Abstract

OBJECTIVE: To use the Busselton study to estimate the impact of smoking on hospital use in Australia.

METHODS: People on the electoral roll in Busselton in 1978 were invited to attend a survey where smoking habits were measured. 3,230 people aged 25 to 79 at the survey were followed until 1994 by record linkage to death records and to the Western Australian Hospital Morbidity Data System. Hyper Poisson regression was used to estimate ratios of hospital separation rates and mean bed day usage according to the 1978 smoking status.

RESULTS: Compared with never smokers, current smokers had hospital separation rates that were 1.32 (95% confidence interval 1.16-1.49) times higher and used 1.40 (1.20-1.65) times as many hospital bed days. Former smokers had rates midway between never and current smokers. Separations due to neoplasms, circulatory disorders and respiratory disorders were all more frequent in current than in never smokers. Estimates of hospital use in Australia due to smoking were about two times higher than those previously published using different methods.

CONCLUSIONS: Smoking is a major contributor to hospital use in Australia. People who stop smoking reduce their risk of hospitalisation.

IMPLICATIONS: Smoking has a major impact on hospital use, which can be reduced by successful smoking cessation programs.