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)

0031 WORK-RELATED PHYSICAL RISK FACTORS FOR SPECIFIC SHOULDER DISORDERS: SYSTEMATIC REVIEW AND META-ANALYSIS

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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

0032 PHYSICAL CAPACITY IN MIDLIFE AND LABOUR MARKET ATTACHMENT AMONG OLDER WORKERS: PROSPECTIVE COHORT STUDY WITH REGISTER FOLLOW-UP

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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 (LTSA) 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 low performance and disability pension and LTSA - with the risk-estimate for disability pension being 7.6 when low capacity was present in ≥ 5 musculoskeletal capacity tests. Population attributable risks for disability pension and LTSA from poor musculoskeletal capacity were 33% and 8%, respectively.

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

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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

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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.

Poster Presentation

Disease Surveillance

0035 NOTCH AND NOTCH AREA AMONG HEARING LOSS EMPLOYEES AT CHEMICAL INDUSTRIES IN RAYONG, THAILAND

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Introduction For Surveillance of Noise-induced hearing Loss (NIHL), Thai Workers in Hearing Conservative Programs (HCPs) must have hearing test (audiograms) annually. Occupational Medicine Physicians (OMPs) use Notch Criteria for early diagnosis of NIHL. Naturally, notch would be deeper and wider after additional exposure to loud noise. The purpose of this study was to describe nature of Notch and Notch Area in target population.

Method In 2015, a descriptive cross-sectional study was performed by collecting audiograms from 1122 employees at chemical industries in Rayong province, Thailand. The investigators used criteria concluded from previous study to identify Notch at 3,000 4,000 6,000 Hertz, V-shape Notch, U-shape Notch and calculate Notch Area.

Results The most common Notch was 6,000 Hertz 4,000 Hertz and 3,000 Hertz respectively. V-shape notch is more common than U-shape Notch. The means of notch area (square unit) in right ear and left ear were 17.7 and 21 accordingly. For workers with bilateral notch, mean difference of notch area between right and left ear was 19.4.

Discussion and Conclusion Occupational Medicine Physician may use Notch Area to make diagnosis of ONIHL. Notch Area was useful for identifying symmetrical hearing loss. Longitudinal study should be conducted to show how Notch Area