1973

IS PHARMACEUTICAL EDUCATION PREPARED TO LEAD ITS PROFESSION?

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The Ninth Annual Rho Chi Lecture, 1973

Boston, Massachusetts **July 23, 1973**

I want to thank those who are responsible for selecting me to deliver the 1973 Rho Chi Lecture. Those who were selected in past years to give this address, already share with me the high honor I am experiencing this evening—an honor that, doubtless, some of you here tonight will also share in the future.

One of the purposes of our coming together in this annual meeting of the Society is to reaffirm our commitment to high standards of academic achievement in pharmacy education. May I quote from the pamphlet which each new initiate of the Society receives, "The honor society reflects by its very existence western man's belief in education and his pursuit of intellectual excellence."[1] Unfortunately, the importance of high scholastic attainment in today's society is often minimized by those, who, apparently, will accept mediocrity in performance, rather than strive for excellence. We live in one of the periods of history in which our very best intellectual resources must be recruited, if we are to be prepared to meet and solve even some of the problems of our time. The goals of the Rho Chi Society must be nurtured and promoted in order that we in pharmacy can be assured of the talented men and women that our profession needs today, and will require in the future. This search for talent is a continuing one.

John Gardner in his book entitled, "Excellence," introduced his chapter, "The Great Talent Hunt," with these words:

> "Speaking on the campus of Stanford University in 1906, Wm. James said, 'The world . . . is only beginning to see that the wealth of a nation consists more than in anything else in the number of superior men that it harbors.' James was generous in suggesting that the world shared his own prophetic understanding. Actually, he was half a century ahead of his time. We are just now coming to grasp the profound truth of his remark."[2]

Gardner follows this introductory thought with some comments of his own ". . . we are witnessing a revolution in society's attitude toward men and women of high ability and advanced training . . . as a result of far-reaching social and technological developments in our society, we are forced to search for talent and to use it effectively . . . The demand for talent is an inevitable consequence of our stage of development as a society . . . It is not a recent trend." He quotes Alfred North White Head: "In the conditions of modern life the rule is absolute, the race which does not value trained intelligence is doomed." Just one additional thought from Mr. Gardner: "It is not just technical competence which is needed . . . It requires large numbers of individuals with depth of judgment, perspective, and a broad comprehension of the problems facing our world."

We can see the relationship between the goals of an honor society, specifically the Rho Chi Society, and the national need for talented men and women as expressed by Mr. Gardner. As we reflect briefly this evening, and more leisurely in our own environments, may we not lose sight of the fact that superior academic achievement at a time when the forces of anti-intellectualism are so rampant, tells us something of the qualities of those students whose performances meet the high standards of the Rho Chi Society. We must not fail to provide the encouragement and the opportunity that those who enter the Society each year must have if they are to achieve maturity of judgment and with that, the capacity to lead.

Competent leadership is a commodity that is scarce in all segments of contemporary society—in the professions, in industry, and in education. Sometimes we deceive ourselves, when after reviewing the pages of history, we conclude that God always raises up a leader for us or for our side, when we reach the moment of crisis. While I am a firm believer that God's hand is at work in directing the destinies of His people, I am also a strong believer in the view that God helps those who help themselves.

The title of my lecture, as indicated by your chairman, is in the form of a question: "Is Pharmaceutical Education Prepared to Lead Its Profession?" I have used the verb form "is" rather than "can," or "should," or "why should." The answer in each of the latter cases seems too obvious to warrant further discussion. But if we ask if pharmaceutical education *is prepared* for action—to do something—to lead its profession, the answer is not as evident, although it may be the same. You may ask immediately if there is a precedent for the educational arm providing the leadership for a profession? The answer is yes. Medical education, directed by the Flexner report of 1910, has been the driving force that has taken American medicine to the respected position that it has achieved in our society.

My career in pharmaceutical education spans roughly the past thirty years. It began at the close of World War II, which coincided with the completion of the Pharmaceutical Survey of 1946-1949.[3] As I reflect on these years, two events or "happenings" stand out with startling clarity because of the impact that each has had on pharmaceutical education. The *first* one evolved from Recommendation 3 of the Pharmaceutical Survey, that the "American Association of Colleges of Pharmacy and the American Council of Pharmaceutical Education take the necessary initial steps for the development of a six-year program of education and training leading to the professional degree of Doctor of Pharmacy . . ." The *second* one is currently taking place, and, for lack of a more specific term, I will refer to it as the development of a clinical component or dimension in the pharmacy curriculum. These two events provide the background upon which my answer to the question will be based.

