

1737a OCCUPATION AND COPD

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Occupational exposures are able to cause a variety of occupational lung diseases that affect either predominantly the airway or the lung parenchyma. Exposures to agents at work that are able to cause COPD remain globally common, although the evidence supporting each of these is variable. Better evidence is available to support the roles of silica, grain dust, coal and cadmium, for example, as specific causes of occupational COPD, whilst multiple epidemiologic al studies also support the harmful effect of exposures to vapours, gases dusts and fumes.

This presentation will summarise the current view of occupational COPD, to include its definition, common causes and it will also include discussion of the uncertainties around occupational COPD. The talk will also include specific mention of the harmful effects of inhaled respiratory crystalline silica, and the continuing global problems associated with silicosis.

1737b OCCUPATION AND ASTHMA

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Asthma is widely recognised to be a heterogenous disease with several 'endotypes'; differentiation of these is not necessarily straightforward and requires assessment from several different angles. Moreover there is increasing evidence that the label is (over-) applied inappropriately.

The often close relationships between occupation and asthma are equally well recognised. Employees, for example, may develop a work-related exacerbation of their pre-existing disease or, *de novo*, 'occupational asthma', usually as a result of an acquired hypersensitivity to a, airborne, workplace sensitising agent; differentiation between these two conditions is often, but not always, straightforward.

However, not infrequently, respiratory symptoms are erroneously attributed to asthma when they are in fact, a reflection of other conditions originating in the upper airway or in relation to disordered breathing patterns. Correct identification of these conditions allows individuals to remain in their current job and avoids the use of protracted polypharmacy; novel approaches are available to assist in making these diagnoses and help to direct appropriate management.

In addition to assessment of current symptoms, a key question often posed is how an individual's asthma will affect their future employment? There is good evidence that variation *between* individuals is greater than that *within* an individual; this allows the prediction of risk of future exacerbations and of the risks of recurrence of remitted childhood disease.

This presentation will review modern approaches to diagnosis and management of asthma and related conditions, including the appropriate role of novel, 'biologic, treatments.

572 WORK-RELATED ASTHMA ASSOCIATED WITH HIGH PREVALENCE OF RESPIRATORY SYMPTOMS AND REDUCED WORK-ABILITY IN A CROSS-SECTIONAL POPULATION BASED STUDY FROM NORWAY

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Introduction Some studies have indicated that patients with occupational asthma have more severe disease than other asthma patient. Indicators of severity may be reduced quality of life and higher levels of sick-leave and disability. There are, however, few studies assessing respiratory symptom prevalence and work-ability. The aim of our study was to estimate the differences in respiratory symptom prevalence and work-ability between patients with indication of work-related asthma compared with other asthma patients.

Methods The association between work-relation and respiratory symptoms and work ability was assessed among 16 099 subjects from the general population, aged 16 to 50 years, included in a cross-sectional study from Telemark, Norway. 828 subjects that reported having physician-diagnosed asthma, ever being employed and currently using asthma medication were included. Of these 171 (21%) had respiratory symptoms at work that improved during weekends, holidays, other absence from work or change of work. These were compared with the remaining patients with physician-diagnosed asthma (n=657). Self-reported work-ability was assessed by the first single item question of the work ability index (WAI). Analyses were adjusted for age, gender, education and occupational group.

Result The patients with work-related asthma reported significantly more respiratory symptoms in the past 12 months; wheezing (OR 2.6, 95% CI: 1.5 to 4.5), woken by dyspnoea during the night (OR 2.0, 95% CI: 1.4 to 2.8), woken by coughing (OR 1.8, 95% CI: 1.3 to 2.6), asthma attack (OR 2.2, 95% CI: 1.5 to 3.1) and reduced work-ability (OR 2.3, 95% CI: 1.5 to 3.3).

Discussion Our study indicates that work-related asthma is associated with higher prevalence of respiratory symptoms and reduced work-ability (score <8) compared with asthma without work-relation. These findings support the hypothesis suggesting that occupational asthma may be more severe than non-occupational asthma.

573 OCCUPATIONAL RESPIRATORY DISORDERS IN A 'CHEMICAL' INDUSTRY IN TOGO

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