



*“Pharmacy is in a rather remarkable position today to blaze a new trail.”*

===== **PAUL F. PARKER** =====

*(1967)*

*At the time he received this award, Paul F. Parker was the Director of the Pharmacy Central Supply Department at University Hospital and an Assistant Professor at the College of Pharmacy, University of Kentucky, Lexington.*

## **Drugs and the People**

*American life is a continuous and unconscious revolution . . . America wants everybody to be happy, healthy, and useful; an idea regarded as wildly “radical” in some parts of the world. America works toward that ideal in every town, factory, school, and legislature until it changes the things that get in its way.*

**T**hese words were used by James B. Reston, Washington Bureau Chief of the *New York Times*, to describe the bumper crop of legislation in the continuing American revolution.

Social change is all about us, and certainly health is one of the most significant of these changes. The people who provide health care no longer have the responsibility to the people for merely treating their diseases, mending their bodies, and immunizing their children but for maintaining their health from the cradle to the grave. While the American way of life in general is undergoing a social revolution, it appears that many of us in the health field still are unconscious of change. Those of us in pharmacy are more a part of this revolution than we may realize, because drugs are surely

one of the most important components of health. To illustrate, let us divide the total concept of health care into any number of identifiable components such as medicine, surgery, dentistry, nursing, radiology, pathology, equipment, facilities, etc.—just as long as one component is drugs. Now, if we had to eliminate these components, one by one, when would drugs be eliminated? Surely, most people would list drugs as one of the last to go. But are pharmacy and drugs completely synonymous? Of course they are not. We must give credit to the scientists who discover and test drugs. We must recognize the very legitimate and important involvement of all our colleagues in the health field who concern themselves to varying degrees with drugs.

When we view pharmacy in the social revolution, perhaps we should ask ourselves: Does pharmacy adequately involve itself in the total concept of drugs, or do we limit our professional emphasis to the sciences of drug development and their physicochemical relationships or to drug distribution and control? Do we balance judgment concerning our business and scientific interests against the interests of patients and the public? Do we function effectively as members of the health team? Do we specialize sufficiently to make drugs as effective and efficient as they should be in relation to their relative importance in health care?

As I have thought about the subject of this lecture during the past several months, I began to develop some rather deep personal feelings about some of the issues confronting pharmacy today. I could not confine my thoughts to hospital pharmacy and the programs in which I am involved daily, but neither could I exclude these matters. I thought, too, about our drug industry—the kind, quality, and quantity of drugs which it makes available throughout the world. Most particularly, I also thought about the practitioners who comprise the major segment of our profession—the community pharmacists. Nor was I unaware of those in pharmacy who direct our associations, those who write and report as pharmaceutical journalists, and those who teach in our colleges of pharmacy.

I fully respect the fact that individuals in each segment of pharmacy see the issues of the day in a quite different perspective. For instance, when viewed as a business, representatives of industry have one kind of interest, the wholesaler another, the community pharmacist another, and the hospital pharmacy—still another. When viewed as a science, the industry researcher would hold one view, the educator-researcher another, and the clinical researcher—to the extent that we have clinical scientists in pharmacy—still another. When pharmacy is viewed as a service to the public, even though we may have a different perspective because of our business involvement or the kind of work we do, it is my opinion that we must all consider the needs and views and interests of the public itself. Therefore, even though you may find it difficult to remain completely neutral about my remarks, my purpose is to direct your attention to some matters of public interest regarding drugs and to propose some basic principles for pharmacy to help us serve the public better.

When I speak of public opinion or the public attitude about drugs, I refer to the total American society—the informed as well as the uninformed. Recently, I read an article in one of the new drug journals which reported public opinion as represented

by an interview with 121 housewives. I refer here to public opinion which might be represented by even one person who might be in a position to obtain public support for his viewpoint. The heart of the matter is, if the facts of any particular issue were known or understood, what would be the public reaction?

In my opinion, the most sensitive public concern about drugs is their cost. This issue is seen in many different ways by different segments of society. For instance, a legislator may start a congressional investigation of drug company profits or, indeed, explore the idea of placing the drug industry under public control. Still another may investigate drug advertising and promotion. Someone may ask whether it is really necessary to have thousands of detail men call on physicians, pharmacists, and others almost every day of the year. Many Americans may want to know whether the cost of drugs is covered or is not covered by his insurance or by Medicare. Other Americans may call for a drug prepayment system. And, too, if my next door neighbor made less money than I did, then he might think drugs cost too much because pharmacists made too much money.

