Vector and Rodent Borne Diseases in Europe and North America: Distribution, Public Health Burden, and Control

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This book represents the culmination of almost 50 years of work by the late Norman Gratz at the World Health Organization. Although not without some merits, Gratz’s book fails to escape from being a laundry list of previous literature, and has some major flaws in its structure and overall aesthetic. The book is separated into 2 parts (Europe and North America), and into 36 chapters, some of which are very short (e.g., 1 to 2 pages). The chapters in the two parts roughly mirror one another, and are primarily organized by vector, such that there are chapters on “Mosquito-borne arboviruses” or “Tick-borne diseases”. Organization within chapter is not consistent, although it is generally by disease, and then country within the disease for common diseases in Europe. In addition, each part has several chapters that try to provide some wider perspective, such as the effects of climate change or economic impacts.

To be fair, there is some good in this book. A tremendous amount of research went into writing this book, and it has an extensive bibliography, worthy of the experience of the author. The structure is sensible, and does allow one to quickly find information about a particular disease and where it is found. This includes rather obscure diseases that border on the esoteric, but one should remember that West Nile virus was equally obscure until a few years ago. Furthermore, it covers some aspects of public health that would not be apparent from its title, such as cockroach allergies and the economic effects of these diseases. In short, it is an adequate reference tool for a public health professional, or academic, studying vector or rodent diseases in North America or Europe, and it is a good annotated bibliography.

There is considerable breadth in the topics covered, providing a single source for a variety of topics. There are good and bad aspects of this structure. Several obscure topics are covered that have not been sufficiently reviewed elsewhere, including the aforementioned section on allergies, but also chapters on introduced vectors, climate change, and economic costs. However, the inclusion of all of these topics is not altogether sensible (other zooneses besides rat-borne are not covered), and it often seems that many of the topics are insufficiently examined. Furthermore, the diversity of topics detracts from the book by diffusing any major implications, such as future effects or the economic burden of vector-borne disease, two areas that could have used more attention.

In spite of its merits as a repository of bibliographic references, there are several major problems. One advantage of a book written by an experienced researcher is a wide perspective on the subject, which could provide the reader with a long-term view able to see patterns often missed when in the scientific “trenches”. Dr. Gratz does attempt this with several chapters on the economic effects and effects of climate change. However, the chapter on climate change in Europe is only a page and a half long, which is barely sufficient to introduce the subject, let alone delve into the potential effects on these diseases. There is no directly parallel chapter in the section on North America, although he does devote 3 paragraphs to effects of climate change as a subsection in a chapter titled “Factors augmenting the incidence, prevalence and distribution of vector-borne disease in the USA and Canada.” Clearly, whole books could (and probably will) be written on the subject, and the treatment of climate change and disease is too short. Likewise, the chapters on economic effects are cursory, and he admits “An attempt to determine such costs could be a major undertaking and beyond the scope of this book” (p. 177). This is a shame, because these broader, integrative chapters are the subjects that would have provided the raison d’etre for the extensive research. The lack of sufficient perspective relegates this book to being an annotated bibliography.

Therefore, as anything but a reference tool, it fails. In much of the book, each chapter feels like a simple restatement of the primary literature, and reads a bit like a laundry list of scientific papers. Most serious researchers would use this book as a shortcut to the primary literature, which might be helpful, particularly for some of the older research. In fact, much of the more recent literature has been left out (advances in our understanding of Venezuelan equine encephalitis virus emergence come to mind). Most casual readers would become quickly bored with the prosaic writing, and most academics would be able to find these references (and more recent ones) using on-line databases. Overall, the ease of use, quality of the writing and insights provided by this book are poor.

Finally, I found the paucity of informative figures, tables or other illustrations to be a significant deficit. These kinds of aids would have been helpful to the reader in breaking up an otherwise monotonous recitation of scientific papers. However, there is only 1 graph, and only 5 figures (4 of which are maps) in the book, and only a few tables as well. Furthermore, the maps are strangely imprecise, as if they were drawn out of focus (the Indo-Pacific Islands are one big mass, as is Florida, Cuba, Hispaniola, and the Greater Antilles). With the exception of an attractive photo of Aedes aegypti on the front cover, the production values of the book are low.
To summarize: only buy this book if you have to have every book about vector-borne diseases, or need a good annotated bibliography on Holarctic vector- and rodent-borne disease. Otherwise, save your money.

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