

Conclusions In the present study, a high prevalence of UI symptoms was found in soccer athletes, with moderate reliability between the pad test and the ICIQ-SF; mild UI was found in both groups. The athletes had the highest scores on the General Health, Emotions and Sleep/Energy domains, which are considered to have the highest impact on quality of life.

0017 LIFE QUALITY IN WORKERS WITH RELATED MUSCULOSKELETAL DISORDERS

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Objectives Analyse the quality of life of workers of administrative department who carry out repetitive functions in a medical certification central.

Method This study was carried out in a transversal analytical approaching. The sample was constituted by 62 workers of the administrative sector of a medical certification central in the state of São Paulo. As an instrument of gathering the data the used questionnaires were: Anamnesis Questionnaire with personal and professional data, Nordic Questionnaire, Job stress scale, SF-36 Quality of Life Questionnaire. The characterisation of the sample was obtained through descriptive statistics, where test t and correlation of Pearson test were applied.

Results According to the results of the analysis of the Nordic questionnaire, 33, 87% mentioned feeling pain in the wrists and hands. In the correlation made among the data of SF-36 and Nordic questionnaire, it was showed that they presented complaints about the Nordic, minor was the score in the variables of SF-36: limitation by physical aspects, pain, vitality, emotional aspects and mental health.

Conclusions It is concluded that the most affected segments were wrists and hands, with 33, 87%, followed by anklebone and feet with 16, 13%.

0020 COMPARATIVE STUDY ABOUT QUALITY OF LIFE BETWEEN WOMEN PRACTICING DANCE AND SEDENTARY WOMEN

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Objectives This study aimed to compare Quality of life (QOL) of women who practice Jazz compared to sedentary women, in the Sports Centre-414 SESI in Sao Paulo - SP

Method We carried out a cross-sectional study, with women between 50 and 85 years old, divided into two groups: Activity Group (GA, n = 14) and Sedentary Group (GS, n = 14). QOL was analysed by the SF-36.

Results The GA had a significant improve in 6 domains of SF-36 compared to GS (p < 0.05).

Conclusions The results of this study suggest an improvement in the QOL of practitioners of jazz, especially in the physical and emotional aspects, compared to sedentary women.

0024 EFFECTS OF CHRONIC LOW-DOSE EXPOSURE TO IONISING RADIATION ON PHYSICIAN MICRO-VASCULAR STRUCTURE REVEALED BY NAIL FOLD CAPILLAROSCOPY

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Objectives The aim of this study was to assess the long term pre-clinical effects of low-dose radiation on the micro-vascular structure among interventional physicians whose hands are exposed to ionising radiation in their daily practice.

Method The study, approved by the ethics committee, included 186 radiation-exposed (surgeons, cardiologists and radiologists) and 35 unexposed physicians. The study participants filled in a questionnaire describing their present and past daily practice from which the present and cumulative radiation exposures were estimated. Their dermal microcirculation was assessed by capillaroscopy of the nailfold of 8 fingers -thumbs excluded- of each study participant. Two quantitative scores characterising respectively extravasation and morphological abnormalities were obtained based on post-hoc codings of seven semi-quantitative indices by five capillaroscopists. These assessments were randomised and were blind to the exposure. The effect of the radiation exposure on both features was modelled using multilevel proportional odds regression adjusted for potential confounders.

Results The exposure intensity of each act was greatest among surgeons but with a lesser number of acts. The mean estimated cumulated exposure was largest among radiologist and cardiologists.

No effect of the exposure could be detected on the extravasation score. The morphological anomaly score increased significantly with duration of exposure and cumulative exposure indices among surgeons and interventional radiologists contrary to cardiologists among which no effect could be detected.

Conclusions Capillaroscopy showed significant effects of chronic low-dose exposure to ionising radiation on micro-vascular structure among exposed physicians but its interest for individual monitoring has not been demonstrated.

0025 ASSESSMENT AND ESTIMATES OF EXPOSURE TO SYNTHETIC AMORPHOUS SILICA AT FIVE GERMAN PRODUCTION PLANTS

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Objectives Synthetic amorphous silicas (SAS) are nanostructured polymorphs of silicon dioxide. We compared two different exposure assessments.

Method This study estimated cumulative exposure to inhalable SAS dust in 484 male workers from five German SAS producing plants. Two procedures (P1, P2) were applied. P1 was based on

an expert assessment. P2 was a multiple exposure assessment (15 scenarios) anchored by a recent measurement series (1375 personal measurements of inhalable SAS dust concentration) and used expert assessments.

Results Cumulative exposure estimates for P1 averaged 56.9 mg/m³-years (range: 0.1 to 419); for a selected P2 scenario the mean was 31.8 mg/m³-years (range: 0.4 to 480), ($p < 0.0001$). Averages varied between the 15 P2-scenarios from 12.6 to 109.6 mg/m³-years. Different time trends for SAS concentrations were observed.

