

of 2 scales were compared in 4 groups of occupational and 3 groups of leisure time PhA. The differences in means were tested by significance level ($p < .05$). The statistical software SPSS 13.0 for Windows was used in the statistical analysis.

Results The prevalence of PD among seafarers was 9.3%, weak SOC 24.2%. Spearman's correlation between SOC and PD was 0.211 ($p < 0.01$). SOC was correlated with occupational (Spearman's correlation 0.108 ($p < 0.05$)) and leisure time (Spearman's correlation 0.114 ($p < 0.05$)) PhA. SOC was weaker in the heavy occupational PhA group and showed no difference between leisure time PhA groups. The mean values of the GHQ-12 scale showed no differences in the occupational and leisure time PhA groups.

Conclusions Psychological distress was not more prevalent among seafarers as compared to the investigations among other occupations in Italy, UK, the Netherlands and Sweden. Sense of coherence among seafarers was weaker in the heavy occupational physical activity group, confirming the findings in the other investigations (weaker SOC in lower socioeconomic status groups).

0338 ABSENTEEISM FOR MEDICAL REASON IN HOSPITAL SURROUNDINGS

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Objectives Our work aims to:

- assess occupational disability for medical reasons in hospitals across the entire work stoppages substantiated by a medical certificate,

- to identify the reasons

- and describe the causes and medical certificates responsible for this phenomenon.

Method It is a descriptive epidemiological study on the whole of the medical absences reported by employees between January 1, 2012 and December 31, 2012 in two hospitals: CHU and EHS Obstetrics and Gynaecology of Sidi-Bel-Abbes.

Support for the survey is a questionnaire completed by the doctor, it collects informations about: individual characteristics, socio-professional characteristics, and information on the declared absence (place of occurrence, the date of delivery to the employer, the type of certificate...)

- Medical causes listed according to the International Classification of Diseases (CIM 10).

Results The study population represents a workforce of 2884 employees and includes the entire staff of the CHU and EHS Obstetrics and Gynaecology of Sidi-Bel-Abbes.

We recorded 331 medical certificates off work reported by our study population. However we objectified about 3/4 of the certificates are initial certificates and 72% that are issued by the public sector.

The rate of medical absenteeism in the hospital surroundings is estimated at 7,68% with a predominance of medical absences related to illness (98%) against only 2% for those related to accidents with a male predominance (5%) containing 1% for females.

Conclusions Our results can be used in a preventive perspective to improve the professional environment and therefore reduce the incidence of medical absenteeism.

0339 EVALUATING TEMPORAL TRENDS IN OCCUPATIONAL LEAD EXPOSURE USING META-REGRESSION OF DATA IN THE PUBLISHED LITERATURE

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Objectives The published literature provides useful data for examining exposure differences across industries, jobs and time periods, but the analysis is challenging because the data is usually in summary form. We used mixed-effects meta-analysis regression models, which are commonly used to summarise health risks from multiple studies, to predict temporal trends of lead blood and air concentrations in multiple US industries from the published data.

Method We extracted the geometric mean (GM) and geometric standard deviation (GSD) of blood and personal air measurements from US worksites from the literature. When not reported, we derived the GM and GSD from other summary measures. Industries with measurements in ≥ 2 years and spanning ≥ 10 years were included. Models were developed separately by industry and sample type. Each model used the log-transformed GM as the dependent variable and calendar year as the independent variable. It also incorporated a random intercept that weighted each study by the inverse of the sum of the between- and within-study variances. Within-study variances consisted of the squared log-transformed GSD divided by the number of measurements. Maximum likelihood estimation was used to obtain the regression parameters and between-study variances.

Results The blood measurement models predicted statistically significant declining trends (2–11% per year) in 5 of the 13 industries. The air measurement models predicted statistically significant declining trends (1–3%) in 2 of the 10 industries; increasing trends (7–10%) were observed for 2 industries.

Conclusions Meta-analysis provides a useful tool for synthesising occupational exposure data that can aid future retrospective exposure assessment.

0342 LUNG CANCER RISK ATTRIBUTABLE TO OCCUPATION: IN A CASE CONTROL STUDY IN BLACK SOUTH AFRICANS, 2001–2008

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Objectives Lung cancer is the 4th most common malignancy in South Africa. Although smoking is a well established risk factor, the role of occupational exposures in the local setting is not clear. We estimated the lung cancer risk attributable to occupations.

Method Data from on-going Johannesburg Cancer Case-Control Study of black African adult cancer patients (2001–2008) was used. Information from 579 lung cancer cases and 1120 frequency matched controls was analysed. Controls were randomly selected from cancers not known to be associated with the effects of tobacco, matched by sex and age (± 5 years). Usual