Results Preliminary results indicate that associations between individual-level estimates of psychosocial work factors with depressive symptoms were largely linear and statistically significant. The associations of JEM estimates of psychosocial job factors with depressive symptoms showed varied patterns of non-linearity and were generally not statistically significant, after adjustment for individual-level measures.

Discussion Our study indicates that individual estimates of psychosocial work factors are consistently, strongly and linearly associated with depressive symptoms, whereas JEM estimates showed varied and non-linear patterns. JEM psychosocial work estimates may capture different phenomena than individual-level estimates.

Poster Presentation

Musculoskeletal

0258

PREVALENCE OF WORK-RELATED MUSCULOSKELETAL DISEASES AND DISABILITY IN CONSTRUCTION WORKERS IN ANKARA

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10.1136/oemed-2017-104636.209

Objectives Musculoskeletal diseases (MSD) affect almost 30% of the global construction sector workforce. Recent studies have shown high risks in bricklayers, plasterers and carpenters. The main causes of MSD in construction workers are heavy lifting, repetitive movements and poor ergonomic working postures. However, there are no studies in Turkey assessing work-related MSD prevalence in the construction sector and related disability in work and daily life.

The aim of this study is to examine the prevalence of musculoskeletal symptoms in manual handling construction workers active in the construction of new buildings for a city hospital in Ankara. The study includes assessing the work-relatedness of MSD. Subsequently the effect of MSD on disability is analysed.

Methods We plan a cross-sectional study using a questionnaire on sociodemographic characteristics, risk factors at work and employment conditions, work history, health status, the Nordic Musculoskeletal Questionnaire and disability as a consequence of work-related MSD, using a face-to-face interview method. The interviews will be performed by trained occupational health and safety specialists from the Public Health Institution of Turkey (PHIT).

The study proposal has been approved by the PHIT and the construction company. Workers will be asked for informed consent.

Results We planned that 1.200 people will be included in the study. The prevalence of work-related MSD and disability will be determined, stratified for occupational groups and socio-demographic variables.

Conclusion The main outcome is prevalence of work-related MSDs in construction workers studied and related disability in work and daily life. Interventions will be recommended for prevention.

Poster Presentation

Respiratory

0259

AIR POLLUTANTS ASSOCIATED WITH BASELINE IN FRACTIONAL EXHALED NITRIC OXIDE (FeNO) IN SCHOOL CHILDREN

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10.1136/oemed-2017-104636.210

Fractional exhaled nitric oxide (FeNO) is now recognised as a surrogate marker of eosinophilic airway inflammation and is affected by several factors, air pollution is an environmental determinant of it. Previous studies provide evidence that children are sensitive to the effects of air pollution. Therefore, the main objective of this study is to determine the effects of ambient air pollution on exhaled NO levels among school children.

From March 2016 to March 2017, a nationwide cross-sectional study was conducted in Taiwan using a modified Chinese version of the International Study of Asthma and Allergies in Childhood (ISSAC-C) questionnaire. Children received FeNO measurement in the morning, and inside buildings. Air pollution data were retrieved from air monitoring stations within two kilometre of the schools.

From 37 schools, 3344 students aged 6–15 years were randomly selected as candidates of the study. We complete monitoring data of air pollution, including SO₂, O₃, CO, NO₂, PM_{2.5} and PM₁₀. Our preliminary results showed that the levels of FeNO were significantly ($p < 0.05$) associated with average CO (0.48 ± 0.4 ppm), NO (5.48 ± 10.21 ppb), PM_{2.5} (20.96 ± 14.27 µg/m³), and PM₁₀ (46.44 ± 22.78 µg/m³) concentrations of lag day1. In summary, results indicated that exposure ambient pollutants might affect FeNO levels of schoolchildren. In order to further investigate, multilevel modelling will be used to distinguish the sources of variation in the response. We plan to evaluate variations among children in the first level, and variations among schools in the second level.