Introduction Musculoskeletal disorders (MSD) are of great concern among miners in Democratic Republic of Congo. This study sought to determine the prevalence of musculoskeletal disorders and associated factors among Namoya Mining workers who attended the company clinic between January 2015 and December 2016.

Method The study utilised company clinic data to find out the prevalence of MSDs among mine workers who attended mine's primary care clinic. Diagnoses of musculoskeletal disorders for the two year period were noted. Among those who had MSDs, other recorded data was extracted which included age, type of work, type of MSD, and management offered.

Results There were a total of 9753 clinic visits for the 2 year period of which MSDs accounted for 15.5%. In 2015, 877 (18.47%) MSD diagnoses were made of a total of 4747 who visited the clinic and 685 (13.6%) MSDs noted of 5006 clinic visits in 2016. Back pain was the most common contributing 82.2% of all MSDs while Work-Related Upper Limb Disorders (WRULDs) accounted for 8%. The most affected were aged 30–40, 78% and majority were shovel handlers (56%) and mining operators/drivers (42%). Over the 2 year period 1600 lumbar belts were issued and 7 surgical interventions done (discectomy) and over 10,000 100 mg of diclofenac sodium tablets prescribed

Discussion The estimated prevalence of MSDs at 15.5% is high compared to data from USA which was 5% before technological advancements (1983–1984) and 4% after technological advancement (2003–2004). This might be attributed to the intensity of work. The management of MSDs can increase expenditure on medical and orthopaedic supplies and therefore need for preventive measures. Due to limited information recorded a comprehensive study is recommended to establish other related factors.

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PREVALENCE AND RISK FACTORS CORRELATED WITH OCCUPATIONAL BACK PAIN AMONG WORKERS IN ELECTRONIC INDUSTRY

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Introduction Persistent back pain is common in society and is clearly an occupation-related problem. The symptoms are prevalent among industrial workers involved sedentary work with prolonged sitting and occasional standing. The nature of industrially electronic work is repetitive and sedentary work which might increase back pain risk. This cross-sectional study aimed to identify the risk factors correlated with back pain among electronic workers at northeast, Thailand.

Methods There were 354 workers selected by simple random sampling from the electronic process of industry. Data were collected by an interview with the structural questionnaires, observation for ergonomics risk assessment with the standard tools of RULA and occupational stress test. Risk factors were identified by multiple logistic regressions with adjusted odd ratio (OR_{adj}) and 95% confidence interval at p-value<0.05.

Results The result showed that most workers were operator (92.09%), age was 20–29 years old (63.84%). Almost workers had work experience less than 5 years (75.71%) and repetitive work (83.62%). The highest risk from RULA found in workers had alternative sitting and standing/walking posture over shift work (68.49%) and also in the group of machine controlled and changing material (71.70%). The prevalence of back pain was 20.62% (95% CI: 16.38 to 24.86) which was the highest prevalence among other areas. Risk factors significantly correlated with occupational back pain were low decision making (OR_{adj}=2.26; 95% CI: 1.26 to 4.05), no exercise (OR_{adj}=8.30; 95% CI: 1.35 to 24.28), overtime work (OR_{adj}=3.39; 95% CI: 1.16 to 9.88), repetitive posture (OR_{adj}=2.94; 95% CI: 1.19 to 7.29) and very high ergonomics risk assessed by RULA (OR_{adj}=2.48; 95% CI: 1.20 to 6.60; p-value=0.018).

Conclusion This study indicated that the high ergonomics risk at machine controlled station and alternative sitting and standing stations must be implemented change soon. Work rotation management is suggested to provide in the working process. Repetitive work, low decision, and long overtime work should be considered for safety management in order to prevent back pain among electronic workers.

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CERVICAL PAIN IN TOBACCO FARMERS IN SOUTHERN BRAZIL

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Introduction More than 2 00 000 families are included in tobacco farming in Brazil. In harvesting, baling, cutting wood among other activities the farmers are exposed to vicious position, physical effort, repetitive movements and vibrations. Thus, this study evaluated the prevalence and factors associated with cervical pain in tobacco farmers in southern Brazil.

Methods A cross-sectional study was carried out with a representative sample of 2469 tobacco farmers from the municipality of São Lourenço do Sul/RS/Brazil. Cervical pain was characterised by an adaptation of the Nordic Questionnaire for Musculoskeletal Symptoms. The multivariate analysis was performed by Poisson regression, following a hierarchical model.

Results The prevalence of cervical pain in the last year was 7.4%, 9.1% for women and 6.2% for men. Work at intense or accelerated pace and green tobacco sickness in the last year were positively associated with cervical pain in both sexes. However, smoking and baling were risk factors among women, while older age, using heavy chainsaw and having suffered pesticide poisoning showed a risk among men.

