CONCLUSIONS

The assessment and prevention of occupational risks are a major asset to improve the quality of work and retain employees through a better quality of work life.

0423

DEVELOPMENT OF A DISEASE SURVEILLANCE SYSTEM FOR SILICOSIS AND RESPIRATORY DISORDERS IN STONE CARVING WORKERS IN THAILAND

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OBJECTIVES

To (a) develop a surveillance system for silicosis (b) estimate prevalence of silicosis and respiratory disorders among stone carvers and (c) develop a guideline for screening for silicosis.

METHOD

This was a cross-sectional, descriptive study of 1257 stone carvers. Data were collected between July and October, 2012. The 767 participants in the study were classified by job categories. Exposure indices were constructed. Health outcomes (including job description, respiratory symptoms and chest radiographs) were assessed and confirmed by diagnosis by a B reader.

RESULTS

Of the total population, 767 underwent chest radiographs (age 24 to 75 years; 97.1% male). The prevalence of radiographic change was 8.9% (68 subjects). There were 66 subjects with parenchymal lesions and profusion (≥ grade 1/0 as per ILO classification). Two subjects have pleural abnormalities. Importantly, 59% among 66 with radiographic abnormalities were compatible with tuberculosis; 32 of whom showed no clinical evidence of tuberculosis.

CONCLUSIONS

The diagnostic differentiation between silicosis and tuberculosis is challenging; consequently, discrepancies can arise when reporting the prevalence of the two diseases. Our research group is developing CPG for screening silicosis for referral to a clinic in chest medicine. The remaining at-risk population will be examined by chest X-ray in July 2013 and the hazard surveillance and exposure to silica performed next.

0426

OCCUPATION AND LEUKAEMIA IN SPAIN 2007–2012

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OBJECTIVES

Established risk factors for leukaemia do not explain the majority of leukaemia. Previous studies have suggested the importance of occupation in leukaemogenesis.

To evaluate associations between job title and leukaemia in the population the MCC-Spain

We studied occupational variation of the risk of chronic lymphocytic leukaemia

METHOD

We have 30,744 occupational interviews recruited during 2007 to 2012 all was codified on 67 group homogeneous units, according to a defined criteria, in the same category defined by a set of tasks of the same characteristics. We analysed 196 cases of leukaemia (aged 20–75 years) and yours controls
randomly selected from 9 regions in a population based case-control study in Spain (MCC-Spain study) with demographic details, information on potential confounders and a comprehensive employment history. Each case of leukemia may have one or more occupations. All occupation were codified by Occupational National Code (CNO 94) and The International Standard Classification of Occupations (ISCO-88) Associations between occupation and leukemia were analysed using logistic regression adjusting for gender, age, and smoking.

Results We analysed the 27.4% of leukaemias. 6% never had occupation with risk of leukemia and 41% were worked at least one occupation with probably exposition to carcinogens for leukemia. Analysis is ongoing and results will be presented at the conference.

Conclusions In summary, our study showed some evidence supporting the role of some kind occupation in the development of leukemia. However, given the relative low numbers the results have to be interpreted with some caution. On have analyse the exposition on these occupations.

Objectives The US workforce, like workforces around the globe, is ageing - which creates new challenges for occupational health researchers and practitioners. Throughout their working lives, workers experience changes in occupational exposures, behaviours and time demands. The ways in which age-related changes in specific injury risk factors interact to influence injury risk are complex. Data reported in Morbidity and Mortality Weekly Reports Data collected by the United States Bureau of Labour Statistics was analysed to compare age-related differences in occupational injury rates across several industrial sectors and subsectors.

Method Occupational injury incidence rate estimates were developed to compare age-related patterns by industry and injury type. Injury count data from 2010, stratified by age group, industry sector and injury type, were provided by the US Bureau of Labour Statistics Survey of Occupational Injuries and Illnesses. The Current Population Survey was used to develop estimates of at-risk experience. Data from a diverse collection of industry subgroups (defined by NAICS codes) were analysed, including agriculture, transportation and warehousing, private hospitals, nursing and residential care facilities, police protection and construction.

Results There are significant differences in the rates of occupational injuries when stratified by age group, industry and injury type.

Conclusions Additional research should explore the reasons why occupational injury rates differ by age group, industry and injury type. Occupational safety programs and policies should consider age-related differences in injury risks when allocating resources toward prevention efforts.

Objectives A potential “healthy worker effect” may bias the studied effect of shift work on health. The observed differentences in health behaviour and health outcomes might be caused by: (i) primary selection, (ii) influence from the with shift work related environment, and (iii) impact of shift work. We aimed to study these potential sources.

Method A cohort of 4754 male trainees who had finished their professional training and started their career in the production between 1995 and 2012 was identified. Among them, 1348 (28%) were involved in rotating shift work and 3406 (72%) in a day working time. Information on lifestyle and blood pressure (BP), body mass index, and measurements of laboratory parameters were retrieved from the data of medical examinations. These were then compared at (i) the beginning, (ii) the end of training, and (iii) 3 years after the job begin, in relation to the working time. Results At the beginning of the training, the prevalence of smokers was higher among shift workers (26% vs. 21%). During the training and the first 3 years of job, marginal decline of systolic BP and elevation of triglyceride were observed among the shift workers, after the adjustment for age at begin, duration between the examinations, and the measurements at the baseline. No difference was found with respect to other risk factors for cardiovascular diseases.

Conclusions Our findings do not support a primary selection in favour of shift workers. A potential impact of shift work on lifestyle and health will be studied prospectively.

Objectives Fractional exhaled nitric oxide (FeNO) has been implicated as a pulmonary biomarker in various respiratory disease, including COPD. Measurement of FeNO is a simple, non-invasive tool for assessing airway inflammation. Nevertheless, the usefulness of FeNO measurements in COPD patient in clinical practice is unclear. The objective of this review was to evaluate the efficacy of management of COPD based on FeNO in comparison with pulmonary function test.

Method Cochrane library (CENTRAL), MEDLINE, EMBASE and reference lists of articles were searched. The last searches were in July 2013. Results of searches were reviewed against predominantly criteria for inclusion. Relevant studies were selected, assessed and data extracted independently by two people. Participant articles with COPD management based on pulmonary function test compared with FeNO measurement were selected. Risk of bias for each study was assessed using the QUADAS (quality assessment of studies of diagnosis accuracy included in systematic reviews) scale.

Results Finally, eight studies were included. Of the eight studies, four were a negative and one were positive correlation between
Correction


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