showed positive effects on sick leave, two studies showed effects on work performance, one study showed effects on work ability and one study showed effects on productivity.

Discussion The scientific evidence shows that it is possible to influence work-related outcomes, especially sickness absence, positively through health promotion efforts that include components aimed at the workplace's physical work environment and organisational structure. There is a lack of knowledge regarding the impact of interventions on work ability, work performance and productivity and thus more research is needed. In order to draw further conclusions regarding work-related outcomes in controlled high-quality studies, long-term follow-up using objective outcomes and/or quality assured questionnaires are required.

758

ATTITUDES TO THE ROLE OF GOVERNMENT, PERCEIVED WORK-RELATEDNESS AND THE COMPENSABILITY OF MESOTHELIOMA: A SURVEY OF MEDICAL AND LEGAL PROFESSIONALS

¹Fan-Ju Hsiao*, ¹Yawen Cheng, ^{1,2}Chieh-Jan Chen. ¹Institute of Health Policy and Health Management, College of Public Health, National Taiwan University; ²National Institute of Environmental Health Sciences, National Health Research Institutes, Taipei, Taiwan

10.1136/oemed-2018-ICOHabstracts.1117

Introduction Despite of the strong link between occupational asbestos exposure and mesothelioma (MM), only a small fraction of MM are recognised and compensated as occupational disease (OD). Lack of awareness of health risks of asbestos and negligence of workers' compensation rights may be underlying factors for low recognition of occupational diseases. While medical and legal professionals are key players in the compensation process, their knowledge and attitudes towards disease causation and compensability of MM as well as attitudes towards welfare state policies are not well understood.

Methods An anonymous survey was conducted among 281 physicians and 929 legal professionals in Taiwan. Provided in the questionnaire was a vignette case. Study participants were asked to comment on the work-relatedness and compensability of the case. Also included was an 8-item scale of the role of government adopted from the International Social Survey Programs to assess participants' attitudes towards welfare state policies.

Results 10.7% of physicians and 2.7% of legal professionals considered the case as an OD with certainty. Uncertainty was much higher in legal professional, as 53.1% of them could not give an answer on this issue. Despite of uncertainty, the majority of physicians (85.1%) and legal professionals (56.6%) agreed that such a case should be compensated under the workers' compensation scheme. After excluding participants who could not answer the question on the work-relatedness of disease, we found that those with lower scores in the role of the government scale were more likely to disapprove MM as an OD and to disagree its compensability.

Conclusion Findings of this study suggest that attitudes of medical and legal professionals towards the compensability of asbestos-related mesothelioma are influenced not just by their knowledge about asbestos hazards and epidemiologic features but also by the ideas they hold about the role of the government in social protection.

774

OCCUPATIONAL EXPOSURE TO COMBUSTION PRODUCTS AND RISK OF DEVELOPING RHEUMATOID ARTHRITIS

¹Anna Ilar*, ^{1,2}Pernilla Wiebert, ³Saedis Saevarsdottir, ^{3,4}Johan Askling, ^{1,2}Per Gustavsson, ^{1,2}Lars Alfredsson. ¹The Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden; ²Centre for Occupational and Environmental Medicine, Stockholm County Council, Stockholm, Sweden; ³Rheumatology Unit, Department of Medicine, Karolinska University Hospital and Karolinska Institutet, Stockholm, Sweden; ⁴Unit of Clinical Epidemiology, Department of Medicine, Karolinska University Hospital and Karolinska Institutet, Stockholm, Sweden

10.1136/oemed-2018-ICOHabstracts.1118

Introduction Studies have suggested a potential association between traffic pollutants and rheumatoid arthritis (RA), but findings have been inconclusive. We therefore assessed the risk of RA from occupational exposure to combustion products in a large population-based case-control study.

Methods We included participants living in Sweden from 2006 to 2013. Incident cases of RA were enrolled from the Swedish Rheumatology Quality Register. Ten controls per case, matched on sex, age and county, were enrolled from the total population register. Work histories were available through population and housing censuses. We estimated exposure to asphalt fumes, diesel engine exhaust (DEE) and polycyclic aromatic hydrocarbons (PAH) from 1955 to 1995 with job-exposure matrices. Conditional logistic regression was used to estimate the risks of two histological subtypes of RA (seropositive or seronegative RA) from exposure to either of the combustion products taken separately or all of them combined. All estimates were adjusted for potential confounding from respirable crystalline silica dust and household disposable income.

Results We analysed 9180 cases and 81 367 controls. Ever exposure to DEE in men was associated with a marginally higher risk of seropositive RA (OR: 1.11, 95% CI: 1.00 to 1.23), which was slightly higher among workers with at least 20 years of exposure (OR: 1.22, 95% CI: 1.00 to 1.49). More than 20 years of asphalt fumes exposure was also associated with a higher risk estimate for seropositive RA among men (OR: 1.87, 95% CI: 1.05 to 3.31). Being exposed to asphalt fumes, DEE or PAH combined for more than 20 years resulted in an OR of 1.22 (95% CI: 1.03 to 1.45) among men and 1.27 (95% CI: 0.50 to 3.26) among women for seropositive RA.

Discussion Long-term exposure to combustion products may increase the risk of seropositive RA among men after adjustments for respirable crystalline silica dust and household disposable income.

