

students' baseline knowledge Faculdade de Medicina da Universidade de São Paulo (internal fifth-year residents and first-year internal medicine) as well as evaluate their own health habits.

**Method** We conducted a cross-sectional study in which we applied two questionnaires that had been used in previous studies by Ferreira Junior, 2011. The questionnaires so called 1) "Survey of attitudes and behaviour" and 2) "Questionnaire assessment of knowledge in health promotion." Regarding the epidemiological data to submit descriptive statistics and Excel filters the table.

**Results** The higher scores among graduate students, were related to nutrition and oral hygiene, both at present as expected in a year. Questions about professional attitude in their 13 items' scores were higher post-graduate training in the item. In other items, students' grades and graduation from residency and postgraduate students were equal. When comparing the mean of graduate students called in questionnaire 2, all items showed lower values in relation to the notes of interns and residents.

**Conclusions** The loss in quality of care is undeniable, since there is awareness on the part of the respondents own lack of technical knowledge updated with regard to health promotion that contrasts with the self-perception of adequate training to do so.

#### 0294 CARDIOVASCULAR DISEASE AS A RISK FACTOR FOR DISABILITY RETIREMENT

Eduardo Sá, Rafael Torres, Lys Rocha. Faculdade de Medicina Da Universidade de São Paulo, São Paulo, Brazil

10.1136/oemed-2014-102362.319

**Objectives** The relationship between work and some diseases that they can provide is already known for a long time. Because of these conditions some projects were created to improve conditions of work and to support the worker loses her job capacity such, among them the disability retirement. The objective of this study was to identify cardiovascular disease as risk factors for disability retirement.

**Method** Was realised a literature review, including articles published in 2000 to 2013, being surveyed those in the period from April to November 2013, using the following descriptors: risk factors, pensions and cardiovascular diseases in databases PUBMED/MEDLINE, BIREME, SCOPUS, WEB OF SCIENCE and COCHRANE. Found, respectively, 8, 8, 27, 2 and 0 items. After deleting the duplicate items, those whom were not in English or Portuguese and non revolved around the topic of study, 7 remained. All showed a positive association between disability retirement and cardiovascular diseases.

**Results** In the study used to compare relative risk for cardiovascular disease retirements with musculoskeletal found the same risk for both diseases. Other studies showed association between increased uric acid, poorly controlled hypertension, perceived stressful work postures and work and increased risk for this retirement. There is a huge investment in prevention campaigns for workers' health to prevent the musculoskeletal disease, but not always the same commitment to the prevention of the cardiovascular.

**Conclusions** In conclusion cardiovascular disease has high significance for the health of the employee, being an important risk factor for disability retirement, and should be encouraged to implement policies to prevent these.

#### 0295 OCCUPATIONAL EXPOSURE TO CRYSTALLINE SILICA AND THE RISK OF LUNG CANCER IN CANADIAN MEN

<sup>1,2</sup>Linda Kachuri, <sup>3</sup>Paul J Villeneuve, <sup>4</sup>Marie-Élise Parent, <sup>5</sup>Kenneth C Johnson, <sup>1,2</sup>Shelley A Harris. <sup>1</sup>Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada; <sup>2</sup>Prevention and Cancer Control, Cancer Care Ontario, Toronto, ON, Canada; <sup>3</sup>Department of Health Sciences, Carleton University, Toronto, ON, Canada; <sup>4</sup>INRS-Institut Armand-Frappier, University of Quebec, Laval, QC, Canada; <sup>5</sup>Department of Epidemiology and Community Medicine, University of Ottawa, Ottawa, ON, Canada

10.1136/oemed-2014-102362.320

**Objectives** Crystalline silica is a recognised carcinogen, but the association with lung cancer at lower levels of exposure has not been well characterised. This study investigated the relationship between occupational silica exposure and lung cancer, and the combined effects of cigarette smoking and silica exposure on lung cancer risk.

**Method** A population-based case-control study was conducted in 8 Canadian provinces between 1994 and 1997. Self-reported questionnaires were used to obtain a lifetime occupational history and information on other risk factors. Occupational hygienists assigned silica exposures to each job based on concentration, frequency, and reliability. Data from 1681 incident lung cancer cases and 2053 controls were analysed using logistic regression to estimate odds ratios (OR) and their 95% confidence intervals. Models included adjustments for cigarette smoking, lifetime residential second-hand smoke, and occupational exposure to diesel and gasoline engine emissions.

**Results** Relative to the unexposed, increasing duration of silica exposure at any concentration was associated with a significant trend in lung cancer risk (OR  $\geq 30$  years: 1.67, 1.21–2.24; p<sub>trend</sub>=0.002). The highest tertile of cumulative silica exposure was associated with lung cancer (OR: 1.81, 1.34–2.42; p<sub>trend</sub>=0.004) relative to the lowest. Men exposed to silica for  $\geq 30$  years with  $\geq 40$  cigarette pack-years had the highest risk relative to those unexposed with  $<10$  pack-years (OR: 42.53, 23.54–76.83). The joint relationship with smoking was consistent with a multiplicative model.

**Conclusions** Our findings suggest that occupational exposure to silica is a risk factor for lung cancer, independently from active and passive smoking, as well as from exposure to other lung carcinogens.

#### 0296 THE NIEHS GULF STUDY: CORRELATIONS OF CONCENTRATIONS BETWEEN VARIOUS OIL CHEMICALS AND TOTAL HYDROCARBONS

<sup>1</sup>Caroline Groth, <sup>1</sup>Sudipto Banerjee, <sup>2</sup>Tran Huynh, <sup>2</sup>Gurumurthy Ramachandran, <sup>3</sup>Mark Stenzel, <sup>4</sup>Patricia Stewart, <sup>5</sup>Aaron Blair, <sup>6</sup>Lawrence Engel, <sup>6</sup>Dale Sandler, <sup>6</sup>Richard Kwok. <sup>1</sup>Division of Biostatistics, University of Minnesota, Minneapolis, MN, USA; <sup>2</sup>Department of Environmental Health Sciences, University of Minnesota, Minneapolis, MN, USA; <sup>3</sup>Exposure Assessment Applications, LLC, Arlington, VA, USA; <sup>4</sup>Stewart Exposure Assessments, LLC, Arlington, VA, USA; <sup>5</sup>National Cancer Institute, Gaithersburg, MD, USA; <sup>6</sup>Epidemiology Branch, National Institute of Environmental Health Sciences, Research Triangle Park, NC, USA

10.1136/oemed-2014-102362.321

**Objectives** In the 2010 Deepwater Horizon Oil Spill, thousands of workers may have been exposed to various potentially harmful chemicals found in crude oil including benzene, ethylbenzene, xylene, and toluene. These and total hydrocarbons (THC) (a composite of all the volatile chemicals in crude oil) were monitored. Over 150 000 personal measurements were taken, but many of the measurements of individual chemicals were