

Tobacco-related mortality following the Peto-Lopez epidemiological model used in international public health comparison

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Summary

In estimating the overall scale of death from tobacco in developed countries, there is a range of uncertainty between the lower limits and the upper limits of what is scientifically plausible. Following a method by Peto, Lopez et al. to base the calculations chiefly on the lower limits, we have compared the tobacco-related mortality for females and males separately in various ages groups between Poland and Sweden over a period of three decades. This method is built on the following steps: ignore deaths under age 35, ignore cirrhosis and non-medical causes, compare lung cancer at ages 35-79 with US non-smokers and concerning other diseases at ages 35-79 make a conservative halving of apparent excess attributed to tobacco. Concerning mortality all causes a tobacco-related mortality among Polish men has increased more than 50 % from the 5-year period 1965-1969 to the period 1990-1994. The analyse for women gives a strongly other picture compared with men showing much lower rates.

When comparing the middle age group with the overall population it is interesting to find a faster increase in tobacco-related mortality rates for Polish men and for Swedish women in the age group 45-64 years than in the overall group. Swedish men have reduced their smoking habit strongly and far more than Polish men (17 and 42% respectively 1999). Concerning the pattern of tobacco use it is obvious that Swedish and Polish women during the last decades have had the same and slowly decreasing smoking prevalence (21 and 23% respectively 1999). It is important to use not only lung cancer mortality but a total picture of tobacco-related disorders as indicators of the success in tobacco control in a country as well for women as for men, especially in the middle age groups.

Key words: cardiovascular diseases, lung cancer, smoking, tobacco-related mortality, tobacco control

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