Self reported respiratory symptoms and diseases among hairdressers

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OBJECTIVES: Hairdressers are exposed to many irritative and allergenic substances capable of causing occupational respiratory symptoms and diseases. The self reported prevalence of respiratory symptoms and diseases was studied, and the risks among hairdressers compared with saleswomen was estimated. METHODS: A cross sectional prevalence study of respiratory symptoms and diseases was carried out among hairdressers and supermarket saleswomen, with a computer assisted telephone interview method (CATI). The study population comprised all the female hairdressers and supermarket saleswomen aged 15-54 years in the Helsinki metropolitan area, Finland. Disproportionate random samples of female hairdressers and sales-women were drawn from the trade union membership registers. The interviews were carried out between February and April 1994. A response rate of 80.5% (355/440) was obtained for hairdressers and 82.2% (583/709) for saleswomen. Atopy, smoking, chronic illnesses, type of work, working hours, working conditions, personal and professional use of hair products, and the use of personal protective devices were assessed. The outcome variables were self reported symptoms of the upper and lower respiratory tract. These were used to define chronic bronchitis, and asthma, laryngitis, and allergic rhinitis diagnosed by a physician.

RESULTS: There was a considerable difference in the prevalence of chronic bronchitis; 6.8% in hairdressers versus 1.9% in saleswomen. The odds ratio (OR) adjusted for age, smoking, and atopy for chronic bronchitis indicated an increased risk of chronic bronchitis (OR 4.8, 95% confidence interval (95% CI) 2.2 to 10.1). No association was found between work as a hairdresser and asthma, laryngitis, and allergic rhinitis. Also the prevalence of rhinitis, rhinitis with eye symptoms, cough with phlegm, dyspnœa, and dyspnœa accompanied by cough was increased among hairdressers. The corresponding adjusted risk ORs were 1.7 (95% CI 1.3 to 2.3) for rhinitis, 1.9 (95% CI 1.4 to 2.6) for rhinitis with eye symptoms, 1.4 (CI 1.1 to 1.9) for cough with phlegm, 1.5 (95% CI 1.0 to 2.2) for dyspnœa, and 1.6 (95% CI 1.0 to 2.7) for dyspnœa with cough.

CONCLUSIONS: Our results indicate an increased prevalence of upper and lower respiratory symptoms among hairdressers. Allergenic and irritative chemicals in hairdressing are likely candidates explaining the difference found between the hairdressers and controls. Work related reasons should be considered when a hairdresser presents with airway symptoms. Preventive actions are needed to improve the working conditions and personal protection.

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