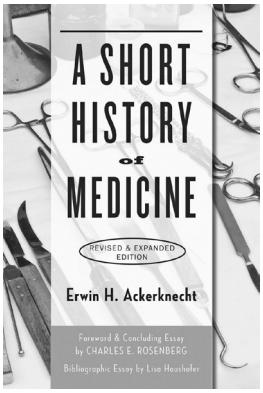
A Short History of Medicine (Revised and Expanded Edition)

Erwin H. Ackerknecht

Baltimore, MD, Johns Hopkins University Press, 2016, 272 pp., $29.95, paperback



Originally from Germany, Dr Erwin Ackerknecht studied in Germany and France, held professorships in the history of medicine at the University of Wisconsin and the University of Zurich, and throughout his career worked (at least intermittently) as a practicing clinician. *A Short History of Medicine* was originally published in 1955 and subsequently updated by the author in 1982. This "revised and expanded" edition bookends Dr Ackerknecht's own work with a foreword and a concluding essay by Charles Rosenberg (emeritus professor of the history of science at Harvard, and a former student of Dr Ackerknecht) and a bibliographic essay by Lisa Haushofer, also of Harvard. Thus, in one text, we have both Ackerknecht's survey of the history of medicine, and a vantage point from which to assess his *Short History* as a historical document in its own right.

In the main text, Dr Ackerknecht begins with "paleopathology and paleomedicine," exploring both what we know of medicine from the earliest written documents, and what might be surmised of even earlier medical endeavors with insights gained from archaeological finds and other artifacts. After chapters on primitive medicine, "ancient civilizations," and ancient India and China, three chapters explore Greek medicine, two more cover renaissance and medieval medicine, and a chapter apiece is given to 17th and 18th-century medicine. Not surprisingly, given that more recent history tends to be better documented, fully eight chapters are dedicated to 19th-century developments, then a final concluding chapter addresses trends in the 20th century.

Throughout the book, the reader is given not just a history of ideas and trends, but also of the people, circumstances, and specific developments that shaped each stage of medical history. Furthermore, this is not just a history of medicine per se, rather Dr Ackerknecht tells the story of medicine as part of a broader historical narrative. For the 21st-century reader, the descriptions of various competing schools of thought at different historical junctures provide a useful comparison against which to assess current debates over competing approaches to medical knowledge and medical practices. Indeed, when he argues that "iatrophysics" and "iatrochemistry" in the 17th century demonstrated the "premature application of basic scientific data to clinical medicine" (p. 96), he seems to be describing a foreshadowing of current debates over "disease-oriented" and "patient-oriented" evidence.

While Dr Rosenberg's foreword is a relatively standard introduction to the book, his concluding essay provides perspective from which to view Dr Ackerknecht's work itself as a part of medical history. He posits that Dr Ackerknecht's own approach to history was a product of his time, and yet it also shaped subsequent approaches to medical history writing. Even reading the text, one notes early on terms such as "primitive medicine," and Dr Ackerknecht's comparative approach of using what we think we know about current-day "primitive societies" to attempt to fill in the gaps of our knowledge about medical prehistory. Nonetheless, Rosenberg argues that Dr Ackerknecht's breadth of vision, including social medicine and ethnography, played a role in reshaping standards for writing medical history, to include "life and death, environment and economic growth, concepts of the body in

health and disease, of the normal and the abnormal" (p. 206).

Perhaps the thorniest question of medical history comes in Rosenberg's critique that Ackerknecht "found it difficult to avoid placing his protagonists in innovation hierarchies—a world of "contributions" and "advancements" (p. 202). In other words, is history better told from a detached and relativizing academic perspective, or from the perspective of the practitioner engaged daily in the field—or perhaps from some vantage point in between?

This concise and engaging text can easily be read by busy learners or faculty, yet the breadth of Dr Ackerknecht's writing also provides a fertile starting point for broader explorations of the relationship between medicine and society through time, and the foreword and concluding essays help one think about the historian's own place in history.

"If civilization is able to survive the catastrophies which threaten it; then most of the history of medicine so far may be hardly more than 'prehistory' to future historians and doctors. Yet their debt to their predecessors will be as immeasurable as is ours to the anonymous caveman who once in the dim past discovered the use of fire" (p. 191).

