Oral Presentation

Other

THE SYNERGY PROJECT

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The SYNERGY project was established in 2007 to provide a scientific basis for recognition of lung cancer as an occupational disease in workers exposed to more than one lung carcinogen. It represents the largest database of case-control studies on lung cancer with complete life course information on occupation and tobacco smoking. Data from 19,370 lung cancer cases and 23,674 controls are available from 16 case-control studies conducted between 1983 and 2010. Cases were recruited from hospitals or cancer registries, and in most studies eligible if: 1)<75 years; 2) resident for at least one year and 3) confirmed diagnosis of lung cancer by histology or cytology. Controls were recruited from the general population (81%) or hospitals (19%), and were individually or frequency matched to cases by sex and age. Information was predominantly collected by interviews with the study participants themselves, though next-of-kin respondents were accepted in five of the studies if subjects were unavailable (9.1% of cases, 6.6% of controls). Ethical approvals for the original studies were obtained in each country and for the SYNERGY project from the IARC Ethics Committee. The database comprises around 14% never smokers, whereof 822 cases. Women represent around 20% of the study population. The strengths of SYNERGY include bringing together epidemiologists and exposure assessment experts from around the world to advance occupational cancer epidemiology, 2) power to study small risks, 3) providing quantitative exposure estimates for population-based case-control studies, and 4) allowing sub-group analyses, e.g. by gender, histology and smoking status.

Poster Presentation

Respiratory

A CRITICAL EVALUATION OF FRACTIONAL EXHALED NITRIC OXIDE (FENO) AND PULMONARY FUNCTION TEST LEVELS IN BAKERY AND PLASTICS WORKERS

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This study aimed to investigate whether the irritants used in bread and plastic industry cause irritation in the respiratory tract to determine the benefits of adding FeNO measurement method to periodical controls in various business branches.

Our cross-sectional study was carried out on 88 workers in the plastics and bread sectors in Istanbul. Our control group consists of 49 people. FeNO levels were measured and the relationship between these parameters and pulmonary function test parameters was investigated. When FeNO levels in control and work groups were investigated, they were found over 25 ppb in 8 persons working in bakery, 11 in plastics, and in 9 of the control group.

When parameters related with respiratory function were evaluated, people whose parameters were found to be lower than 80% were as follows respectively: PEF levels of 29 people (64,4%) working in bakery in and FEF(25-75%) levels of 5 people (11,1%); whereas PEF values of 26 people (60,5%) among the workers of plastics and FEF(25-75%) levels of 5 people (11,6%) were found to be less than 80%. A statistical significance was found between FeNO and PEF levels which were under 80%. In workers whose FeNO levels were found under 25 ppb and those whose PEF levels were under 80% were found to be significantly high (p=0.03).

Measuring FeNO levels will be helpful to identify the various environmental respiratory irritants at workplaces before