Abstract

Objective. To describe the mortality trends of cancer attributable to tobacco smoking, particularly lung cancer, for the 1980-1997 period in Mexico. Material and Methods. Mortality trends were analyzed for each type of cancer associated to tobacco smoking, according to the International Classification of Diseases (ICD). Crude and adjusted mortality rates were estimated for the period between 1980 and 1997, by age, gender, basic death cause, and year of death. The gender ratio and the relative proportion were estimated for cases in the 35-64 age group and for the entire study population. Age population projections by Consejo Nacional de Poblacion (National Population Council), were used as denominators (1970-2010). Results. The gender ratio for mortality rates for lung, esophageal, oral cavity and pharyngeal cancer was 2.10:1.00 (male: female). The gender ratio for laryngeal cancer was striking: 4.21:1.00, probably due to the higher prevalence of male tobacco smokers. The estimated relative proportion, using the total mortality due to malignant cancers between 1980-1997, was 12.31% for lung cancer, 1.71% for larynx cancer, 1.55% for esophageal cancer, and 1.49% for oral cavity/pharyngeal cancer. Previous tobacco smoking was correlated with the mortality rate trends for lung cancer (beta: 0.910, IC 95%: 1.097-1.797, R²: 0.827). For the poorest social groups by federal entity, the correlation was inverted (beta: -0.510, IC 95%: -0.170, -0.039, R²: 0.260). Conclusions. In Mexico, increased tobacco smoking, improved cancer diagnosis, and the demographic transition, are probably the main factors determining cancer mortality rates. However, other lifestyle associated variables, such as urbanization, physical activity, carotenoid intake, and other dietary and toxic substances like alcohol, may also influence the morbidity and mortality rates. Although tobacco-related cancer is a fast-growing public health problem having a poor prognosis, tobacco smoking, the main risk factor, could be eliminated by health education and promotion, together with publicity regulation and healthy taxation policies.

Keywords

Mortality, lung neoplasms, smoking, Mexico.