Conclusion The prevalence of cervical pain is similar to that found in other studies in farmers, but risk activities are marked by the sexual division of labour and are related to ergonomic exposures. The study points to the need to deepen understanding about the role of nicotine exposure in musculoskeletal problems. The mechanisation of the harvest and the activities needed to heal the leaf could reduce cervical pain among smokers.

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MUSCULOSKELETAL DISORDERS AMONGST FARMERS IN MOROCCOB Benali*, I El Amri, R El Omari, A El Kholti. *Casablanca Faculty of Medicine and Pharmacy, Hassan II University, Morocco*

10.1136/oemed-2018-ICOHabstracts.724

Introduction Musculoskeletal disorders (MSD) are a common problem within the occupational health field. The objective of this study is to determine the prevalence of chronic lumbar back pain within a population of farmers, the analysis of medical and professional consequences and the search for associated factors.

Methods We've gathered a random sample of patients consulting in Ouled Frej health centre, in the province of El Jadida. We've collected data through a standardised questionnaire.

Results We've got information from 270 patients, 78,5% were female, with a mean age of 33,5 years. Lumbar back pain (LBP) was present within 33,5% of the cases and it affected women more than men ($p=0,0002$). The mean of the visual analogue scale for pain evaluation was at 46,59%. The triggering factor was heavy loads lifting in 63,63% of the time. Non steroidal anti inflammatory drugs were prescribed in 80,64% of the cases. The proportion of patients experiencing professional outcomes due to their LBP was found to be 47,72%.

Discussion In this study, the frequency of LBP was higher amongst female workers, with a sex ratio of 2,82 which matches the findings of Gepner and al. The rates of resorting to medication varies between 42,2 and 79%. In our study pretty much every one of the patients took some sort of medication for their LBP (including self medication). Professional consequences of LBP are usually evaluated by means of medical leave. For our patients, 16,1% had to stop working which is similar to what Gepner and al found.

Conclusion Preventing the transition to chronic pain needs to be done as early as possible. Simple and inexpensive measures can often be enough to encounter this problem which necessarily include information and coordination between the attending and occupational physicians.

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WORK-RELATED RISK FACTORS FOR SUBACROMIAL PAIN SYNDROME: SYSTEMATIC REVIEW AND META-ANALYSISHF van der Molen*, C Foresti, JG Daams, MHW Frings-Dresen, PPFM Kuijer. *Academic Medical Centre, University of Amsterdam, Department: Coronel Institute of Occupational Health, Amsterdam Public Health research institute, Amsterdam, The Netherlands*

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Introduction To examine the association between work-related risk factors and clinically assessed specific soft tissue shoulder disorders like rotator cuff syndrome – including tendinitis of the supraspinatus, infraspinatus and/or non-traumatic tears and ruptures –, bicipital tendinitis, calcific tendinitis, impingement and bursitis.

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. These shoulder disorders were grouped into subacromial pain syndrome, abbreviated to SAPS, and defined as all non-traumatic, usually unilateral, shoulder complaints that cause pain, are localised

around the acromion, and often worsen during or subsequent lifting of the arm. Meta-analyses and GRADE were performed to assess evidence and quality for the studies on work-related risk factors.

Result In total 16 300 patients with SAPS from a population of 2,413,722 workers from Denmark, Finland, France, Germany and Poland were included in the meta-analysis. Moderate evidence for associations were found for arm-hand elevation (OR=1.9, 95% CI: 1.47 to 2.47) and shoulder load (OR=2.0, 95% CI: 1.90 to 2.10). Low to very low-quality evidence was found for hand-force exertion, hand-arm vibration and psychosocial risk factors.

Discussion Arm-hand elevation, hand-force exertion and hand-arm vibration during work, increase the incidence of SAPS. Especially preventive measures to reduce arm-elevation and shoulder load, the latter involving combined physical exposures, e.g. hand-force exertion and arm-elevation, are recommended to prevent these work-related shoulder disorders. Presumably psychosocial factors play an intermediate role, and therefore, should also be targeted in occupational preventive actions.

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COMPARISON OF DIAGNOSTIC CRITERIA FOR OCCUPATIONAL UPPER EXTREMITY DISORDERS BETWEEN COUNTRIESHenk van der Molen*. *Coronel Institute of Occupational Health, Academic Medical Centre, University of Amsterdam*

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The aim of this Special Session is to exchange detailed exposure and diagnostic criteria for work-related upper extremity disorders.

Countries have different criteria, definitions and acceptance of work-related musculoskeletal disorders. This session will compare differences on seven common upper extremity disorders: Trapezius Myalgia (Cervalgia), Rotator Cuff Tear, Epicondylitis, DeQuervain's Disease, Trigger Finger, Wrist Tendonitis, and Carpal Tunnel Syndrome. Each presenter will discuss required relevant work exposure and diagnostic criteria. In addition the legal and social insurance decision process will be briefly discussed. When available, country-wide occupational incidence of the disorders will also be presented. In final 20 min the audience will be invited to comment on the presentations from the perspective of the experience in their country.

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