



BOOK REVIEWS

From the Editor

With this issue of the *Journal* (Volume 154, Number 1), we inaugurate an expansion of our Book Reviews section. Each issue of the *Journal* will now include a book review and an editor's note. The note will draw attention to book reviews appearing in other major journals and epidemiologic publications. At the outset, we will monitor the following journals: *Epidemiology*, the *International Journal of Epidemiology*, the *American Journal of Public Health*, the *Journal of Public Health Policy, Science*, the *New England Journal of Medicine*, and the *Journal of the American Medical Association*.

As a start, we draw your attention to a review of a book dealing with the history of coal mining in the United States and the consequent widespread prevalence of pneumococci (1). The reviewer, Abdur Rauf Shad, M.D., concludes his review by saying, "I found that the book helps in putting the patient, the disease and the history of the coal mining industry into context" (2, p. 339).

In this issue of the *Journal*, we offer a review by Manning Feinleib of the fourth edition of the widely used *Dictionary of Epidemiology* (3), edited by John Last and colleagues.

We invite your comments and any suggestions for reviews of books you have found particularly relevant and interesting.

REFERENCES

1. Derickson A. Black lung: anatomy of a public health disaster. Ithaca, NY: Cornell University Press, 1998.
2. Shad AR. Black lung. (Book review). *JAMA* 2001;285:339-40.
3. Last JM, Spasoff RA, Harris SS, eds. A dictionary of epidemiology. 4th ed. New York, NY: Oxford University Press, 2000.

Warren Winkelstein, Jr.

A Dictionary of Epidemiology, Fourth Edition

Edited by John M. Last, Robert A. Spasoff, and Susan S. Harris

ISBN 0195141687, Oxford University Press, New York, New York (Telephone: 800-451-7556, Fax: 919-677-1303, Web: www.oup-usa.org), 2000, 224 pp., \$45.00 (hardcover), \$24.95 (paperback)

It is the fate of those who toil at the lower employments of life, to be rather driven by the fear of evil, than attracted by the prospect of good; to be exposed to censure, without hope of praise; to be disgraced by miscarriage, or punished for neglect, where success would have been without applause, and diligence without reward.

Among these unhappy mortals is the writer of dictionaries; whom mankind have considered, not as the pupil, but the slave of science, the [prisoner] of literature, doomed only to remove rubbish and clear obstructions from the paths of Learning and Genius, who press forward to conquest and glory, without bestowing a smile on the humble drudge that facilitates their progress. Every other author may aspire to praise; the lexicographer can only hope to escape reproach, and even this negative recompense has been yet granted to very few (1, p. 3).

Lexicographers perform an essential service in facilitating communication in this era of rapidly evolving sciences, technologies, and information. They must keep abreast of neologisms, track changes in usage of existing words, and develop precise definitions that not only define terms but also convey nuances of meaning that differentiate between synonyms. That we now have the fourth edition in 18 years of John Last's *Dictionary of Epidemiology* evidences the

rapid changes in, growth of, and vibrancy of the field of epidemiology.

Various dictionaries are noted for special features: The *Oxford English Dictionary* is comprehensive and authoritative with regard to etymology; the *American Heritage Dictionary* I find exceptional for describing usage; Ambrose Bierce's 1911 *Devil's Dictionary* is noted for its wit and sarcasm; and E. Cobham Brewer's 1898 *Dictionary of Phrase and Fable* is a favorite of mine for arcane and esoteric knowledge. What should we expect of a dictionary of epidemiology? Undoubtedly, it should be comprehensive and up-to-date and present technically correct definitions that help the reader understand complex and subtle concepts. In reviewing this latest edition of John Last's now-classic *Dictionary of Epidemiology*, I decided to look at it from the point of view of a doctoral candidate in epidemiology preparing for his or her oral examination. Some of the terms and concepts I have asked students taking their oral examinations to explain are: incidence and prevalence; cohort study and case-control study and their synonyms; rate and risk; ecologic fallacy; regression to the mean; confounding and effect modification; bias; multilevel analyses; and hierarchical models. Except

for the last term, all of the above are presented in the *Dictionary of Epidemiology* and explained well. Although the *Dictionary of Epidemiology* is certainly not meant to take the place of a textbook, a student who had learned these definitions from the *Dictionary* would do fine on the examination.

Next I compared several sections of the *Dictionary* to the index of terms in a major epidemiology textbook (2). Again the *Dictionary* did well, having many more terms that a student might want to know about than did the textbook's index. Generally, terms that appeared in the textbook index but not in the *Dictionary* were highly technical or specific to the concepts fostered in the text. Undoubtedly, some of these will be included in future editions of the *Dictionary*.

This new edition is approximately 10 percent larger than the previous edition. It includes many recent concepts—e.g., ecoepidemiology (but not psychoepidemiology), logical framework analysis, and minimal clinically important difference; expands on older concepts—e.g., environmental epidemiology; and has deleted a few archaisms—e.g., “immission” and words that are now commonly understood, such as modem and software. The mis-alphabetizations present in the third edition have been corrected. The new edition has included many acronyms, a feature missing from the previous edition but one that is particularly important to students who are not familiar with the names of studies or agencies. Some other features that pleased me were the frequent citation of recent sources in the literature where more extensive discussions of various concepts could be found and a thorough bibliography of significant epidemiologic textbooks.

There are a few aspects of the fourth edition that might be improved. Although formulas and equations are presented for many concepts, they are lacking in some definitions

where I would have wished them, e.g., Cronbach's alpha. It would have been nice if the authors had included short biographies of notable epidemiologists; there are no readily available sources that do so. Students and nonepidemiologists would probably also appreciate a table of abbreviations that commonly appear in epidemiologic articles without explicit definition, e.g., RR, OR, SMR, and AADR. The appearance of the text would have benefited from a somewhat larger type font and more liberal spacing between entries. We might also hope that the next edition will follow the example of the University of Cambridge's *Dictionary of (Ecological) Epidemiology* and be made available on the Internet (3).

As a rare exception to Samuel Johnson's observation (1), John Last and the many contributors to the present edition have not only escaped serious reproach but are worthy of appreciative praise. This dictionary will serve many epidemiologists as an authoritative reference and set a standard for harmonizing terminology in a vigorously flourishing discipline.

REFERENCES

1. Johnson S. Preface to dictionary, 1755. In: McAdam EL Jr, Milne G, eds. *Johnson's dictionary: a modern selection*. New York, NY: Pantheon Books, 1963.
2. Rothman KJ, Greenland S. *Modern epidemiology*. 2nd ed. Philadelphia, PA: Lippincott-Raven, Inc, 1998.
3. Swinton J, ed. *Dictionary of (ecological) epidemiology*. Cambridge, United Kingdom: University of Cambridge, 1999. (<http://www.kings.cam.ac.uk/~js229/glossary.html>).

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