
Abstract

PURPOSE: This study examines the association between lung function [percentage predicted FEV₁ (forced expiratory volume in 1 s)] and respiratory symptoms (asthma, bronchitis, wheeze, dyspnea) and mortality from all causes; coronary heart disease, stroke, cancer, and respiratory disease in a cohort of 2,100 men and 2,177 women in the Busselton Health Study followed for 20-26 years for mortality.

METHODS: A total of 840 men and 637 women died during the follow-up period, and Cox proportional hazards regression was used to assess the relationships between risk factors and mortality.

RESULTS: Lung function was significantly and independently predictive of mortality from all causes, coronary heart disease, cancer, and respiratory disease in both men and women, and of mortality from stroke in women. There was evidence that, among men, the association was stronger in current and former smokers as compared to those who never smoked. After adjustment for age, smoking, lung function, coronary heart disease, blood pressure, treatment for hypertension, total cholesterol, body mass index, and alcohol consumption, dyspnea was significantly related to total mortality in men and women and to respiratory disease mortality in men, and asthma was significantly related to respiratory disease mortality in women.

CONCLUSIONS: Lung function is associated with mortality from many diseases independent of smoking and respiratory symptoms. Although most respiratory symptoms are associated with smoking and lung function, after controlling for smoking and lung function, only dyspnea is associated with mortality from nonrespiratory causes.