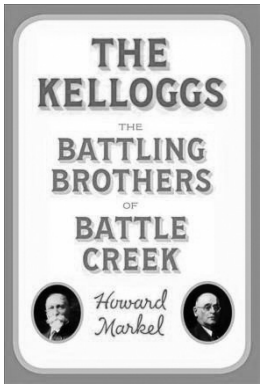
doi: 10.22454/FamMed.2018.444172

William Cayley Jr, MD, MDiv
University of Wisconsin School of Medicine and Public Health
Eau Claire, WI

The Kelloggs: The Battling Brothers of Battle Creek

Howard Markel

New York, Pantheon, 2017, 506 pp., $35, hardback, also available as an e-book



Howard Markel is a prominent medical historian who has written mostly about health and medical care in the United States from the late 1800s onward. Based at the University of Michigan, he had ready access to the JH Kellogg archival collection at the Bentley Historical Library in Ann Arbor, the documents pertaining to the business of the Sanitorium at the Michigan State University library, and several other important collections in and around Battle Creek, Michigan. He had access to interview grandchildren and others who knew the Kellogg brothers, which deepened his understanding of these characters and their motivations.

The book examines the lives of the well-known cereal mogul WK Kellogg and his older brother, the physician John Harvey (JH) Kellogg, who was much better known for most of their lives, but who has been largely forgotten since his death. Markel places their beginnings in the Adventist sect's spiritual revival and abstemious hygiene rules. At a time when medical treatments in the United States could best be described as barbaric (bleeding, amputation and cauterization without anesthetic, cupping, and mustard plasters for example), the Adventist laity healed infections and horrific wounds with balms, baths, and broths. The book follows JH through his piecemeal medical training and his gradual takeover of the Adventists' Western Health Reform Institute, which he transformed from a glorified boarding house into a well-equipped health resort frequented by the rich and famous. The Sanitorium, as he rebranded it, became world famous for treating indigestion, dyspepsia, and "autointoxication" with baths, exercise, enemas, the elimination of alcohol and tobacco, in extreme cases surgery, and, above all, a high fiber vegetarian diet. Experiments with improving the palatability of the latter led to the development of many food products, including

the now ubiquitous corn flakes. WK, who had served for decades as his brother's personal assistant and de facto practice manager, eventually spun off the cereal business, leading to a decades-long legal battle over the production and marketing rights.

Markel's lively narrative makes the book a cracking good read for those interested in the history of family medicine and particularly in the history of complementary and alternative medicine. It is also a superb biography of two prominent Americans. He carefully and properly places the Kelloggs in the mainstream of turn-of-the-century medical practice. What perhaps is missing is an explication of how and why those same practices later came to be exiled to the fringe, as pharmaceutical researchers finally developed a few drugs that actually worked (think of penicillin, insulin, and thiazide diuretics) and in so doing created a paradigm that still dominates our practice.

Markel also rightly locates the Kelloggs within the context of the Progressive movement in American society, and neatly describes their wishful thinking that a combination of better technology and better behavior would end disease and poverty. So much of their worldview remains in the assumptions that underlie our daily work. For example, that dietary recommendations matter, or that anyone follows them, or that some foods are healthier than others.

I would have liked Professor Markel to expand on the low state of scientific inquiry in the period. Clinical studies of the time were largely limited to case series and other forms of uncontrolled observation that would, in the current context, have difficulty rising to level of evidence 2b. Large randomized controlled studies with human subjects did not become standard until the 1960s. Because of the cost, they remain rare beyond the realm of big pharmaceutical companies. Markel misses the opportunity to put forward an argument for much more generous funding of research in what has come to be called complementary and alternative medicine. But that is a large subject, and it would require a separate book. Hopefully he will take on that project next.

I highly recommend this book. The serious student of the history of medicine will find the desired detail and context, but the general reader will also find the narrative entertaining and easy to follow. As we once again debate who gets what health care and how it is paid for, physicians who take the broader view of medicine and its place in society will want to read this book. Understanding how we got to where we are will perhaps help us make wiser recommendations about where to go from here.

