

FAX TO: Dr P J Dunn, Imperial, Canada

PREMATURE MORTALITY ATTRIBUTABLE TO SMOKING AND HAZARDOUS DRINKING IN CANADA

The approach adopted in the document is:

1. To decide which causes of death are 'causally' related to the proposed risk factor. This is attempted by subjective review of published studies and opinions.
2. To decide what proportion (Attributable Fraction) of premature death from each cause of death is attributable to the proposed risk factor.

In general, they calculated the Attributable Fraction (also called Attributable Risk) for each cause of death using estimates of relative factor, broken down into exposure levels where possible.

The authors tried to get around some of the information problems, such as inconsistencies and incompatibilities between epidemiological studies, by using data from a small number of US studies (predominantly Hammond (1966)).

3. To calculate the number of premature deaths, attributable to the risk factor for each cause of death, by multiplying the number of deaths from a particular cause (e.g. particular illness, accident etc.) by the corresponding Attributable Fraction.
4. To estimate total premature death attributable to the risk factor by summing the number of premature deaths attributable to each cause of death.

Comments

Generally speaking, this paper conforms to the accepted epidemiological practices but suffers from one curious defect, the use of relative risk estimates taken from US data rather than Canadian. The paper also uses current smoking rates whereas some epidemiologists such as Sir Richard Doll would advocate the use of smoking data some 20 or 30 years prior to the mortality figures. This might in fact lead to an over estimation of the deaths attributed to smoking in this particular approach. Given these two flaws in the argumentation the conclusions might be challenged by other epidemiologists.

It is noticed that the Foreword states that "we hope that these papers will provide food for thought"... If this happens, either through circulation of the document or publication, then it is difficult to see what else can be done.

Quantitatively, the paper did not conclude that there was a great difference between "hazardous" drinking and smoking.

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