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PILOTING OF A SOCIAL MARKETING CAMPAIGN TO REDUCE MUSCULOSKELETAL RISKS RELATED TO MANUAL MATERIALS HANDLING ON CONSTRUCTION PROJECTS

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Introduction Musculoskeletal disorders (MSD) are the most common work-related health issue among construction workers. Despite the existence of practical solutions for reducing physical exposures, prevention efforts to reduce MSDs have not been systematically adopted by most construction employers. This study will describe a social marketing campaign to promote ergonomic methods in construction safety.

Methods The Ergonomics Community of Practice, consisting of researchers, industry stakeholders, and insurance industry representatives, has developed a Pilot Ergonomics Social Marketing Program to promote safer Manual Materials Handling (MMH) on construction sites. The work group recognised a need for contractor engagement in planning for safer MMH with an emphasis on; establish weight limits for lifting; and storing materials to reduce MMH risks. Formative work with construction contractors explored how contractors approached planning and three MMH practices. Program materials will be based on formative work results.

Results Data from 81 surveys with construction contractors showed most considered themselves knowledgeable about ergonomic hazards (85%) and knew how to prevent them (79%). Most contractors (57%) reported using planning strategies to prevent MMH risks both before and during project work but others reported little or no planning. Interviews of 12 'positive deviant' contractors identified planning for MMH as a common practice, and produced descriptions of several strategies used to overcome barriers for MMH activities.

Discussion The development of social marketing campaign materials are based on effective MMH strategies that have been adopted by proactive contractors. These materials, including a planning tool, will be tested by intermediary organisations (insurers and construction organisations) with contractors. The social marketing process and preliminary result on the number of contractors who chose to implement the program, the degree the program was implemented, and whether the implementation was sustained during the pilot period will be covered in this presentation.

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

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Introduction 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 work related musculoskeletal symptoms and disability in manual handling construction workers active in the construction of new buildings for a city hospital in Ankara.

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 (NMQ), and disability, as a consequence of work-related MSD, using a supervised 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 will include about 1.200 Turkish workers in the construction branch in the study. The prevalence of work-related MSD and disability will be determined, stratified for occupational groups and socio-demographic variables. Results are expected in October 2017.

Discussion The main outcome is the estimated prevalence of work-related MSDs in construction workers and associated occupational risk factors in the construction branch of Turkey. We will also analyse the effect of these disorders on the prevalence of disability in work and daily life. Based on the results, interventions for prevention will be recommended.

Nanomaterials

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UPDATE OF POTENTIAL HAZARDS OF NANOMATERIALS

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Aim of special session This session will address new findings about the potential hazards of nanomaterials.

Presenters: ¹PA Schulte, ²D Pelclova, ³H Wolff, ⁴E Bergamaschi, ⁵D Kehren, ⁶D Broßell, ⁶I Guseva-Canu, ⁷I Iavicoli

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OVERVIEW –UPDATE OF POTENTIAL HAZARDS OF ENGINEERED NANOMATERIALS

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