I cannot, in good conscience, tell you that I believe drugs cost too much. But neither can I completely justify the cost of drugs. I have read most of the canned speeches that come across my desk from the Madison Avenue boys. Some of these people and, indeed, some of my professional associates believe that I should accept this material and present it before groups such as my local Rotary Club. The fact is the evidence about drug costs has just not been adequate to convince me that I should go out and explain to my fellow Americans why drugs cost what they do.

I believe that drug research is expensive; I believe we should have good production and distribution controls; I even believe we should use packaging systems, such as are represented by unit dose packaging, to extend controls to the point where the drug is administered to, or used by, the patient. All of these things make drugs expensive. I believe any expense is justifiable that assures better quality and control to the patient.

There are two areas of cost that I would question, and even here I hasten to add that I am not passing judgment. These are the cost of marketing, including advertising, promotion, and detailing on the one hand and the principle of markup for distribution on the other. I do not recall any data that have been made available concerning marketing costs. Nor do I know of any professional conferences or other efforts on the part of the profession that explored the subject. Can the profession face the public squarely and say the cost of marketing is essential? Undoubtedly, individual companies have determined that the present methods of marketing produce the highest volume of drug sales—but, again, does this mean that the public is best served?

The profession has, indeed, faced the issue of the markup principle by advocating the use of the professional fee. I believe the pharmacy practitioner will have made a monumental step in improving his public image when he fully accepts the professional fee concept and divorces his professional services from the cost of drugs.

We need to take a fresh new approach to the clinical evaluation of drugs. The 1962 Harris Amendments to the Food and Drug Act are a rather obvious example of the public getting what it wants and changing things that get in its way in order to do so.

But the answer is not merely so simple as passing a law to require the government to make a judgment on whether a drug is safe and efficacious or whether it is not. Good judgment to determine drug safety and efficacy can be only as valid as the scientific and clinical information to make such a judgment. I refer here to the loose organizational arrangements that exist between preclinical research groups and clinical research groups for drugs. In the past, such research has been coordinated largely between the medical departments of drug companies and individual physicians. The new legislation has required so much red tape and paperwork that potential clinical scientists are not encouraged to do clinical research. The support for clinical research from industry is not as attractive now as it has been in the past, because so much other research monies are now available.

It is timely and appropriate for colleges of pharmacy and hospital pharmacy departments to create and develop drug research programs in the medical center environment. Is there any good reason why the interdisciplinary team approach to drug research, including the clinical component, cannot be applied in the academic and clinical environment as well as in the laboratories of the pharmaceutical companies? I believe some precedent already exists to do this to a limited degree but largely on an individual basis. I believe that an organized program of this type would attract good pharmaceutical scientists as well as good clinical investigators.

Physicians need help in conducting good clinical drug investigations. The subjective clinical judgment which only they can provide is essential, but subjective judgment must be framed in an appropriate research design (protocol) to provide adequate objectivity. The pharmaceutical scientist might well devote a major part of his research effort developing this protocol, making objective measurements, providing double-blind bases for the studies, and, in general, bringing scientific depth to clinical drug research. Such programs would serve as a training ground for the development of more scientists who are so badly needed in this field. But most importantly, it would produce scientific results to support our nationwide need for determining drug safety and efficacy.

For the past five years, I have directed a drug distribution program which produces drug usage data showing statistically how much of what drug was used and on whom. These data are relatively unsophisticated and, unfortunately, do not include why the drug was used. Even without computerization of these data, our physicians can easily see from the drug usage information that they overused certain drugs even though they themselves wrote the original orders for the drugs. We like to think that we have a good program to guide physicians in the rational selection of drugs, but, obviously, there are areas of drug use that give us concern. What would happen if all drug usage in the nation was reviewed objectively? Would such a review stand the test of public scrutiny? In other words, do we use the drugs we should use and not use the drugs we should not use?

