

Book Review

The development of modern epidemiology, Personal reports from those who were there, Holland, W.W., Olsen, J., Florey, CdV. (2007), Oxford University Press

This book marks the 50th anniversary (1957–2007) of the International Epidemiologic Association (IEA), which is, indeed, an important event. In 1957, epidemiology did not exist as a discipline in its own right. The London Epidemiological Society, in 1850, was a loose confederation of individuals, fighting against cholera. Around 1920, departments of Epidemiology had been created in Baltimore (1919) and London (1927), but it took almost 40 more years for the first modern association of epidemiologists to emerge. IEA preceded the arrival of the Society for Epidemiologic Research (SER), created in 1968, and the American College of Epidemiology, founded in part by the same people in 1979.

In their history of the IEA, Holland, Detels, and Mosbech explain:

“The International Corresponding Club, as the IEA was first called, was started in 1954 by John Pemberton of Great Britain and Harold N Willard of the United States with the advice and help of the late Robert Cruickshank. They had found, as traveling Research Fellows each in the other’s country, that they were handicapped by not being sufficiently well informed about the research and teaching in the field of social and preventive medicine in the various medical schools and research institutes. Initially it was to try and remedy this defect, that the Club was established on a small and informal basis. At first it was just a corresponding club whose object was ‘to facilitate the communication between physicians working for the most part in university departments of preventive and social medicine, or in research institutes devoted to these aspects of medicine, throughout the world’. This was to be achieved by the publication of a Bulletin twice a year and by members endeavoring to ‘ensure a friendly and hospitable welcome for visitors’ from other countries. The first issue of the Bulletin appeared in January 1955 and contained contributions from 26 correspondents from nine countries. Correspondents soon felt the need to meet to discuss research and teaching and the first formal meeting took place at the Ciba Foundation in London at the end of June 1956. By this time there were 49 correspondents from 18 countries, and one of them, A Querido of Amsterdam, who attended the London meeting, invited the Club to hold its First International Scientific Meeting in the Netherlands. As a consequence a ‘Study Group on Current Epidemiological Research’, supported by a grant from the Rockefeller Foundation, took place

at Noordwijk in September 1957. There were 58 participants representing 44 university departments from 20 countries at this meeting.” (<http://www.dundee.ac.uk/iea/History1.htm>)

In 1959, at its second international scientific meeting held at the Universidad del Valle in Cali, Colombia, the name “International Epidemiology Association” was officially adopted.

This anniversary publication, prepared by Holland, Olsen, and du V. Florey, is at first surprising. For one, the book is not historical. It does not systematically review and tell the history of the scientific discipline referred to as epidemiology. It is not exhaustive, as numerous epidemiologists “who were there,” did not contribute to it.

Moreover, the publication is not finely assembled and structured (except for its resolute international coverage). It is, rather, a heterogeneous bundle of essays grouped by broadly named chapters such as “Tuberculosis,” “Malaria,” and “Epidemiologic Methods: A View from Africa.” Although one of us (AM) contributed to the publication as an author of one chapter, he was not aware of its contents until it was published, which eliminates that bias from our review.

Nevertheless, this book is in its own way a unique contribution to the history, or better yet, to the *sociology* of epidemiology. This large collection of testimonies from people of different continents, who call themselves epidemiologists, provides an “evidence-based” perspective, although it does not necessarily fully represent what epidemiology is today. It is a sort of miraculous fishing expedition in today’s sea of international epidemiology. The editors released two parallel fishing nets: biographies and content. The catch has been rich and the editors seem to have been careful to preserve a spontaneous and genuine nature. Within the chapters, historians and sociologists will find plenty of material to work with, while epidemiologists may discover the breadth of their discipline.

Those who contributed to this book (52 in total), have all kinds of backgrounds, indicating that many different roads lead to epidemiology. One contributor suggested that since epidemiology is such a young discipline, older contributors could not possibly have begun their careers as epidemiologists, especially those from countries other than the UK and US. It would be interesting to compare epidemiology with other disciplines in the natural and social sciences, to see whether or not the multitude of ways of becoming an epidemiologist represented in this book are truly specific to our discipline.