In 1950, the American Association of Colleges of Pharmacy failed to support Recommendation 3, by rejecting a proposal from its Curriculum Committee.[4] This proposal to adopt a six-year first professional degree program for pharmacy was debated fiercely by educators, practitioners, and members of the various Boards of Pharmacy. The arguments against the proposal were traditional, indeed: we can't afford it, we are not ready for it, my university will not support it, our medical school will not consider a doctorate for pharmacists, and we do not have either the faculty or the facilities for an expanded curriculum. Still others argued that the professional doctorate program would compete with their graduate programs in the pharmaceutical sciences. And so the proposal went down to defeat with a motion to table the recommendation of the Curriculum Committee. Here was an instance when pharmaceutical education had an opportunity to lead—the time was auspicious the supporting arguments were valid and educationally sound, and this action had been recommended by educational experts. What was missing was the foresight and the courage to prepare for the future. Pharmaceutical education failed to lead—the profession was satisfied with the status quo.

But this was *not* the end, because out of the debate and the resultant action emerged two schools of thought in pharmacy education and two curricula, one leading to a baccalaureate degree, the other to a professional doctorate. This led to the compromised five-year curriculum concerning which AACP President Schwarting said in 1971, "Innovative develop-

ments have been minimal and hardly illustrious." He then commented that the "faculties and their leaders" of the six-year programs "have been innovative and they have, as a result, made monumental contributions to the future of pharmaceutical practice."[5]

It is not surprising then that the belief is expressed with increasing frequency that we have a system of pharmacy in the United States characterized by two classes of pharmacists, two concepts of practice, two philosophies of pharmaceutical education and two levels of educational preparation for practice. Surprisingly, many pharmacists agree that we have this dichotomy, although they are reluctant to discuss it. Pharmacy educators, likewise, do not wish to recognize it, a conclusion that seems consistent with their action at the AACP meeting in Scottsdale when they defeated a resolution that would have defined the end product of each curriculum.[6]

I submit to you my belief that the dual structure in the pharmacy system of our country is one of the outcomes of the failure of the AACP to move ahead in 1950. Had pharmaceutical education dealt forthrightly with its future, the schools and colleges today would have had 10-15 years experience with an expanded curriculum. The problems of faculty recruitment and acquisition of facilities would have been met, and a framework for the "new look" in pharmaceutical education would be in place. Also, what is quite obvious now, is the fact that the climate for university and government support of innovation in professional education was much more favorable in the 1960's than it is today. The structure that we have in pharmacy has resulted from our own decisions. It is not decisive, as some would have us believe, it will be decisive only if we make it so. This structure can, and I hope it will serve a useful purpose in the future as we develop and evaluate new models of practice and education. I only say, let it be recognized; let us deal with it realistically and openly. We must get on with our search for understanding of those forces which are shaping our future; and with that understanding proceed to develop strategies to deal with them.

The second event, to which I referred earlier, is much less specific than the first. It amounts to the implementation of a concept, the clinical pharmacy concept. The word, "clinical" is an adjective, "having to do with decial study or practice based on actual treatment and observation of patients, as distinguished from experimental or laboratory study."[7] Traditionally, the term has been applied to the healing arts where the laying on of hands is inherent in their practice, and has been regarded as being applied quite exclusively to the practice of medicine and dentistry; however, today its use has a much broader connotation. Even so, the use of the term by pharmacists has been inappropriate at times, it has been frightening to some pharmacists, and has been threatening to some physicians; and it has not been understood by others.

Pharmacy is a patient-oriented profession. By its very nature, its practice is clinical. We do practice in a clinical environment; we do have clinical roles; we do encounter clinical problems; we do have clinical courses in our curricula, and we do have clinical training programs. But when the term clinical is used to describe a "kind" of pharmacist—a clinical pharmacist—its use in this case seems redundant.

The reason I selected Recommendation 3 of the Pharmaceutical Survey and the subsequent action by the AACP as the *first* event in my analysis is two-fold: it is an extremely important event in the history of American pharmacy, and it demonstrates a failure to sense that importance and thereby a failure to lead. The reason I selected implementation of the clinical pharmacy concept as the *second* event is straightforward: something has happened in pharmacy education over the span of a very few years that is exciting. Pharmacy education has been turned-around. ". . . the old order has gone, and a new order has already begun."[8] It is on this event that I wish to focus our attention.

Our purpose is to examine the "new Order" in search for evidence of leadership by or in pharmaceutical education. What we are looking for is *first*, evidence of changed attitudes, *second*, evidence of changed behavior and *third*, evidence of a commitment to the future.

In other words, the criteria for leadership will be attitudes, behavior and outlook. With these in mind, I wish to examine three aspects of contemporary pharmaceutical education according to the following topics: the Commitment to a New Concept of Pharmaceutical Service and Care, the Reorganization of the AACP, and the establishment of the Study Commission on Pharmacy.