For over 25 years, hospital pharmacists have championed the cause of pharmacy and therapeutics committees. The basic purpose of this cause has been the development of a more rational drug therapy. Unfortunately, some of us have not fully un-

derstood the basic reason for pharmacy and therapeutics committees and, as a result, have overemphasized standardization and economics. This is wrong, and I believe we should take prompt action to correct it. While standardization and cost reduction may result from good, rational drug therapy, they cannot and should not be the basic reasons for it.

Even though hospital pharmacists have steadfastly pursued this course for over 25 years, the results are not yet adequate. I can foresee no particular reason for physicians to play a more important role in drug therapy in the future than they have in the past. The only answer I see is for pharmacists to become more directly involved in drug therapy. This applies to patient care programs outside the hospital itself and into group medical practices, or what is sometimes referred to as the total concept of institutional health care from a social viewpoint. This means clinical pharmacy must become a fundamental component of pharmaceutical education. In retrospect, I believe we are already 25 years late in doing this, but even now we must first develop a clinical faculty and find a way to weed out some other segments of the pharmaceutical curriculum.

We must admit to ourselves that we have a long way to go to become clinically involved. But I have a real fear that clinical involvement will soon become such a popular idea in pharmacy that everybody will want to get into the act. As a result, we will use such terms as “drug consultant to the physician.” Is that discreet? Wouldn't it be much more appropriate if a pharmacist had aided or assisted a physician in some meaningful way and the physician said he had consulted with the pharmacist? Someone might contend that he was clinically involved because he regularly went on rounds with the physician. I would only ask, “For what purposes, and what did he contribute?”

In the first place, we need to become comfortable and at home in the clinical areas with physicians and patients. Secondly, we need to understand the clinical jargon, particularly as it relates to drugs and specific patient conditions, laboratory or pathological studies, etc. This will not be easy. But the most difficult part of all will be for the pharmacist to make a meaningful contribution to drug therapy or drug use in general. To me, this means that the pharmacist will need to know more than anyone else about drugs in their application to patients.

The subject of clinical involvement of pharmacists is not to be taken lightly; and I say to pharmacy educators, hospital pharmacists, or any other pharmacist who may have reason to become involved clinically that the issue should be approached in full cooperation with physicians and with sufficient support to make it work.

By advocating that pharmacists assume a meaningful role in drug therapy, we are not saying that physicians are not doing a good job, nor are we saying that physicians must not have ultimate responsibility to prescribe drugs. Indeed, they must retain this responsibility. We are saying that drug therapy is sufficiently complicated that we must provide a drug emphasis that is consistent with the importance of drugs in the total concept of health care. Neither are we saying that drug distribution cannot or should not be a fundamental role of the pharmacist, but rather that his time and knowledge must be more effectively directed to the total concept of drug use.

If we are successful in introducing a clinical component to pharmaceutical education, there is little doubt in my mind that we will also introduce a variety of specialists in pharmaceutical practice, that drug detailing as we know it today will disappear, and that the team concept of health care with respect to drugs will start to become meaningful.

Still another aspect of drug selection that must be considered in the light of public interest is the inconsistency between the drugs physicians prescribe and payment for these drugs by welfare programs, Medicare, or other third-party payee plans.

It is obvious that the pharmacist must take a more responsible political role at the federal, state, and local levels in drug therapy and payment programs. As he does so, he will be faced immediately and squarely with some of the most puzzling questions of our time. He will need to apply a superior quality of judgment to balance the quality and selection of drugs on the one hand against the cost of drugs and maintenance of the free enterprise system in the drug business on the other.

Pharmacists in America have always had the basic elements of a monopoly on drugs. Not completely so, but at best they had a situation with which they could have drawn the string tighter or made it looser. By default or misjudgment, they allowed the latter to happen. With the advent of the principle of self-service and mass merchandising, we became more obsessed with the loss of business than with the principle of protecting the public against itself. As a result, we advertised drugs directly to the public, mass merchandised them in our drugstores, and placed ourselves in direct competition with the people who had a business advantage to gain from loosening our drug monopoly. Now we know that if this monopoly is ever to return drugs to the control of the pharmacist, it can do so only by justifying the control in terms of protecting public health. To justify this cause, it will not be adequate for you and me to simply say it is so.

