

## PREVENTIVE MEDICINE

DUNCAN W. CLARK AND BRIAN MAC MAHON, EDITORS

Boston, Little, Brown and Company, 1967, xix + 897 pp.

The philosophical idea of preventive medicine has through the years presented little difficulty; moreover, in recent times, in communities where the chief burden of disease is imposed by microorganisms the definition and implementation of control methods has often proved relatively simple. However, the number of communities, indeed of whole countries, in which the transmissible diseases play a role secondary to others of a more insidious nature is slowly increasing—and the economic contributions of these countries to the affairs of man is wholly disproportionate to their size.

For reasons that are traditional, and administratively convenient, but nigh to indefensible on an intellectual basis, medical schools are divided into departments, each of which carves a discrete block out of the continuum of human knowledge and jealously guards it as its own. For a few “subjects” such definition has never presented a problem; for instance surgeons, obstetricians and gynecologists work in a state of equilibrium with their academic colleagues.

Neither in preventive medicine nor in the basic sciences are affairs so settled, however. The ancient wars in which physiology, histology and biochemistry were carved from the venerable corpus of anatomy are being refought, but this time enzymes, membranes, ribosomes and molecules are being partitioned within the tiny world of the cell. These fights and others like them have an impact beyond the departments directly concerned.

Thus the role played by the department of preventive medicine is being moulded by pressures both without and within the school of medicine. With this partitioning and repartitioning of *mundus academicus*, old textbooks are discarded, no matter how well they are revised, and new ones are written each trying for a while to fit usefully into the changing world in which their writers work.

PREVENTIVE MEDICINE is the latest of a relatively small number of textbooks attempting to follow medicine into its current campaign to exterminate at source or at least to control the chronic metabolic and neoplastic diseases that cripple and kill man of the megalopolis.

The editors set themselves the task of describing “(1) the methods of study (particularly those based on population) on which the discovery and the evaluation of preventive measures depend; (2) the body of knowledge pertaining to the etiology and prevention of disease, and (3) the body of knowledge concerning health programs and services.” Of the 39 authors invited to contribute, about half were, at the time of writing, full-time faculty members teaching preventive medicine or preventive dentistry to medical students.

The book is divided into three parts. The first, called “Methods in Preventive Medicine,” has chapters on the vocabulary of the subject, the techniques of epidemiology and genetics, sources of United States morbidity data, especially the National Health Surveys and others of a more general nature. Part two, the longest, is called “Disease Etiology and Prevention” and contains 25 chapters on these two topics as they pertain to perinatal disorders, growth and development, dental disorder, nutritional diseases, accidents, addictive diseases, the chronic diseases grouped by body systems (12 chapters) and a series of chapters on such assorted conditions as cancer, acute infection, tuberculosis, venereal disease and so on. The book ends with two relatively brief sections, one on “Prevention in Practice” and the other on “The Health Services.”

In a sense the result has much in common with the lucky wedding dress, “something old, something new, something borrowed. . .” “Old” are the chapters on subjects that have been fundamental to texts on preventive medicine through the years,

such as the sections on indices of community health or the health of the nation; the reviews of tuberculosis, venereal disease and acute infections. They are, however, still essential today, and on the whole are authoritatively written by acknowledged experts. "Borrowed" are a few chapters by authors who, to this reviewer's knowledge, have never made a previous contribution to the field they describe. Recruiting the help of such writers is not necessarily a bad thing for it is often easier to acquire a sense of the size, the shape and the proportion of mountains from afar than from half-way up the side of them.

The book contains much that is quite new. One cannot call to mind another textbook that makes a systematic attempt to link the etiology to the prevention of all common—and some uncommon—North American diseases. Although the recent flood of federal legislation concerned with the organization of health services has brought about such extensive and rapid change that no text can hope to remain up to date, the last section of the book certainly breaks fresh ground, and because it concerns itself with principles continues to be useful.

The book has some shortcomings, most of which are endemic among books with multiple authorship. The quality of the contributions is patchy. Several are outstanding, among them MacMahon's on Epidemiologic Methods, Cancer and the Health of the Nation; Klarman's on Financing Health and Medical Care; Clark's on the Vocabulary of Preventive Medicine and Payne's on the Basis of Preventive Measures; but a few are very weak. Emphasis is sometimes wholly unrelated to real importance; for instance it is difficult to justify the devotion of a scant total of three pages to the section dealing with the etiology of ischemic heart disease, hypertension and cerebrovascular disease, and the same amount of space to the arthritides, when nearly five pages are concerned with rabies, and another five with the mathematics involved in the determination of zygoty. Neither of the short presentations give nearly enough information about details every medical student should know; yet both of the longer ones deal with topics in a depth inappropriate to a text of this sort. No attempt is made at

textual cross-referencing; thus although topics such as obesity, social class or the preventive check-up are described both definitively and coincidentally, the reader who wants to obtain full value from the book must make extensive use of the index. The index is, however, a good one.

All the chapters finish with a list of references, but no clear policy underlies the selection of these. Some are lengthy and similar in form to those of the review articles in journals and some suggest that the contributor is only interested in his own work and that of his best friends; some again follow what would seem to be the most sensible policy namely to pick out a few truly substantial or significant original contributions to the literature in support of certain statements or opinions and then to give a short list of monographs or collateral texts as recommended reading.

Despite these shortcomings, *PREVENTIVE MEDICINE* comes close to reaching the goals it sets itself. Its coverage is a fair representation of that attempted in the curriculum of many of the more progressive departments of preventive medicine (or pseudonym) in the United States, and very important, the level of presentation is in general well adjusted to the needs of the medical student.

The book, which is available in paper back or hard back, has been produced by a photographic offset process, which means that it is cheaper than the majority of medical texts of its size (about 900 pages) and this is important. In conclusion one can with some enthusiasm recommend its use as a general medical school text on the grounds that it is modern, excellently conceived, well presented within the limitations set out above and priced to suit the pocket of the average student. Much of it, too, will be valuable to graduate students in schools of public health and to others concerned with epidemiology and medical sociology.

ROY M. ACHESON