#### ABOUT THE AUTHOR

Robert Fortuine's undergraduate years were largely devoted to classical and modern languages, following which he studied medicine at McGill and public health at Harvard. He has spent the majority of his professional life as a physician to Native Americans, especially in Alaska, but has also relished the medical profession as a hospital administrator, diplomat, clinical teacher, medical historian, and editor. He has written extensively on the history of medicine in the arctic regions, and in 1990 was named Alaska Historian of the Year for his book *Chills and Fever: Health and Disease in the Early History of Alaska*. Dr. Fortuine is currently Professor in the Biomedical Program at the University of Alaska Anchorage and Clinical Professor of Family Medicine at the University of Washington. He and his wife live on a lakeshore about 50 miles north of Anchorage, Alaska.

# THE WORDS OF MEDICINE

Sources, Meanings, and Delights

By

## **ROBERT FORTUINE**



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To my wife Sheila, who has shared my life for forty happy and fulfilling years

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ORE THAN TO ANYONE ELSE, I owe my interest in the medical vocabulary and in Medical history to Dr. William Willoughby Francis, the self-described "second cousin with nephew status" of Sir William Osler. During my medical student days, Dr. Francis was the librarian (and cataloger) of the splendid collection of old medical books which Osler bequeathed to his alma mater, McGill University. As faculty advisor for the Osler Society, he carefully nurtured and nourished any spark of interest in medical history among students deeply preoccupied at the time with laboratories, clinics, and examinations. Dr. Francis retained his infectious enthusiasm for medical and linguistic scholarship right through to the year of his death in 1959 at the age of 82, after which I had the privilege of renting a room in his widow's apartment for several months during my fourth year of medical school. Long after I cut loose from the academic environment and became increasingly absorbed in the rigors of clinical practice in the Northern regions, the image of this cheerful, witty, and immensely learned man kept coming back to me and I came to appreciate more and more his wide-ranging knowledge of history, classical languages, and his personal embodiment of medical humanism. In a real sense, this book is part of his legacy.

I hope the reader will find at least a small measure of the enjoyment in reading this book that I have had in researching and writing it. The work has been a project of mine for many years now, one which kept intruding itself into my life. For months at a time, and even for a year or two, I would put it aside and turn to more pressing tasks. Then once again a medical word which was new to me and which illumined my consciousness with a striking image would leap out at me from the pages of a medical journal or text, and for the next few weeks or months I would be back at my dictionaries and lists.

No one could undertake a project like this without access to and use of many reference works on language, medicine, and the history of medicine. As for anyone who writes on the English language, the *Oxford English Dictionary* (2nd edition) was absolutely indispensable. I used this work mainly in its CD ROM version, which offers some remarkably helpful search features. This grand monument of meticulous scholarship, quite aside from its usefulness in my work, was a source of never-ending delight and astonishment. Two other indispensable references were *Liddell and Scott's* 

*Greek-English Lexicon*, and the *Oxford Latin Dictionary*. In addition, I used various etymological dictionaries, medical dictionaries, word study books, foreign language dictionaries, and medical texts, most of which are listed at the end of the book. Not listed are many medical journal articles and other resources in clinical medicine from which I have gleaned from time to time new or interesting words or turns of phrase.

**Robert Fortuine** 

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### Abbreviations

Du.	Dutch
Fr.	French
Ger.	German
Gr.	Greek
It.	Italian
L.	(Classical) Latin
LatL.	Late Latin
MedL.	Medieval Latin
ME.	Middle English
ModE.	Modern English
ModL.	Modern Latin
<i>N.A</i> .	Nomina Anatomica
OE.	Old English
OED2	Oxford English Dictionary, 2nd Edition
OLD	Oxford Latin Dictionary
ON.	Old Norse
Port.	Portuguese
Sp.	Spanish

## Introduction

#### GOALS

Why another book on medical terminol-ogy? The shelves of medical bookstores and libraries are replete with books on this topic-some for the general reader, some for health professionals, some for scholars, and most of all for students. The bulk of them, however, are not written for physicians, but rather for medical transcriptionists, medical record librarians, or entry-level health professionals. Their purpose is to present in elementary fashion some of the more common Latin and Greek roots, showing how medical words are built up from their basic elements, with exercises not only on how to analyze words for their meaning, but even on how to construct new words. Other available books contain endless lists of medical words, classified by topic or by specialty, including hundreds of obscure eponyms, most of which after a lifetime in medicine have never found their way into my personal experience. These books are little more than medical dictionaries without definitions, and again, are intended primarily for medical transcriptionists.

True medical dictionaries have a distinguished tradition and are still in plentiful supply today. Standard references like *Stedman's* is now in its 27th and *Dorland's* in its 28th edition. Smaller dictionaries, such as *Taber's*, are useful helps for busy nurses, medical students, and pharmacists. Still other specialized medical dictionaries are available for psychiatrists, pharmacists, ophthalmologists, dermatologists, surgeons (and their transcriptionists, it should be added), and many other types of practitioners.

Dictionaries by their nature are there to be complete (in varying degrees), and to provide definitions. They include many thousands of words, perhaps most of which are never heard, read, or spoken by the average physician. Most dictionaries give in addition some indication of the etymology of the words they list, or at least their underlying roots. The larger ones may give a few words on the individuals whose names have become eponyms, but usually little more than their dates of birth and death, nationality, and field of endeavor. These essential qualities of dictionaries make them splendid and helpful reference works but not the kind of books one can read for leisure or enjoyment, or keep on the bedside table. Our trips to the dictionary may be rewarding, but we usually come away with only one new particle of knowledge for our memory banks, and that often quite unrelated to the rest of our experience.