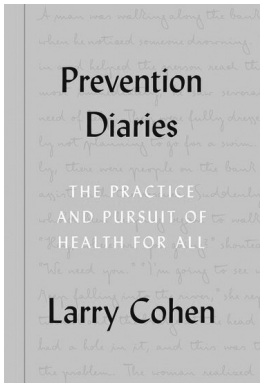
doi: 10.22454/FamMed.2018.977910

Paul Lazar, MD
McLaren-Flint Family Medicine
Flint, MI

Prevention Diaries: The Practice and Pursuit of Health for All

Larry Cohen

New York, Oxford University Press, 2017, 249 pp., $24.95, hardcover



As family medicine physicians, we are able to change lives in increments of clinic visits. We treat diseases and, if we're lucky, are able to improve health. Larry Cohen has taken this same mission over the course of his career to improve the health of millions and prevent illness and injury before it begins.

Have you ever wondered how car seat laws became the norm? Or how indoor smoking bans became commonplace? Wondered about the downstream effects of systemic violence? In *Prevention Diaries: The Practice and Pursuit of Health for All*, Cohen masterfully ties together personal narrative from his 30 years of field experience with hard facts to illustrate the importance of public health efforts in improving our collective health. More importantly, he demonstrates the profound impact that can be made with a little bit of passion and a lot of hard work.

Cohen begins with a key concept of prevention—the notion that "upstream" thinking, or understanding why an issue is occurring, is critical in finding the solution. He goes a step further to illustrate the financial benefits of such thinking. For example, dollars spent to prevent exposure to lead paint not only prevented harm, but also saved exponential dollars for associated complications, including criminal justice and educational support.

He goes on to illustrate how even insurmountable problems can be tackled by taking smaller steps to eventually establish a new norm. Using examples of both smoking and

car seats, he illustrates the "prevention take-back test: even if the legislation were to change back now, most people would probably continue to use car seats because the law established a new norm" (p. 29). The financial importance of combatting these large issues further proves the point, both to readers and to decision-makers. Between medical costs and costs of missed work from accidents, car seats have a "13-to-1 return on investment" (p. 106).

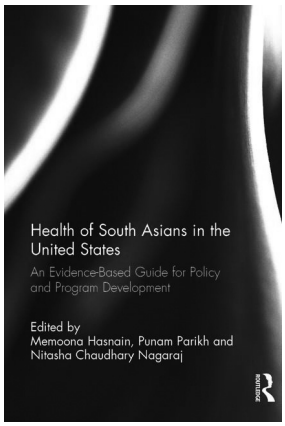
While it is easy to focus on practicing medicine as the main way to foster health, *Prevention Diaries* reminds us that patients do not exist in a vacuum. In discussions of violence, environment, nutrition, and the social determinants of health, Cohen reminds us that health care providers work in much the same way as preventionists: "track back from the clinical concern, uncover the cause of the problem, and determine the right treatment to arrest it" (p. 31). *Prevention Diaries* presents a moving introduction to prevention, and why it is so important to begin addressing even the largest of problems. Moreover, it reminds physicians to "think upstream" and widen our differential for everyday health concerns.

doi: 10.22454/FamMed.2018.961459

Brintha Vasagar, MD, MPH
Medical University of South Carolina
Charleston, SC

Health of South Asians in the United States: An Evidence-Based Guide for Policy and Program Development

Memoona Hasnain, Punam Parikh, and Nitasha Chaudhary Nagaraj, Editors
New York, Routledge, 2017, 306 pp., $150, hardcover



This is a relatively rare book in medicine, at least for this reviewer: one not made redundant by electronic/handheld data sources, and in fact adding new information on a topic relatively unexplored in US health care.

For a relatively large minority demographic, there is surprisingly little on South Asian health in US health guidelines, evidence-based recommendations, or even in the general clinical trials literature. Indeed, even the term South Asian is not widely understood outside centers of concentration.

It is not uncommon for South Asian patients to have no specific demographic checkbox on clinic intake forms, instead checking "Asian," which (a) more customarily refers to those of East Asian descent and (b) in any case is an over-generalizing term which does an injustice to the many ethnicities and cultures of the most populous continent.

