FACTORS INFLUENCING THE LUNG FUNCTION OF EMPLOYEES IN VETERINARY PRACTICES

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Introduction:

Veterinary medicine, with its diverse exposures, is one of the areas at increased risk for sensitisation, the development of allergies and occupational respiratory diseases. We investigated the influence of personal and occupational characteristics on the lung function of assistants and veterinarians in veterinary practices.

Methods:

We conducted a cross-sectional study among veterinary assistant staff (n = 103) and veterinarians (n = 19). A questionnaire, specific IgE determination and lung function were evaluated. Spirometry was performed according to the ATS criteria and compared with the Global Lung Initiative (GLI) reference values based on the Z-score.

Results:

The median age of the 122 participants was 33 years and the median length of occupation was 7.6 years. A physician-confirmed diagnosis of asthma was reported by 13 individuals (10.7%). A poor FEV_1/FVC ratio (Z-score < 0) was found in n= 87 (71.3%) and manifest obstructive airway disease (Z-score < 1.64) in n= 10 (8.2%) subjects. The analyses showed a relevant influence of atopy status, sensitisation to furry animals and tobacco smoking on the FEV_1/FVC ratio.

Conclusions:

Particularly sensitised workers should be monitored more closely, including spirometry, to detect impairment and limit occupational effects on lung function.