Copenhagen, Denmark; Center for Healthy Ageing, University of Copenhagen, Copenhagen, Denmark

Introduction We aim to determine the prospective association of different physical capacity tests with health related labour market outcomes among older workers.

Methods The prospective risk of register-based long-term sickness absence (L TSA) and disability pension from measured musculoskeletal capacity (jump performance, postural balance, sit-to-stand, explosive muscle strength, and maximal strength of the hand, back and abdominal muscles) and cardiovascular capacity (lung function and aerobic fitness) were estimated among 5076 older workers from the Copenhagen Ageing and Midlife Biobank. Time-to-event analyses were censored for competing events and adjusted for age, gender, physical and psychosocial work environment, lifestyle, socioeconomic position and previous LTSA.

Results Low physical capacity in many of the tests (less than 1SD below mean) predicted risk of LTSA and disability pension. Specifically, low aerobic fitness (HR 5.9), low jump performance (HR 2.7) and low abdominal muscle strength (HR 3.3) predicted risk of disability pension. A dose-response association was observed between number of musculoskeletal capacity tests with health related labour market outcomes and disability pension.

Conclusions Poor musculoskeletal and cardiovascular capacity in midlife increased the risk for LTSA and disability pension. Promoting physical capability to a normal level among older workers with low capacity may have the opportunity to prevent premature exit from the labour market.
Poster Presentation

Migrant Workers

**0033** A SURVEY OF CHILD LABOURERS AMONG SYRIAN REFUGEES IN AGRARIAN LEBANON

Rima Habib. American University of Beirut, Beirut, Lebanon
10.1136/oemed-2017-104636.23

**Background** Since the outbreak of the war in Syria in 2011, over 1 million Syrians have sought refuge in Lebanon, more than half of whom are children below 18 years of age. Recent reports have highlighted the increasing numbers of Syrian children working in Lebanese agricultural settings.

**Methods** This research will utilise cluster random sampling to enrol into a survey 500 households living in informal tented settlements near the agricultural areas of the Beqaa Valley, Lebanon. A questionnaire was designed to capture information on the living and working conditions of child labourers living in these communities. The surveys will collect data on household socioeconomic and demographic information, migration history, and service usage. Data will also be collected on child labourers demographics, work history and experience, education, health status, and life experiences. The quantitative data from the survey will be entered into a descriptive analysis aimed at identifying trends in the population data. The findings will be categorised by age, gender, location, and other salient variables.

**Results** This report will highlight the working conditions that predominate Lebanon’s migrant child labour force, while exploring the familial and household context that affect these children’s experiences as migrants, workers, and children.

**Discussion** The analysis will highlight how migration push factors such as war and the conditions of extreme familial poverty may necessitate child labour. This research will provide contextualised understandings of refugee children’s participation in the agricultural labour force and support targeted interventions aimed at increasing education and childhood opportunities for these young people.

Poster Presentation

Pesticides

**0034** ACUTE OCCUPATIONAL PESTICIDE POISONING IN MOROCCO: A 6 YEAR RETROSPECTIVE STUDY

Zineb Nabih, 1Maria Windy, 2Naima Rhalem, 3Soumaia Hnimou, 4Abdelmajid Soulaymani, 5Adelhane Mokhtar, 6Rachida Soulaymani-Bencheikh, 7Werde Ham*, 8Laboratory of Genetics and Biometry, Faculty of Science, Ibn Tofail University, Kenitra, Morocco; 9Moroccan Poison Control Centre, Rabat, Morocco; 10Faculty of Medicine and Pharmacy, Mohammed V University, Rabat, Morocco
10.1136/oemed-2017-104636.24

**Introduction** Pesticide poisoning has become a major public health problem worldwide, following the intensification of agriculture. The easy availability of highly toxic pesticides in the homes of farming communities has made pesticides the preferred means of suicide with an extremely high fatality rate. Similarly, the extensive use of pesticides exposes the community to both long-term and acute occupational health problems. The aim of this study is to describe the epidemiological characteristics of acute occupational pesticide poisoning in Morocco.

**Methods** This is a descriptive retrospective study of occupational poisoning cases, notified between 2007 and 2012 in the Moroccan Poison Control Centre.

**Results** There were 151 cases of acute occupational pesticide poisoning (35.7% of women and 64.3% of men), which was 43.7% of all occupational poisoning cases notified during the period of study. These products were responsible for poisoning of varying severity, depending on the types of pesticides, the route of exposure, and the duration and frequency of exposure. The average age of victims was 27.9±0.9 years. More than half of reported cases resulted from inhalation (53%), 36.2% from oral exposure and only 9.4% from dermal exposure. The risk was mainly related to the use of insecticides (50%). Among the 136 cases for whom the evolution is known, a 26-year-old man died. For other cases, the outcome was favourable with or without sequelae.

**Conclusions** Preventive measures should be taken to rationalise pesticide use, which pose a real public health problem, not only for users, but also for the general population.