Commitment to a New Concept of Pharmaceutical Service and Care: Please notice that I am using the term "pharmaceutical care" which I define as the care that a given patient requires and receives which assures safe and rational drug usage.

Pharmacy practice in the United States to a large degree has become stereotyped just as has the practice of medicine and dentistry. Our traditional practice patterns might be summarized as being distribution and product oriented, and passive and non-integrated in nature. Some say our practice is noticeably self-serving, something that can be said about most professions. In the ambulatory setting, our patterns usually are based on the drug store system of delivery while in the institutional setting they are centralized and isolated from the main areas of patient care. Have these traditional patterns changed?

There can be no question that today we see pharmacists in expanded roles providing a variety of patient care services. An analysis of these roles was presented at the recent meetings of the AACP in which the following were described:[9] Manager of all drug-related resources, health educator, drug consultant, provider of maintenance care, and provider primary care. In these roles pharmacists are planning and participating with physicians, nurses, public health officials and others in shaping a system of comprehensive health care. These changes, of course, mean that the mere physical distribution of drugs is not enough—that the pharmacist must provide services to physicians and patients that will lead to the safe and rational use of drugs, with adequate control over both utilization and cost. The pharmacist must be prepared to participate in decision making as it relates to planning and monitoring the progress of drug therapy. In other words, he must be a free standing drug specialist in his own right, thereby being qualified to participate in the interdisciplinary delivery of care.

Of importance to our discussion is the fact that pharmaceutical education has stimulated the development of these new roles and, likewise, new concepts for pharmaceutical service and care. It was this that prompted Dr. Schwarting to make the comments he did.

Pharmacy educators have recognized the enormous demands these changes are making on the educational process, even in the basic philosophy of pharmaceutical education. Beyond this mere recognition of the demand for educational change is a determination to achieve the "successful management of change," which someone has said "is today's great challenge."[10]

I should like to pay tribute to the young men and women in pharmaceutical education who are viewing the future with perspectives and imagination much broader than those of my generation. I want to acknowledge the contributions of our established faculties and deans, with a particular commendation to our young deans for their progressive leadership. I must also recognize those responsible students and practitioners who have joined in the new movement to make the pharmacist and pharmacy education socially responsive to the needs of society. What each of these is telling us is the same: We want pharmacy to be an active partner in restructuring our health care system by bringing together its component parts into a functionally integrated system, and we want the pharmacy student to be academically and clinically trained so that as a practitioner he will be equipped to share in improving patient care. Does this not reflect changing attitudes? I believe it does.

Reorganization of the AACP—Our nation's goal in reshaping its health care delivery system can be summarized as follows: to improve the accessibility of the system to those to whom it is presently inaccessible, to improve the quality of care for those to whom it is

presently substandard, and to devise ways of containing the costs of care in light of increasing demands for service. Achievement of this goal will be dependent upon our success in changing the behavior of patients, of providers of care, of those who pay for care and of those who make policy affecting the system. There is much evidence that changes in behavior already have taken place in pharmacy education. I will cite only one instance, namely, the reorganization of the AACP.

During my entire career, the AACP has been viewed as a deans' organization, one that offered little to interest members of faculties. Annual programs consisted largely of doing the busy work to maintain the identity and purpose of the organization with very little intellectual stimulation to either deans or faculties. An organizational stereotype had developed over the years, quite a common occurrence among contemporary institutions. Although the Association recognized its problem, any attempt to remedy it resulted in little more than perpetuation of the stereotype.

In 1971, a Committee on Association Organization was formed, and under the leadership of Dean Lawrence Weaver of the University of Minnesota, this group created a new organizational plan, modern in concept and structure. It provided for a House of Delegates composed of four Councils, one each for Deans, Faculties, Sections, and Students. The important point is that the plan was adopted in principle in 1972 and the first annual meeting under the new plan was held in 1973.

It would be unrealistic to think that the reorganization of the AACP will be an end unto itself or that it will achieve resolution of all the problems that prompted its formation in the first place. The reorganization, on the other hand, does illustrate changed behavior in pharmacy education. Furthermore, it reflects the determination of pharmacy educators to be prepared to deal with the forces which are shaping its future.

The Study Commission on Pharmacy—While this activity represents a change in both attitude and behavior, it also represents a concern for the future. We live in restless times. We are apprehensive about our future and our ability to cope with the unforeseen forces of tomorrow. What impact will these forces have on us and our families, our professional societies, and our public institutions? Pharmacy is apprehensive about its future. In what form will pharmacy as a profession survive, because professional survival is a concern of many pharmacists. Will the drug store system of drug distribution serve the needs of tomorrow's health care delivery system? Can it survive the social, economic, and political pressures to which it is being subjected? What are the alternatives? How will pharmacists be compensated for their services? Perhaps the underlying question—one which is seldom raised—deals with our fear that pharmacy will not be able to control its own destiny—fear of our inability to direct our own future.

