BOOK REVIEWS

From the Guest Editor

Here is more on “the book that does not exist,” as Winkelstein has put it (1). A text on the history of epidemiology is badly needed. Meanwhile, a collection of papers, written by both professional historians and epidemiologists, has become available (2–8) and can provide useful material for courses dedicated to history in the teaching curriculum of epidemiology scholars. Social and Preventive Medicine (International Journal in Public Health) started publishing these papers in January 2001. Most were presented at a workshop on the history of epidemiology, entitled “Measuring Our Scourges,” held in Annecy, France, on July 1–10, 1996.

The Annecy workshop focused on the history of epidemiologic methods rather than on specific achievements of epidemiology in controlling plagues such as cholera, tuberculosis, malaria, typhoid fever, or lung cancer. The rationale was the following: Students of epidemiology learn successfully how to describe the states of health of populations and how to investigate outbreaks. Then they will learn, with increasing degrees of complexity, to understand and to apply the design of prospective and retrospective studies, and the concepts of bias, confounding, and interaction. They also come to think in terms of causation, with different levels of sophistication. Because they have mastered this set of methods and concepts, are able to adapt them to specific research questions, and can make them evolve when encountering new types of problems, these students become (and are given positions as) “epidemiologists” rather than any other kind of scientist.

In this context, it is crucial to understand the historical process that led to the emergence and formalization of the methods we use today. Methods, just as diseases or scientists do, have their own history. Being aware of their genesis and of the context in which they were developed not only is of cultural interest but also is indispensable for their critical appraisal. Our methodological tools were often developed while trying to solve specific problems in specific social and scientific environments. The concept of confounding, for example, seems to have been borrowed largely from statistics and sociology and refined as part of the controversy about recognizing the harmful effect of tobacco (9).

To offer support to people who would like to use this material for teaching purposes, the publisher of this journal (Birkhäuser Verlag AG, Basel, Switzerland) has authorized us to place the published papers, along with the related editorials, in pdf format on a Web site (http://www.epidemiology.ch/history). If you do use this material, please share with us your joys as well as your frustrations. Remember: the book does not exist.

REFERENCES


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Cancer Precursors: Epidemiology, Detection, and Prevention
Edited by Eduardo L. Franco and Thomas E. Rohan


Recent advances in epidemiologic and laboratory research have contributed to our understanding of the molecular and morphologic characteristics underlying neoplastic progression of cancer. As new methodologies improve our ability to
characterize cancer precursors, we can better predict and prevent the disease. Drs. Franco and Rohan bring together a timely and comprehensive set of reviews describing the biologic basis of carcinogenesis, issues related to measurement and interpretation of cancer precursors, site-specific precancerous conditions, and control of cancer precursors. Predictions of future developments with respect to cancer precursors are also made.

The book has several important strengths, most noticeably the wealth of current information on cancer precursors and related topics provided by an impressive cast of cancer researchers. Other important strengths of the book include its logical organization, consistent style and content structure, and effective use of approximately 100 tables and figures. The scope of the book is ambitious, yet appropriate.

The overview in the first two chapters on the biologic basis of carcinogenesis provides a useful review and effectively sets the stage for the rest of the book. The next three chapters further provide an important context by addressing topics related to measurement and interpretation of cancer precursors. Several chapters that follow make up the main section of the book. These chapters contain reviews that cover 16 important cancer sites where solid tumors occur. The reader does not need to go beyond this book to understand these chapters, since the initial chapters provide adequate preparation. After the book’s main section covering site-specific cancer precursors, there are three chapters that discuss control of cancer precursors. These chapters give an insightful perspective on how knowledge of cancer precursors has and may influence primary prevention, screening, and clinical development of chemopreventive drugs. Finally, the book’s concluding chapter contains the editors’ perspective regarding current knowledge and likely future direction of research on cancer precursors.

Consistent use of clear and concise chapter introductions and conclusions, ample subheadings within chapters, parenthetical text references to related material in the book, and extensive citations are appealing features. The contributors did a nice job of providing reviews accessible to a wide audience, although the extension of content in certain reviews may be better appreciated by more experienced scientists. Agreeing with the editors, I believe that the book is appropriate for basic cancer researchers, epidemiologists, oncologists, molecular biologists, pathologists, health policy professionals, and graduate students in cancer-related fields.

At the outset of the book, the editors present four important reasons for studying cancer precursors. First, study of cancer precursors provides insight into the etiology of select cancers. Second, clearly defined cancer precursors can be targeted to aid screening in providing earlier detection. Third, specific knowledge of cancer precursors may indicate risk factors that can be modified to reduce the occurrence of the precursor and/or corresponding cancer. Fourth, general insights into the nature of the carcinogenic process may be illuminated by studying the molecular and genetic changes occurring in cancer precursors. Although the reviews successfully support each of these reasons for studying cancer precursors, it is evident that considerable research is needed. Many of the contributors appropriately indicate where our current understanding is limited and where future research is needed.

The book’s title is Cancer Precursors: Epidemiology, Detection, and Prevention. Epidemiologic methods are useful for investigating the natural history of disease, or the progression of the disease process over time, from exposure to or accumulation of factors that lead to pathologic change, to onset of symptoms, to an eventual outcome (recovery, disability, remission, or death). An understanding of cancer precursors extends our knowledge of the biologic basis of carcinogenesis and the natural history of disease. It is evident that such knowledge can greatly contribute to our ability to detect and prevent cancer. The title indicates that research in cancer precursors is an important part of epidemiologic disease investigation, detecting and preventing cancer. Thus, this title accurately reflects the content of the book.

In total, I could not find any major weakness in the book. On the contrary, it effectively provides specific and compelling reasons for studying cancer precursors, the most up-to-date and comprehensive collection of reviews on the topic, and a realistic picture of the complexities facing research of cancer precursors. It also becomes clear in reading the book, as evident by the breadth of the contributors’ qualifications, that progress in our understanding of cancer precursors requires a multidisciplinary approach involving molecular biology, pathology, epidemiology, and other scientific specialties.

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