Why is this book different? It is neither a handbook for learning terminology, nor a word list, nor a dictionary. Rather, it is an appreciation of that special branch of English that has evolved over the centuries for the use of physicians and other health professionals in their daily work and study. My goal is to help those whose lot it is to read, write, and speak this particular *genre* of English in their daily lives to enjoy and appreciate something of its lasting heritage. And we are not referring here to a narrow and provincial technical jargon, but to what is fast becoming the common mode of medical communication throughout the Global Village.

The language of medicine, to those not initiated into the cult, can be a confusing morass of long, unpronounceable, and unspellable words. How many physicians cringe to hear medical words mispronounced by reporters on the evening news, misspelled in the newspapers, or misused by other people who should know better, including other health professionals? Even more disturbing, perhaps, is how many physicians are not bothered by the mispronounced, misspelled, or misused word, because they are not all that clear on it themselves? To take it a step further, how many physicians linger for a moment over a word because they savor the quaint conceit of meaning embedded in it, or because they know the story or the man or woman behind it? Who knows (or cares) whether an eponym is taken from the Bible, a Dickens novel, or from a certain faceless patient who had the disease? Medical writing and speaking in our time, has all too often become a boring litany of clichés and jargon characterized by sesquipedalian words loosely interspersed with dangling participles, indefinite referents, and passive verb forms.

None of this, of course, is easy to change, and this book has no pretensions in that direction except a hope that those who read it may begin to use the language of our profession more knowledgeably, precisely, and (dare I say?) lovingly. The specific goals of this book are:

- 1. To foster a greater awareness of medical words among health professionals and their correct use in the healing arts. Physicians by the nature of their training have a strong scientific background, but, unlike their peers in centuries past, most have had limited exposure to ancient or modern languages, history, and literature. Moreover, they are busy people who have little opportunity, or perhaps inclination, to pursue such studies in the course of their daily professional life, which is already overwhelmed by conflicting pressures and demands. This book attempts to add some insights and pleasure into the everyday medical language we use to communicate with one another.
- 2. To heighten awareness of the precise meaning of medical words and phrases. Many physicians hear or read words used loosely, and then may use them in a sloppy manner themselves. Further, to a distressing extent they talk to their patients using the same big words with which they talk to each other. The patients, in their turn, often politely nod in agreement with little or no comprehension, unwilling to display their ignorance. This book will try to foster precision in the use of technical terms, but it will also lay stress on the value of everyday English words that may convey in simpler terms what some of the complex ones fail to communicate.

- 3. To demonstrate how to break down unfamiliar words into their component parts to derive their meaning. For many words, however, it will go a step further, giving the origin not simply in terms of Latin and Greek roots (which indeed is not everyone's idea of a good time), but also the story behind the word. These stories may stem from mythology, history, geography, biography, or literature, and once assimilated will furnish a flash of recognition and a measure of enjoyment each time the word is encountered or used.
- 4. To help the reader to write more correctly and hence more effectively. It is, of course, a book of words, not a treatise on grammar or style, but knowing the roots of a word will prevent many common spelling errors and lend a measure of accuracy to the use of words, so that they are not assigned meanings they don't have.
- 5. Finally, the most important goal of all for this book is to enhance the enjoyment of the language of medicine-to lift it beyond an everyday professional jargon that often makes reading (and listening) both a chore and a bore. Knowing the derivation of and the story behind the technical terms of everyday life should heighten awareness, pride, and even delight in the heritage of medicine that we all share.

#### FOR WHOM IS THIS BOOK WRITTEN?

This book is first of all written for physicians and biomedical scientists, who are those most likely to speak, hear, or read medical words throughout the day, and on whom the responsibility most clearly rests for using them correctly. Beyond these, other health professionals—especially nurses and others engaged in direct patient care—will, I think, find the book can be an enrichment of their daily work. A third group of individuals for whom it is designed includes entry-level students of medicine, nursing, and other directcare professions. If an interest in and respect for words can be instilled at an early stage of development in a professional, it will certainly pay dividends later in life, not only by helping to avoid the almost inevitable bad habits into which we find ourselves drifting but also by building at an early stage a solid foundation for continued learning and enjoyment of both the vagaries of the language and the history of medicine.

The organization of the book is basically topical and historical but it also takes into account the needs of students of the health sciences. Allowing an overview of how the language of medicine evolved, the early chapters deal with medical word formation from Greek and Latin roots, including a consideration of prefixes and suffixes, verbs, and adjectives. Next follow six chapters on the word-imagery of medicine-that is, the formation of medical roots and expressions by a comparison with a similar object, form, or idea from the nonmedical world. Medicine is especially rich in such formations, beginning in classical times and extending to new words continually being fashioned in our own day to describe new diseases, new structures, and new concepts. Although the most words derive from Greek or Latin roots, a substantial number also come from modern languages, including English itself. The practical hope embedded in this series of chapters is that familiarity with the colorful word pictures described will assist practitioners and students to remember complex and unfamiliar terms.

The next few chapters examine some of the older words of medicine, beginning with a discussion of the remnants of Latin, which have lingered in the medical vocabulary up to the present time. Then follow a couple of chapters that look at some of the obsolete