Conclusions Both approaches suffer from considerable uncertainties that need to be considered in the epidemiological morbidity study.

0026 PSYCHOSOCIAL STRESS OF NURSES IN ONCOLOGY: EFFORT-REWARD IMBALANCE SCALE

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Objectives

- To identify sociodemographic variables associated with psychosocial stress in oncology nurses;
- Assess the associations between occupational variables and stress in the work environment of nurses in oncology;
- Discuss the impact of psychosocial stress in nursing work in oncology.

Method This is a cross-sectional epidemiological study, which will be used part of the Database of research - Nurses' Health Study, the 18 largest hospitals in the city of Rio de Janeiro / Brazil held in 2011. Permission to use the database of the National Cancer Institute was provided by the research coordinator. From a total of 234 nurses, 94% (211) have joined the research. A questionnaire was used Effort-Reward Imbalance and variable exposures (demographic, occupational and health) for the verification of statistical association. Were included in the logistic regression analyses and the variables in the bivariate analysis were associated with a lower level of significance ($p < 0.20$). Was defined as the reference category that with the lowest expected risk for the High Effort-Reward Imbalance. Presented outside the adjusted odds ratios and their respective 95% confidence in the multiple model.

Results Variables that showed statistical association after logistic regression analysis were age and intent into abandonar nursing. The younger nurses is approximately three times higher chance of having the High Effort-Reward Imbalance when compared to older, and who had the intention to leave nursing had increased odds for the High Effort-Reward Imbalance.

Conclusions Stressors at work are health risks, so many individual and organisational efforts should be considered to deal with such a situation in oncology.

0027 LIFE EVENTS AND PSYCHOLOGICAL DISTRESS AMONG POLICE OFFICERS SIX YEARS POST HURRICANE KATRINA

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Objectives To investigate if organisational support modifies associations between life events and psychological symptomatology among police officers post Hurricane Katrina.

Method Complete data on depression [Centre for Epidemiological Studies Depression scale (CES-D)], PTSD [Posttraumatic Stress Disorder Checklist - Civilian version (PCL-C)] and life change events [Recent Life Changes Questionnaire] were available for 98 police officers assessed 6 years after Katrina. The Survey of Perceived Organisational Support scale was used to assess organisational and supervisory support. Linear regression and ANOVA/ANCOVA were used to compare mean levels of depression and PTSD across quartiles of total life change events score.

Results Mean age was 42.5 years; 27% were female. Mean levels of CES-D and PCL-C did not differ significantly between male and female officers. Total life events score was positively and significantly associated with depression and PTSD in both unadjusted and multivariable adjusted models ($p < 0.001$). Among officers who scored low on organisational support, mean levels of CES-D and PCL-C increased significantly with the increasing quartiles of total life event score ($p = 0.005$ and $p = 0.001$, respectively) in fully adjusted models. Associations were not significant among officers who scored high on organisational support.

Conclusions Our findings suggest that a higher number of life change events is significantly associated with increasing symptoms of depression and PTSD among officers, and these associations are modified by organisational support. Previous studies suggest that stressful life events are associated with chronic depression. Future studies are warranted to investigate independent contributions of individual life events in associations involving depression, PTSD and support.

0029 A STUDY OF BLOOD MULTI-ELEMENT CONCENTRATIONS IN LEAD-EXPOSED AND NON-EXPOSED WORKERS

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Objectives Both lead recycling and lead-containing paint are the main source of lead exposure. During the lead industrial processes, the workers exposed to many elements including non-essential elements and essential elements. The aim of this study was to compare lead (Pb) with cadmium (Cd), arsenic (As), selenium (Se), cobalt (Co), copper (Cu), zinc (Zn) in blood between lead-exposed and non-exposed workers.

Method There were 109 lead workers and 329 non-exposed workers enrolled. The whole blood concentration of Pb was determined by graphite atomic absorption spectrometer (AAS), while the others (Cd, As, Se, Co, Cu and Zn) were determined by inductively coupled plasma mass spectrometer (ICPMS). We analysed the associations between the seven elements and the worker health examination data. Finally, multiple linear regressions were used to analyse elements interactions.

Results The mean age of all workers was 40.13 years and mean BMI was 24.81. Mean concentrations (ug/L) of blood elements in Pb-exposed workers were Pb 143.5 ug/L, Cd 1.28, As 9.45, Se 251.46, Co 0.57, Cu 1044.4, and Zn 9706.92. While concentrations in non-exposed workers were Pb, 26.18 ug/L, Cd, 0.98, As, 5.28, Se, 255.40, Co, 0.42, Cu, 880.07, and Zn, 6891.52. To find the relationship of Pb and the other elements, using the interaction variables, showed that there were interactions between Cd and As, As and Co, As and Cu.