Abstract

OBJECTIVE--To estimate whether the prevalence of asthma in adults increased over a nine year interval.

DESIGN--Serial cross sectional studies of the population with a protocol that included both subjective and objective measurements.

SETTING--Busselton, Western Australia.


MAIN OUTCOME MEASURES--Respiratory symptoms measured by self administered questionnaire, bronchial responsiveness measured by bronchial challenge with histamine, and allergy measured by skin prick tests.

RESULTS--Symptoms with increased prevalence were those with significant association with allergy in this population. Recent wheeze increased from 17.5% to 28.8% (p < 0.001) and diagnosed asthma increased from 9.0% to 16.3% (p < 0.001). The increase was greatest in subjects less than 30 years old. The prevalence of shortness of breath coming on at rest and of hay fever also increased significantly, but the prevalence of shortness of breath on exertion, chronic cough, bronchial hyperresponsiveness, current asthma (defined as recent wheeze plus bronchial hyperresponsiveness), and allergy did not increase. The severity of bronchial responsiveness did not change significantly in any symptom group.

CONCLUSIONS--Young adults showed a significant increase in reporting of symptoms related to allergy but not in the prevalence of current asthma. The increase in symptoms may be due to increased awareness of asthma in this community, to changed treatment patterns, or to increased exposures to allergens.