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Foreword

The fraction of cancer attributable to lifestyle and environmental factors in the UK in 2010

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This supplement provides up-to-date estimates of the numbers (and percentages) of new cancer cases in the UK that are attributable to factors that have been established by international consensus as potentially avoidable causes of the disease. It therefore offers a useful guide to the relative importance of different preventive interventions.

Excluded from consideration are factors that, although known to be effective in reducing the risk of numerically important cancers, do not offer acceptable or practical preventive strategies at present. Early and multiple childbearing (to prevent breast cancer) and the widespread use of anti-androgen drugs (to prevent prostate cancer) come under this category. What remains is a limited number of important factors that can, at least to some extent, be affected by personal or political choices. The most important among these is continuation of the significant reduction in tobacco exposure. Next in importance are reductions in obesity and in heavy alcohol consumption, and certain other dietary changes. Each of these four main strategies for cancer control would also substantially reduce the burden of other non-communicable diseases, particularly cardiovascular, diabetic, renal and hepatic disease.

Whether, and to what extent, changes in these major causes of cancer can be achieved is another consideration. Thus, for example, although substantial progress has been made in reducing the number of young people who start smoking, and in helping those who smoke to escape their addiction in time to avoid most of the risk of premature death, tobacco still remains the most important avoidable cause of cancer, responsible for almost 20% of all cases of cancer (and, although this supplement does not quantify cancer mortality, for about 25% of all deaths from cancer, plus similar numbers of deaths from other diseases).

Taken together, the causative factors reviewed in this supplement account for an estimated 43% of all new cases of cancer in the UK (approximately 134000 new cases in 2010), and about 50% of all cancer deaths. Most of these cases of cancer (excluding a few thousand due to the natural background of ionising radiation, or due to certain infections that are currently neither preventable nor treatable) could have been prevented by methods that would also prevent many premature deaths from other non-communicable disease. Over the past 40 years in the UK, the probability of death before the age of 70 years has been halved, and over the next few decades it could be halved again by continued improvements in the treatment of disease and by paying appropriate attention to the few major avoidable causes of disease. This supplement will help focus the attention of researchers, individuals and policy makers on the relative importance of the currently known causes of cancer.

Conflict of interest

The author declares no conflict of interest.

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