MORTALITY AFTER FIRST HOSPITALIZATION FOR CHRONIC OBSTRUCTIVE PULMONARY DISEASE: CHANGES IN 1980-1998

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SUMMARY

The prognosis of a hospitalized patient for chronic obstructive pulmonary disease (COPD) is poor. The aim of this study was to determine changes in the prognosis for patients entering hospital for the first time on account of COPD in ten years.

Data were gathered from the hospital treatment records maintained by the National Research and Development Centre for Welfare and Health in Finland on periods spent in hospital by persons over 44 years of age with a principal diagnosis of COPD over the interval 1972-1994. Two groups of patients were then distinguished separately, those first treated in 1980-1984 and those first treated in 1990-1994, and mortality data sought for these persons in the records of Statistics Finland up to the end of 1998.

A total of 11,739 men and 3,048 women were found to have been admitted to hospital with a diagnosis of COPD for the first time in the period 1980-1984. The corresponding figures for the interval 1990-1994 were 8,941 men and 3,628 women. The Cox regression model standardized for age showed mortality to have increased in ten years among both the men [Hazard Ratio 1.093 (95 % CI 1.055 - 1.133)] and the women [HR 1.138 (95 % CI 1.061 - 1.221)]. This worsening of the prognosis was most pronounced in the age group 45-64 years, where the men had an HR of 1.145 (95 % CI 1.060 - 1.236) and the women of 1.412 (95 % CI 1.208 - 1.650).

The prognosis for men and younger women in particular entering hospital for the first time for COPD deteriorated significantly over a period of ten years. This may partly be attributed to the increased frequency of diagnosis and treatment of COPD in outpatient departments and to the reduction in rehabilitation. The apparent more rapid worsening of the prognosis for women relative to men can largely be attributed to their increased smoking.

Key words: COPD, hospitalization, mortality, prognosis

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