There may be on the horizon a new hope and justification for more completely controlling drugs. I am told that each drug may have a rather standard metabolic path, rate of excretion, etc., but that when two or more drugs are taken or administered simultaneously, a new set of pharmacologic facts comes into existence with respect to each drug. Imagine what this would mean when some of our patients take 12 or 15 drugs simultaneously. Although we may now be approaching a time when it can be demonstrated scientifically that drugs need to be controlled, is it now also time to strengthen our professional position on this subject? In seeking its remedies, should the public listen to the television commercials or be guided by the advice of the checkout girl at the grocery store or the checkout girl at the drugstore? Maybe our educational curriculum should be more directed to a scientific understanding of these remedies and less concerned with methods of merchandising them.

We live in an informed society, and I can see no reason why it is not appropriate for my friends, neighbors, or relatives to know what drugs they are taking and what effect they are supposed to have. I would go further and ask why we should not have programs designed specifically to inform the public about drugs. As the situation exists today, any person with a reasonable amount of initiative could find almost any information about any drug if he would only take the time and effort to do so. Obvi-

ously, I am not speaking of the rare situation in which it would be in the patient's best interest to withhold drug identification. This could be overcome easily if it was understood that prescription containers would be labeled with the name of the drug unless the physician indicated otherwise. It is well understood that there would be better continuity if therapy and drugs could be more easily identified in case of an emergency. Now that the American Medical Association has officially taken a position on this subject, it is obvious that pharmacists are the principal deterrent to keeping the public informed. It appears to me that the real reason is that pharmacists think patients might shop for their prescription medication.

There is still another, less controversial, but more serious side to the subject of patient information about drugs. I refer here to the patient's understanding of how he should take his drugs, the emphasis of drugs in relation to disease, the factors of home environment that interfere with good therapy, and whether he even has his prescription dispensed. As an example, a physician on our staff once conducted a survey of patients to determine their degree of understanding about their illness and home care as they were being discharged from the hospital. To my chagrin, even though their drugs were labeled by name, there was less understanding about their drugs than any other aspect of their illness. I have since been able to interest the chairman of our Behavioral Science Department in doing a study of patient understanding and use of drugs.

I believe pharmacy can act responsibly to the public in all of these areas, but in order to do so, there must be a new philosophy and sense of direction among its practitioners. This brings me to the four principal points of my lecture. I believe these points, if applied, will make us sensitive to our responsibilities to society and, to some extent, capable of fulfilling them:

1. *Pharmacy should involve itself in the total concept of drugs in health care.* In other words, pharmacy should involve itself intimately and responsibly with every aspect of drugs—from their discovery to production, evaluation, and testing, to their being prescribed, distributed, administered, and used by patients.
2. *Pharmacists should be socially responsible individuals who are patient and drug oriented.* This point introduces two components to our philosophy which, in my opinion, are remarkably weak—"socially responsible" and "patient oriented."
3. *Pharmacists should function as integral members of the health team.* In this respect, we are not referring so much to personal acceptance as to meaningful contributions.
4. *Pharmacists should be encouraged to specialize functionally.* The emphasis should be to specialize in various areas of drug concern such as clinical pharmacology, biopharmaceuticals, clinical pharmacy, drug information, etc., rather than hospital pharmacy, community pharmacy, etc. Since environmental specialization is not based on a fundamental set of knowledge, a set of skills, or a quality of professional judgment, is it specialization at all?

Pharmacy is in a rather remarkable position today to blaze a new trail and take a leadership role in health professions because of the importance of drugs to health care and the social revolution in which we are involved. But there are problems of communicating this challenge throughout our profession. I am reminded of the story told by the dean of our Dental School about the Kentuckians who were squatted before the court house of a rural town. One turned to the other and drawled, "How's your wife?" The other removed his pipe and, after unhurried deliberation, responded, "Compared with what?" I would then hope to respond, "Compared to all other health professions, which is the way people see us." There are so many differences in our profession because of age, time of attending pharmacy school, business involvement, scientific background, environment of practice, etc., that it is difficult to see what common factor or focus of interest might lead the profession in one direction. I would hope that one focus might be "Drugs and the People."

*Harvey A. K. Whitney Award Lectures (1950–2005)*

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