The authors thus wisely set the stage for this work with a chapter on demography and census classification of ethnicity. Explaining who exactly South Asians are—those of origin in India, Pakistan, Bangladesh, Nepal, Sri Lanka, the Maldives and Bhutan—goes a long way to framing the concerns particular to this group.

There are relatively few clinical trials exploring the health issues of South Asians in North America. Thus the book goes through the key health topics of interest in this group, including traditionally important ones such as cardiovascular disease and diabetes. The authors of those chapters do a valuable service in collating available research on the topic. They also highlight the dearth of more nuanced interpretations particular to South Asians. Many clinical trials do not separate out South Asians from Asians in general. This limits the utility

and generalizability of such studies. When studies on hypertension are published with recommendations for the US population, as clinicians we may occasionally be provided with information on specific interpretations or treatment recommendations for some groups (eg, African-American patients, and increasingly, Latinos and Asian Americans), yet South Asian Americans are usually absent as a group. It begs the question of whether they are actually absent, or just from the investigators' perception. This provocative question is explored further in the final chapter by Prasad et al, and is one of the most readable and interesting areas of further research in the book. The chapter reviews national-level work on establishing guidelines for studying South Asian health issues, and developing a framework for implementation. There is a helpful overview of key organizations working together on this initiative. Indeed, this chapter should be required reading for any large-scale clinical trial or study in the United States which aims to study or generalize about the US population.

An area of opportunity in the book is chronic kidney disease. It is not well covered in the Diabetes chapter, and thus may need a section of its own. Due to the high prevalence of both cardiovascular disease and diabetes in this population, chronic kidney disease may be an understudied opportunity for detection, prevention, and intervention.

It is equally important to highlight what the book is not. As a guide for policy and programs, it does not aim to be a compendium of clinical recommendations for South Asians. As such, the reader will not find a discussion of the relative utility of ACE inhibitors, beta blockers or calcium channel blockers in the treatment of hypertension in this population. No doubt as the evidence base improves, such guidelines would be forthcoming as they have for other groups.

There are several topics covered in the book which should be singled out for mention. These topics are not only important in any minority community, but have also been historically stigmatized and under-studied among South Asians. Therefore the chapters on mental health (and in a pleasant surprise, maternal mental health), LGBTQ health, HIV, and intimate partner violence deserve particular recognition and are a valuable addition to the review literature.

Overall, this book is a singular accomplishment. It is a credit to the fine editorship, led by a diverse team of professionals from primary care and public health. Drs Hasnain, Parikh, and Nagaraj have led an important effort to aggregate data, present the existing knowledge base, and advocate for expanding it. Perhaps most importantly, they present a credible and forceful argument for critical improvements in recognizing the importance of South Asian health indicators in the vast evidence base of US health care.

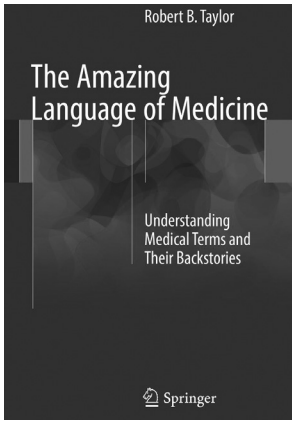
doi: 10.22454/FamMed.2018.284231

Omar Khan MD MHS
Christiana Care Health System
Wilmington, DE

The Amazing Language of Medicine: Understanding Medical Terms and Their Backstories

Robert B. Taylor

Cham, Switzerland, Springer International Publishing, 2017, 238 pp., $49.99, softcover



What could be closer to the heart of family medicine than communication, context, and meaning? "Words, are, of course," as Rudyard Kipling noted, "the most powerful drug used by mankind."[1]

Leave it to a family physician generalist to bring together history, literature, classics, etymology, philology, geography, and the biomedical sciences to give us stories about the words we use in practice and patient care. Perhaps no family physician is better suited than Robert B. Taylor, MD, to create this quaint and curious volume of linguistic lore. A pioneer family medicine educator and author of over 30 books, he knows the craft of writing, appreciates our historical roots and understands the primacy of communication.

