respected professional scientific organization in America today. The Executive Director of this association gave, what he called "startling" statistics about drug reactions as they were discussed by Dr. Leighton E. Cluff, Professor of Medicine at the University of Florida College of Medicine. For one thing, it was stated that about 15% of patients are admitted to hospitals because of adverse drug reactions. He claimed "this represents 1.5 million patients a year." And this does not include patients who have a drug reaction after being hospitalized. Virtually every drug reaction could be prevented if the doctor was aware of what the drug can do—in addition to its alleged therapeutic effect. Even excusing undetected idiosyncratic patient allergies, the fact the one doctor claims a million and a half patients a year suffer drug reactions has to indicate a gross failure of doctors to know all they should know about drugs.

Another reported observation was that 20% of all hospitalized patients received antibiotics, but that this number was not compatible with the reported number of infections. In other words, patients were given antibiotics without any evident reason. The Executive Director of The American College of Physicians is not afraid to say that: "It is possible physicians themselves may be over-

influenced by claims made for drug efficacy."

Unfortunately, there are relatively few opportunities, other than medical journals, for practicing physicians to learn about drugs today. Most post-graduate courses stress theory and dwell on diagnosis—with the emphasis on how the medical laboratory (rather than the physician himself) can best make that diagnosis. One reason for this lack of academic courses on drug education is that where such courses do exist, they are more often than not, sponsored by a drug company—and they inevitably include free drinks and dinner for the doctors who attend. Again, you start such a meeting with a built-in bias and it is difficult for human beings—even if they are doctors—not to be influenced under such conditions. Medical schools just cannot compete with drug companies when it comes to

offering seminars on drugs.

That physicians want to know more about drugs is quite evident. While on of JAMA's editors, I had the responsibility of running the Queries and Minor Notes Department (now called the Questions and Answers Department). This editorial department handled letters to the editor that asked questions about drugs and diseases. Often, a physician sent in an abbreviated case history of a patient he was treating and asked for specific advice as to what drug to use, or whether it was all right to utilize a certain drug. Several times these questions and their answers were published in book form and sold by the AMA. I recently took another look at one of these books, entitled "Selected Queries and Minor Notes," and found that half of all the questions asked related to drugs, as opposed to diagnostic procedures, surgical techniques, etc.). What was of even greater interest, in reviewing this book, specifically with this testimony in mind, was that 4 out of every 5 questions on drugs asked for information that should have been common knowledge to the medical profession (side effects of drugs, proper dosage, specific rather than general indications for use, etc.); these were questions that showed the ads for the drugs had omitted the most important prescribing information

But doctors only have time to read the "headlines" in a drug ad; not because the doctor does not want to read more, but because he just does not have the time to read all the details—and especially to search out and study the references that really tell about the drug. And he does assume that if the ad is in his "official" association journal, it must be all right. This is because most doctors are quite unaware of the dichotomy between the editorial departments and the business departments of their association. And, it is my opinion that this false trust in advertising in JAMA, and other AMA publications, is what has led to the

gross overuse, as well as misuse, of drugs.

It seems obvious that legislation now on the books, has not reduced the incidence of drug reactions—the very best indication of drug use and abuse. To require that certain information be in fine print does not, at the same time require that the doctor read that fine print. But to require that the headlines in a drug ad emphasize—with equal attraction—the bad along with the good could

help reduce the drug reaction problem.

Properly evaluated advertising could be the best method of bringing the doctor up-to-date on drugs. But only the medical profession can insist on such standards. I hope the past and future hearings of this committee will bring this fact to the attention of the doctors and that they, in turn, will insist on such standards as a rigid policy in their "official" publication.