793

A POSITION PAPER ON THE FUTURE REQUIREMENTS FOR OCCUPATIONAL HEALTH PHYSICIANS IN THE PUBLIC HEALTH SERVICE, IRELAND

L Sisson*, S Carolan. Workplace Health and Wellbeing Unit, HSE, Human Resources, Dublin, Ireland

10.1136/oemed-2018-ICOHabstracts.1119

Introduction At a time when health resourcing costs are contracting, it is vital that services examine the potential to maximise the efficiency of their services and resources. The

objective of workforce planning is to develop knowledge and intelligence data on the workforce, to inform decisions at local level and to drive improvements in Occupational Health service outcomes.

Methods The Workplace Health and Wellbeing Unit was set up in March 2016 under Priority 2 Staff Engagement within the Health Services People Strategy 2015–2018. [www.hse.ie].

With reference to the HSE People Strategy 2015–2018 'We have clearly defined workforce planning as a key component of our people'

Occupational Health Services is one of four areas of governance and responsibility.

A mapping exercise of current Occupational Health Physician establishments and a profiling of activity in the occupational health departments were conducted.

A literature review of best practice in models of care was completed.

An agreed framework for workforce planning was adhered to.

Result A position paper on The Future Requirements for Occupational Health Physicians in the Health Service, Ireland has been submitted to relevant decision makers.

Regular review of the progression of this work will take place.

Discussion Occupational Health Services are reasonably well established in the Irish health care setting, however the future of the services have never been defined using a planned approach at national level As such this is the first initiative to identify and calculate the requirements for the future that ensure a sustainable future for the specialty and the service.

The position paper presented information on current Occupational Health Physician Staffing Establishments in the Irish Health Service, and it proposes a model of care for future delivery of Occupational Health Services provision in the Health Service in Ireland, and finally it articulates WHWU'S approach to maximise Occupational Health Physician roles in the context of workforce planning within the service.

830 CLINICAL DIAGNOSTICS OF WORKING WOMEN EXPOSED TO ORGANOPHOSPHATES IN THE WORKPLACE

¹N Loio-Marques*, ²M Felgueiras, ³C Turbau, ⁴R Valls-Llobet. ¹Occupational Medicine Resident, Centro Hospitalar Porto, Porto, Portugal; ²Clinical Pathology Resident, Centro Hospitalar Cova Beira, Portugal; ³Biologist, Centre d'Atenció Programes Sanitaris (CAPS), Barcelona, España; ⁴Endocrinologist, CAPS, Barcelona, España

10.1136/oemed-2018-ICOHabstracts.1120

Introduction Over the last decades a relationship has been established between the use of organophosphates (OP) and the development of systemic symptomatology, possibly resulting in the diagnostic of Multiple Chemical Sensitivity Syndrome (MCSS), Chronic Fatigue Syndrome (CFS), Mitochondrial Dysfunction Syndrome (MDS), Chronic OP Induced Neuropsychological Syndrome (COPINS), among others. MD, evidenced by the change in Lactate/Pyruvate ratio, seems to be the set-point of evolution of these syndromes. For MQSS in particular, the

diagnosis is done using the internationally acknowledged questionnaire 'Quick Environmental Exposure and Sensitivity Inventory' (QEESI). The main objective of this study was to identify the different diagnosis presented by women chronically exposed to OPs in their workplace.

Methods Continuous observational study (1994–2014) about diagnosis and employment condition of women exposed to OPs.

Results All women showed signs of MCSS, CFS and COPINS. Among the signs and symptoms associated with these syndromes, digestive changes 46% and food intolerances 12% were the most observed. Also, 62% of the women showed a sign described as typical from intoxication by OPs: black tongue. The results also show that all women had mitochondrial dysfunction.

Conclusion Exposure to OPs seems to contribute towards MCSS, CFS, MDS and other systemic symptoms of a chronic and disabling character, with the possibility of having associated mitochondrial dysfunction as the set-point.

840 NAFLD AND OM PRACTICE

MD Renales*. Consultant, Minute Healthcare, Quezon City, Philippines

10.1136/oemed-2018-ICOHabstracts.1121

Introduction Non-alcoholic fatty liver disease is an inflammation of the liver caused by an accumulation of fat deposits in the liver tissue. The common underlying problem is obesity, diabetes, or both in metabolic syndrome. NAFLD is manifested by an increase in alanine aminotransferase in liver function tests. Progressive disease results in cirrhosis if the cause remains untreated. Currently, NAFLD is an increasing problem in Asia as well as in the Philippines.

Methods This is a review of literature on the emerging problem of NAFLD. Interventions focus on the individual and enterprise management of NAFLD.

Result Prevalence of NAFLD is 12.2% in a hospital-based Philippine study. The characteristic features included female, sex, obesity, elevated liver enzymes and diabetes. Another study compared ASH, NASH, and TASH and how disease progression is a result of both direct effects on the liver as well as indirect alterations in other organs and tissues such as intestine, adipose tissue, and immune system. In another study, the increasing incidence of NAFLD in Western countries is strictly linked to lifestyle habits. The prevalence of NAFLD in European and Japanese population-based studies is estimated to be 14% to 21%. One study presents lower prevalence that is variable between 15% to 20% in Asian countries than the Western countries.

Discussion Using the above results of the literature review, the paper discusses occupational management of individuals with NAFLD as well as the enterprise as a whole.

Conclusion The occupational physician coordinates with the external physician for care of diagnosed workers with NAFLD, work accommodation, and fitness to return to work. Workplace management approaches discuss interventions to reduce if not prevent NAFLD due to workplace toxic and lifestyle agents.