

A quick guide to cancer epidemiology

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This short and essential book [1] is addressed essentially to medical and public health students, and to anyone interested in a summary up to date presentation of cancer epidemiology and prevention. It is subdivided into four major sections, that include principles of primary and secondary cancer prevention, the current global burden of neoplasms, the distribution, causes and prevention of 17 major cancers or groups of neoplasms, and an overview of major causes of human cancer.

We emphasized quantitative aspects of cancer epidemiology, in order to provide the reader with indications of the public health importance of each neoplasm and risk factor, as well as priorities for prevention and focus on intervention in specific population groups.

After decades of steady increases, cancer mortality (though not incidence) rates have been declining over the last two decades in most high income areas of the world, and over the last decade in several middle income countries as well [2, 3]. This reflects tobacco control, mainly in males from high income areas of the worldwide [4, 5], but also prevention of infection-related neoplasms (mainly stomach, liver, cervix uteri), some decline of alcohol-related cancers in selected areas of Europe [6], together with appreciable improvements in early diagnosis and treatment for several common cancers (i.e., colorectum, breast, cervix uteri, prostate), as well as for leukemias, lymphomas, testis cancer and several other less common neoplasms.

Still, the progress in cancer control has been much smaller than in vascular (cardio and cerebro-vascular) diseases, and in 2008 there were 12.7 million incident cancers worldwide, and 7.6 million cancer deaths, the majority of these occurring in low and middle income countries [7].

Thus, our conclusion remains that neoplasms will continue to be a major source of human disease and death. Considerable efforts have been made to develop effective therapeutic approaches for a wide number of important neoplasms. However, even if major discoveries in the clinical management of cancer patients will be accomplished in the near future, the changes will mainly affect the affluent part of the world population. Therefore, prevention of the known causes of cancer remains the most promising approach in reducing the burden of cancer, in particular in countries with limited resources. Control of tobacco smoking and of smokeless tobacco products, reduced overweight and obesity, avoidance of excessive alcohol intake, increased physical activity, avoidance of unnecessary exposure to solar radiation and control of known occupational and environmental [8] carcinogens remain the main approaches, we currently have to reduce the burden of human neoplasms.

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