The Hypertension Primer Project
An Educational Experiment

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Modern medical curricula are also a barrier to better education in hypertension. Despite the fact that hypertension remains the most common reason why Americans visit physicians, medical schools rarely present the relevant background information in a coherent fashion. In most medical schools, hypertension is taught in a piecemeal fashion in such courses as biochemistry, physiology, pathology, pharmacology, and epidemiology, as well as in clinical medicine, pediatrics, and surgery. Such curricular fragmentation is further reinforced by organ-oriented subspecialists, whose practices encompass only a small part of the larger whole and who tend to view high blood pressure and its control as someone else’s management problem.

The Problem: the Information Gap

Webster defines a primer as a “small introductory book on a subject.” With several high-quality specialty journals and many excellent textbooks available, the question logically arises: What value is there in a hypertension primer? It could be said that the reason for the Primer is that, despite the marked increase in the amount of factual data that are potentially available, the amount of readily accessible, current, expert-level perspective and interpretation is often proportionally diminished. In this explosion of knowledge, the information gap is further widened by the speed of scientific change, the fragmentation caused by the continued growth of medical specialties and subspecialties, the continued focus on experimental reductionism to the relative exclusion of integrative biomedical research, and the proliferation of new information sources. It has therefore become virtually impossible for many physicians, scientists, and trainees to appreciate how much is known about the complex syndrome of hypertension because each fragment of knowledge is not usually seen as a part of a larger recognizable pattern that is in turn linked to other biological processes and diseases. The resulting situation is not unlike the fable of the six blind men and the elephant, which each described as a very different animal based on the limited extent of the creature he could grasp.

The Solution: a New Paradigm

It may seem paradoxical that an intrinsically fragmented primer could assist in improving access to integrated information. We have attempted to resolve this dilemma through the unique matrix organization of the information presented. The Hypertension Primer has been designed to provide ready access to the highest level of expert opinion about essential information, both new and old, from more than 150 members of the Council. Authors have contributed short, concise chapters highlighting their own areas of expertise in well-defined aspects of the field. No chapter is a full review of current information, but each chapter highlights key concepts about the individual subtopics in the form of the bullet points at the beginning. Authors were asked not to reference these concepts in full but rather to suggest additional reading for those who wish to probe the subject further. This condensed format engendered a continuing challenge and tension among those who wanted to provide the more complete perspective of a standard textbook chapter and those who were willing to trust that the editors would be able to weave together the individual strands of information through the cross-referencing matrix system that is included. The book also features extensive diagrams and tables to help condense and streamline the information presented.

It is hoped that this unique matrix format will be conducive to different styles of self-education and will be useful for both novices and subspecialist experts who wish to gain access to information in an otherwise unfamiliar or less readily accessible discipline. To the best of our knowledge, it is the first hypertext document that has appeared in print before it has appeared electronically. Hypertext is the basis for many of the...
new CD-ROM encyclopedias and learning systems that have appeared in personal computers. For those unfamiliar with the concept of hypertext, individual information segments are linked together by keywords that allow the learner to immediately access information in a related discipline by simply clicking on the highlighted keyword embedded in the current segment.

In organizing this three-dimensional matrix of information, topics were first layered into three basic strata of information: basic science, population science, and clinical management. Each of these basic layers was further stratified into a sequence of thematically related subsections and finally cross-referenced with linked areas from the other two basic strata when appropriate. A major advantage of this hypertext approach is that the learner can begin at any point in the spectrum of information segments and proceed either forward toward clinical applications or backward toward explanations of basic scientific mechanisms, allowing different learning paths. Chapters can be read in sequence, can be approached in any order, or can be read individually to shorten the access time to the highest level of expert opinion. A standard index also reinforces these interchapter links.

Future Applications
We hope you find the Primer to be of value to you and your colleagues and that you will consider participating in our educational experiment. It has always been anticipated that this unique format could be quickly converted to a computer-based system, yet we have also felt strongly that the print medium has a permanent place in the educational process. The Primer experiment can be extended to new computer-based systems in the near future if its acceptance is sufficient. It is also hoped that this document may form a model for expansion to related areas of cardiovascular diseases. The editors and the American Heart Association are interested in your ideas and feedback, which can be directed to the National Office in Dallas or to the editors directly.

Note from the Editors
This textbook, by the membership of the Council for High Blood Pressure Research, is appropriately introduced in Hypertension. The editors are pleased to introduce the second edition of the Hypertension Primer to our readers who are, in fact, the fountainhead of new hypertension information.
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