

Fundamentals of cancer epidemiology – 2nd edition

Editors: Philip C Nasca & Harris Pastides
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541 pages; US\$ 89.95

Recognizing the increasing cancer burden worldwide, Nasca & Pastides provide a basic understanding of cancer epidemiology, with a particular focus on cancer biology, gene–environment associations in the cancer etiology and major risk factors for cancer.

The intended readers are students in public health schools and related medical and para-medical fields as well as those working in cancer control on a regional, national and international level. Since, according to the authors, there is no textbook dealing with cancer epidemiology for first-time students, this book aims to be such a textbook for those with basic knowledge in epidemiology.

Nasca & Pastides begin by emphasizing the importance of describing the cancer burden and trends using appropriate measures. Then they explain what cancer is and how it can be diagnosed and categorized using different cancer classification schemes (e.g. staging, coding).

Chapters 3–7 contribute to the methodological and technical knowledge on cell biology and on study types, which are of particular relevance for investigating carcinogenicity, biomarkers and genetic risk factors. Among them are experimental studies, molecular–epidemiological studies, studies on gene–environment interactions and genetic epidemiology studies.

The subsequent chapters (8–16) describe risk factors for cancer in a detailed and comprehensive way. Not only are classic lifestyle and well known risk factors such as tobacco, alcohol, diet and occupational hazards considered but also genetic factors, ionization and radiation, infections, immunological factors and hormones. Possible dose–response relationships are addressed and figures and illustrations help to understand the etiology and terminology.

The chapters on risk factors are internally structured in different ways, some by cancer sites, others by the particular factors associated with the increased risks, taking into account the different study types that address these associations.

One whole chapter is dedicated to the risk factors for and occurrence of childhood cancers and points out the need for the life–course perspective in cancer research. This chapter was newly added into this second edition. The last section gives an introduction to cancer screening as a method for early detection using certain cancers as examples to demonstrate different screening concepts.

Although the chapter on infectious agents and occupational carcinogens addresses the disproportionate geographical burden between high- and low-income countries, not much information in general is provided on geographical differences in cancer burden and survival.

Using “descriptive epidemiology” as a chapter heading, one would expect more technical information on what this is. The book makes us aware of the need to take care in interpreting comparisons, trends and data on cancer occurrence; however, it does not state how to carefully interpret these statistics.

The authors use tables and figures that aid in understanding the burden of cancer and distribution of cancer sites as well as the categorization within different cancer classification schemes. Several illustrations are used

to make etiology and biology of cancer understandable also to non-medical professionals.

The appendix provides a detailed glossary with a particular focus on biological and medical terminology, a feature that is usually available in reference books used by medical students. Appendix B lists web sites without indicating the kind of information they could provide to the reader. A more helpful table for major cancer web resources is available on page 3.

Every chapter ends with a summary and discussion questions. However, it would be helpful to provide specific answers to these questions in the appendix, which would make an improvement to the relatively ineffectual appendices.

The book is an important reference book for students, whether beginners or post-graduate students. It is written in a clear language, is well ordered and accurate. Nevertheless, several cancer epidemiology textbooks are already available from IARC (International Agency for Research on Cancer). Thus the main strength of this book is its strong biological and medical basis as well as the up-to-date reference to the continuum of genetics and biomarkers in cancer epidemiology.

Although health policy-makers are not the priority audience, and few words are said on cancer control activities, an introduction in this field would significantly add to *Fundamentals of cancer epidemiology*. ■

review by Jördis J Ott^a

Letters

Please visit <http://www.who.int/bulletin/volumes/87/8/en/index.html> to read the following letters received in response to *Bulletin* papers:

HIV, infant feeding and implementation failure: advancing policies for women with HIV infection and attaining the Millennium Development Goals, by Agnès Binagwaho, Mary C Smith Fawzi, Peter Drobac, Molly Franke, Louise Ivers, Jim Yong Kim, Joia Mukherjee, Julia Noguuchi, Michael Rich, Sara Stulac & Paul Farmer responding to:

Coutsoudis A, Coovadia HM, Wilfert CM. HIV, infant feeding and more perils for poor people: new WHO guidelines encourage review of formula milk policies. *Bull World Health Organ* 2008;86:210-4. PMID:18368208

with author reply.

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