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LUNG ALERT

Severe asthma in the workplace

▲ Eisner MD, Yelin EH, Katz PP, *et al*. Risk factors for work disability in severe adult asthma. *Am J Med* 2006;**119**:884–91.

In this study, a cohort of 465 patients with severe asthma was evaluated for the prevalence of and risk factors for asthma-related work disability. Additionally, the longitudinal impact of workplace disability and exposures on asthma outcome and health service use was observed.

The prevalence of asthma-related complete work disability was 14% (95% CI 11% to 18%). Among the people with asthma who were unemployed, 26% (95% CI 21% to 32%) of complete work disability (having to leave the work place) was attributed to asthma. Among those employed, the prevalence of partial work disability (defined as including time off work, decreased effectiveness at work or the need for a change in role due to asthma) was 38% (95% CI 31% to 45%).

Sociodemographical and medical factors were significantly related to complete work disability ($p = 0.03$ and $p = 0.02$, respectively), but work exposures were not ($p = 0.24$). Both socio-demographical factors ($p = 0.06$) and work exposure ($p = 0.01$) were related to partial disability. Using multivariate analysis the actual severity of asthma was found to be associated with both complete (OR 1.34, 95% CI 1.16 to 1.54) and partial work disability (OR 1.31, 95% CI 1.07 to 1.61).

Complete work disability was significantly associated with a greater risk for future hospitalisation (HR 1.54, 95% CI 1.06 to 2.23), whereas partial work disability was associated with increased risk for both emergency department visits (HR 2.14, 95% CI 1.25 to 3.67) and hospitalisation (HR 1.79, 95% CI 1.08 to 2.95).

Work disability is common in severe asthma and affects subsequent health needs. Modifying occupational exposure, asthma severity and medical factors such as smoking may prevent work loss, health expenditure and poor health outcome.

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