In his quest for the origins of common and not-so-common medical words, Dr Taylor roots around in history, myth, anecdote, and tales of medical discovery, from Achilles to Zika. Up-to-date entries include fascinoma, incidentaloma, chartoma and, very sadly, iPatient. The reader can browse with a generalist's eye or search by special interest.

These backstories of word origin range from definitive to contested to questionable. The author brings the reader in on controversies and offers competing origin myths when the fog of time obscures the past.

The words we use in medicine come from classical Latin and Greek, of course, and from modern German, French, Portuguese, Japanese, and Arabic. They also come from languages as remote as Old English and Medieval French and from tongues as diverse Ghana (*kwashiorkor*), Polynesia (*tattoo*), Malay (to run *amok*), the Tupi of Brazil (*ipecac*), the Fore of Papua New Guinea (*kuru*), and the Quechua of the Andes (*cocaine* and *quinine*).

Diseases have been named, not just by their anatomy or pathology, but for ancient Greek gods, modern literary characters and the doctors, patients, and locations connected with their first description. Names of diseases and treatments come from astute clinicians, pioneering scientists, indigenous healers, and pharmaceutical industry ad men. Terms have been coined by scholars, scientists and healers—sometimes all in one historical figure.

You may know that *placebo* comes from the Latin book of *Psalms* used in the Office of the Dead. But who knew that *alcohol* comes from the Arabic eye shadow used by beauties of antiquity? Or that *bezoar* comes from the use of hair balls as cures for the plagues of ancient Persia? *Isoniazid* was named after competing drug companies drew research notes out of a hat.

As with accounts of patients and illnesses, each entry is an engaging narrative. Dr Taylor tells these stories to link us to our past—at times mythic, heroic, or embarrassing. The author believes understanding the background of the words we use can help improve our communication through understanding of connotation and context.

The text is generously enriched by an eclectic array of illustrations, most in color and all with helpful public domain citations. The author provides references for historical notes and offers general resources on the language and history of medicine.

This is not a reference work, a vocabulary builder, or a guide to medicalese as a second language. It is a treasury of notes and anecdotes, a companion to study and life in medicine. It is not meant to be read cover-to-cover, but to be kept by armchair or bedside and sampled fascinating bit by curious bit. It harkens back to the commonplace books kept by most readers and writers in slower and more thoughtful times.

The word entries feel like notes the author has jotted and lovingly curated over decades of personal reading, study, and practice. They reflect the curiosity of a generalist, not the pedantry of a lexicographer. The collection gives the reader a special peek into the intellectual and practice life of the author, such as one gets from perusing a friend's bookshelf or LP collection.

Much attention is now focused on work-life balance in medicine. This book offers curious readers a resource for work-work balance by enriching their professional lives and deepening their sense of history, discovery and meaning.

Words are perhaps our most potent tools in diagnosis and treatment, teaching and learning, research and policy. Knowing their history can help us understand the paths medicine has traveled from ancient cult to current practice. Today, discourse is too often abbreviated by acronyms, defined by billing codes, and confined by electronic boilerplate. *The Amazing Language of Medicine* offers deeper appreciation of how practice has shaped the words we use and how our words can shape our visions of practice, scholarship, and healing.

doi: 10.22454/FamMed.2018.526424

William R. Phillips, MD, MPH
University of Washington
Seattle, WA

Reference

1. Kipling R. Surgeons and the soul. Speech in: A Book of Words: Selections from Speeches and Addresses Delivered Between 1906 and 1927. London: Macmillan; 1928.

Reviewers interested in writing reviews for publication should contact Book and Media Reviews Editor William E. Cayley, Jr, MD, at bcayley@yahoo.com.

Publishers who wish to submit books for possible inclusion in *Family Medicine*'s book reviews section should send texts to Sam Grammer, Society of Teachers of Family Medicine, 11400 Tomahawk Creek Parkway, Suite 240, Leawood, KS 66211. fmjournal@stfm.org

All books reviewed in this column are available for purchase at amazon.com through the STFM portal at www.stfm.org/bookstore.