We performed a quick survey of the 52 contributors listed in the book to gain a better understanding of who they are. We sent them an email asking for their date of birth, country of origin,

Table 1
Demographic characteristics of the 52 contributors to the book *The Development of Modern Epidemiology. Personal reports from those who were there* (Oxford University Press, 2007)

| Variable | Categories | N | % |
|---------------------|---------------|------|------|
| Gender | Women | 4 | 7.7 |
| | Men | 48 | 92.3 |
| Age | Mean | 66.4 | 13.8 |
| | <40 | 2 | 3.8 |
| | 40–49 | 2 | 3.8 |
| | 50–59 | 10 | 19.2 |
| | 60–69 | 11 | 21.2 |
| | 70–79 | 12 | 23.1 |
| | 80–89 | 4 | 7.7 |
| | 90 + | 3 | 5.8 |
| MD | Missing | 8 | 15.4 |
| | Yes | 43 | 82.7 |
| | No | 7 | 13.5 |
| Continent of origin | Missing | 2 | 3.8 |
| | Africa | 3 | 5.8 |
| | Asia | 2 | 3.8 |
| | Europe | 17 | 32.7 |
| | Middle East | 4 | 7.7 |
| | North America | 11 | 21.2 |
| | Oceania | 3 | 5.8 |
| | Latin America | 4 | 7.7 |
| Missing | 8 | 15.4 | |

Data obtained mostly through a Fall 2007, electronic mail survey of the contributors listed in the book.

main field of interest and whether or not they had a medical degree. We sent the questionnaire by airmail to those we could not reach by email. After receiving most of the contributor's responses, we checked the addresses and re-sent the survey. For the 10 contributors we could not get in contact with, we were able to find some of their information online or through other sources.

Our results are summarized in Table 1. The typical contributor is a male MD, aged 66.4 years (SD=13.8), originating from North America or Europe. The survey results are consistent with common thinking that epidemiology is a European borne discipline, which disseminated to North America, and then, after 1970, to the rest of the world.

In the papers of the non-Western authors, there is no indication of epidemiology existing in their region before the late 20th century. This could very well be inaccurate considering that this is not a historical book and that the authors are not representative, but at the same time, it might not be far from the truth. Modern epidemiology is characterized by the combination of population

thinking and group comparison (Morabia, 2004), both originally Western concepts from areas of the world that led to the industrial revolution of the 19th century.

Another unique hindsight of the book is that it identifies the research domain to which epidemiologists have (or believe they have) contributed. It is difficult to assess the nature of epidemiologic work from publications with titles containing the words "epidemiology" or "public health." A large fraction of epidemiologic work gets published in medical and social science journals, making it a Herculean task to try and trace epidemiologic production. From that perspective, the IEA book presents a handy review. The common denominator of these contributions is, as we would expect, public health. The most common specialties are cancer, cardio-vascular, and infectious diseases. Interestingly, most contributors listed a series of three or four domains of activity, so that it was impossible to summarize this information in the table without simplifying it. Epidemiologists are intrinsically versed in multiple disciplines.

There are at least two main areas of research that could be stimulated by this book: "Who are epidemiologists?" and "What are the domains of research covered by epidemiology?" We are not aware of any previously published material that gives a synthesized answer to either of these questions.

However, there is one question that the book does not address: What is the future of epidemiology? Young generations of epidemiologists are not represented among the authors. Only two of them were born after 1960. Where are the people who will carry epidemiology to its next phases? What has been their role in the development of "modern" epidemiology? Are they busy developing "complex" epidemiology? The title says that the book is about those who "were" there, but will they still be there tomorrow?

Reference

- Morabia, A., 2004. Epidemiology: an epistemological perspective. In: Morabia, A. (Ed.), *History of Epidemiological Methods and Concepts*. Birkhäuser, Basel, pp. 1–126.

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