0417 PRELIMINARY STUDY OF DISTRESS AMONG MEDICAL AND PARAMEDICAL STAFF OF MOROCCAN HOSPITAL

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Objectives Mental health status of medical and paramedical staff has an impact on the quality and quantity of their productivity and on their relationship with the patients. The objective of this preliminary study is to measure mental health status in hospital staff, especially, emotional disorder “distress”.

Method The study is realised in hospital in Rabat, Morocco, among 100 medical and paramedical staff. The 12-items General Health Questionnaire GHQ and questionnaire about their health status are used.

Results The results show that, according to gender; among 50 men, 50% suffer from distress and among 50 women, 58% are distressed.

Also, according to specialty; 80% of doctors and 47.5% of nurses in different categories (55% of nurses in anaesthesia and resuscitation, 45% of nurses of laboratory, polyvalent nurses and radiology nurses) suffer from this emotional disorder.

The findings demonstrate also, that 23% and 36% of the staff sample’s suffer from different health problems (gastritis, allergies, asthma, colopathy, hypertension...) and from sleep disorders respectively.

Conclusions These preliminary results have highlighted the danger that threatens the health status of medical and paramedical staff of this hospital. Deeper investigations are needed to determine all the possible factors that could be influencing this status and studying the possible relationship between the founded pathologies and distress.

0420 SEVERE OCCUPATIONAL INJURIES IN MOROCCO

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Objectives Occupational injuries represent a considerable part of the injury burden to society, affecting people in the most productive years of their lives. The aim of this study is to describe the profile of severe occupational injuries in Kenitra city, economic capital of the Gharb region (NW Morocco).

Method This is a descriptive retrospective analysis of severe occupational injuries (fatal injuries or resulting in permanent disability) notified in the delegation of employment of Kenitra in 2008–2009. The results do not include occupational diseases or journey accidents.

Results There were 210 severe workplace injuries reported; 176 resulted in temporary disability and 34 were fatal. According to data recorded, 91% of the victims were men with a male–female ratio of 10.05. The most exposed sectors were building and public works sector (38%), wood, furniture, paper, cardboard, textile and clothing industries (29.5%) and metallurgical industries (10%). Accidents were caused by machinery and falling materials, followed by falls from height and electricity.

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 duration of exposure was between 2 and 30 years. 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, 55 cases among 68 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 clinician 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 leukaemia 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.

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**0435** PRIMARY SELECTION AND IMPACT OF SHIFT WORK ON CARDIOVASCULAR RISK FACTORS

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**Objectives** A potential "healthy worker effect" may bias the studied effect of shift work on health. The observed differences 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 environment, and (iii) impact of shift work. We aimed to study these potential sources.

**Results** We analysed the 27.4% of leukaemias. 6% never had occupation with risk of leukaemia 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.

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**0440** A SYSTEMATIC REVIEW AND META-ANALYSIS OF EXHALED NITRIC OXIDE IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE: RELATIONSHIP TO PULMONARY FUNCTION

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**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 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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