

## FOREWORD

The global burden of cancer continues to increase. In the year 2000, 5.3 million men and 4.7 million women developed a malignant tumour and 6.2 million died from the disease. Given the current trends in smoking prevalence and the adoption of unhealthy lifestyles, the number of new cases is expected to grow by 50% over the next 20 years to reach 15 million by 2020. Worldwide, twelve per cent of people die from cancer and in industrialised countries more than one in four will die from the disease. Each of us will experience grief and pain as a result of cancer, as a patient, a family member or a friend.

In developed countries, the overall cancer mortality is more than twice as high as in developing countries. The main reasons for the greater cancer burden of affluent societies are the earlier onset of the tobacco epidemic, the earlier exposure to occupational carcinogens and the Western diet and lifestyle. In developing countries, up to one quarter of malignancies are caused by infectious agents, including the hepatitis (HBV and HCV), and human papillomaviruses (HPV). HBV vaccination has already been shown to prevent liver cancer in high-incidence countries and it is likely that HPV vaccination will become a reality within the next 3-5 years. Today, more than 80% of women dying from cervical cancer live in developing countries. Successful prevention of HPV infection would make an immense contribution to women's health.

Tobacco consumption remains the most important avoidable cancer risk. During the twentieth century, approximately 100 million people died worldwide from tobacco-associated diseases. Half of all regular smokers are killed by the habit and one quarter will die prematurely before the age of 70. The World Health Organization and its member states will soon adopt the Framework Convention on Tobacco Control, a major step towards reducing the enormous morbidity and mortality associated with tobacco consumption.

During the past decade, research into the causes of human cancer, the molecular basis of malignant transformation and gene-environment interactions that contribute to individual cancer risks has made significant progress. Insight into cellular signalling pathways has led to the development of new anticancer drugs that are more specific and carry a lesser burden for the patient.

It is possible to prevent at least one-third of the cases that occur every year throughout the world through better use of existing knowledge. Where sufficient resources are available, current knowledge also allows the early detection and effective treatment of a further one-third of cases. Pain relief and palliative care can improve the quality of life of cancer patients and their families, even in very low resource settings.

My colleagues at the International Agency for Research on Cancer in Lyon and more than 50 contributors from all over the world have compiled a summary of the current understanding of cancer causes, cancer development, prevention and treatment. Together with the recently published WHO guidelines for national cancer control programmes, it will provide a scientific basis for public health action and assist us in our goal to reduce the morbidity and mortality from cancer and to improve the quality of life of cancer patients and their families, everywhere in the world.

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