What is needed is an intellectual assault on some of the key issues. What are the forces at play in our society which are sure to influence our future? Ward Darley, noted medical educator, identified these for medicine in 1967 as the "inevitables in its future."[11] He likened the components of change of the past 25 years to a chain reaction, "the links of which arrange themselves in the following sequence: 1) increasing knowledge, 2) increasing specialism, 3) increasing demands for service, 4) increasing shortages of personnel, 5) increasing complexities and efficiency in data processing and communication, and 6) increasing institutionalization (organization)." We recognize that some of these same forces are as inevitable in our future as they are in the future of medicine because they are technological and societal in origin. What behavioral changes will these force upon pharmacists? What strategies should pharmacy develop for short and long term planning?

The Commission on Pharmacy, under the direction of Dr. John S. Millis distinguished educator and administrator, will almost certainly come to grips with some of these questions. The Commission will attempt to sketch the "big picture" and against this silhouette the pharmacist, pharmacy education, and pharmacy the profession. In this process, we can expect

the Commission to examine the scientific and technological, the social and economic and the political forces of today, and suggest rational ways of dealing with them in the future, thereby directing pharmacists to new responsibilities in serving the health needs of our country. The Commission will give us guidelines in the form of principles and recommendations for the future. The Commission will provide us with a plan, the details of which will be worked out at the grass roots level by you and me, just as it should be. It certainly will have ideas on interdisciplinary education for the health professions. We can anticipate with high expectation the completion of the Commission's work and the receipt of its report in 1975. The Commission on Pharmacy is a creation of the AACP. This is a form of leadership of the highest order: sensing a need, developing a plan to fulfill that need, and acquiring the resources to do the job.

We have examined pharmacy education in search for evidence of creative leadership. We have found that pharmacy practice has changed, a change that has been stimulated and is being fostered by change in pharmaceutical education. These changes reflect changes in professional attitudes; change in attitude is the initiating force in movements of reform, and reform *is* taking place in pharmacy practice and education. We have found evidence of a plan for the future in form of the Study Commission on Pharmacy.

There are still other instances in which leadership from pharmacy education is being exerted beyond the boundaries of its own profession, namely in interprofessional circles. For example, the AACP was one of the organizing groups which established the Federation of Associations of Schools of Health Professions in 1968. The initiating force for the Conference on the Interrelationships of Educational Programs for Health Professionals sponsored by the Institute of Medicine in 1972 was provided by pharmacy educators and was an outcome, to a large measure, from a number of interdisciplinary conferences sponsored by schools of pharmacy. The accrediting mechanism for pharmacy education is being modernized so that the American Council on Pharmaceutical Education can maintain educational standards consistent with the needs of a new era.

History, I believe, will record that education for the health professions in the United States began losing its traditional, categorical character in the 1970's and began phasing into an, as yet unidentified, integrated structure. If interdisciplinary education in the health professions is in our immediate future, surely an interdisciplinary accrediting program is likewsie in our future. I see pharmaceutical education preparing to meet both of these issues in a positive and forthright manner.

Is Pharmaceutical Education Prepared to Lead its Profession? I say to you it *is* prepared to lead. What the outcomes of this leadership will be cannot be foretold. There are many complex problems to be dealt with and the road will not be easy But I believe we can say with conviction tonight that there is both hope and promise for the future that should provoke a sense of renewal in all of us. John Gardner in his book on "Self Renewal" says, "In the ever-renewing society what matures is a system or framework within which continuous innovation, renewal and rebirth can occur."[12] It is the framework to which Mr. Gardner refers that we see emerging in pharmacy education.

My concluding thought is taken from a statement made by Mr. Ralph McGill, Publisher of the Atlanta Constitution and Pulitzer Prize winner for editorial writing. Mr. McGill, writing in the Saturday Review in 1968, reviewed the progress of recent years in which the South had been adjusting its "old agricultural and social system . . . from low-to-high wage industries." Under the title of "The South's Glowing Horizon—If . . . ", Mr. McGill analyzed the social, technological, financial, political and educational aspects of the new south and in his summarizing paragraph said: "The future of the South, then, is bright, if the Southern people will to have it so . . . ".[13] I have likened this statement to pharmacy's position so many times, since the future of American pharmacy is bright if pharmacists, themselves, will to have it so.

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Dr. Donald C. Brodie, Consultant, Bureau of Health Services Research and Evaluation, Health Services Administration, DHEW, is shown receiving 1973 Rho Chi Lecture Award from Councilor William J. Hodapp at the Boston meeting of the Society.