Mortality Attributable to Tobacco by Selected Countries Based on the WHO Global Report

In order to study the correlation between tobacco consumption and disease risk across the world, we prepared an abstract of estimated adult (age 30 years and above) deaths attributable to tobacco consumption for all types of malignant neoplasm (ICD-10 code: C00–97), cardiovascular disease (100–99) and respiratory disease (J00–98), on the basis of the WHO Global Report entitled, Mortality Attributable to Tobacco, which was recently published in 2012. In this publication, country- and region-specific death rates per 100 000 and proportion attributable to tobacco consumption (%) as of 2004 reported by WHO are available by age and sex.

Figures 1 and 2 show the overall death rates and death rates attributable to tobacco consumption for males and females, respectively, for all types of malignant neoplasm, cardiovascular disease and respiratory disease in the selected countries, along with rough estimates of rates and the proportion of mortality attributable to tobacco consumption.

For males, the USA and the UK had high tobacco-attributable death rates for all three disease groups. France and Poland had high tobacco-attributable death rates for malignant neoplasm and cardiovascular disease, but not for respiratory disease. Japan and Korea (Republic of Korea) had high tobacco-attributable death rates for malignant neoplasm, but not for cardiovascular disease. China is characterized by a high tobacco-attributable death rate for respiratory disease. Australia had low tobacco-attributable death rates for all three disease groups. Brazil is characterized by a high tobacco-attributable death rate for cardiovascular disease.

For females, the tobacco-attributable death rates were lower than those for males. The USA and the UK had high tobacco-attributable death rates for all three disease groups. Unlike the pattern observed for males, tobacco-attributable death rates were not notably high for females in France and Poland. Australia and China had high tobacco-attributable death rates for respiratory disease.

Figure 1. Death rates (per 100 000) and proportion attributable to tobacco consumption for males. Each bar shows death rate by region and each black bar shows death rate attributable to tobacco. The numbers on bars are proportion of deaths attributable to tobacco. USA: United States of America; UK: United Kingdom; Korea: Republic of Korea.

Figure 2. Death rates (per 100 000) and proportion attributable to tobacco consumption for females. Each bar shows death rate by region and each black bar shows death rate attributable to tobacco. The numbers on bars are proportion of deaths attributable to tobacco.
Note: Mortality data, abstracted from the World Health Organization mortality database, were downloaded from the International Agency for Research on Cancer (IARC) CANCER Mondial Statistical Information System (http://www-dep.iarc.fr/). Data were tabulated by the authors of this article. Responsibility for this presentation and interpretation lies with the authors of this article.