2009 Paul Parker Medalist

Clinical Pharmacy: Humble Beginnings, Extraordinary Progress, and Unprecedented Opportunities

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This is truly a great honor to receive a recognition that carries the name of a pharmacy giant, Dr. Paul Parker. He envisioned, implemented, and led many innovative pharmacy programs at the University of Kentucky, setting a standard for the rest of the country. Dr. Parker also mentored so many outstanding students, residents, and colleagues who have made a difference through their innovations and leadership in pharmacy. I believe he would be pleased with the progress we have made in clinical pharmacy but that he would also encourage us to capture new opportunities to improve health care.

This is also a special occasion for me as we celebrate 30 years of progress for ACCP and clinical pharmacy. This progress is well documented in the book we received at this meeting.[1] I have been fortunate to be actively involved with ACCP since 1980. It is gratifying to witness the growth and sophistication of our practice enterprise, education and training programs, research initiatives, and community outreach efforts. Our contributions have been effective and have brought wide recognition to pharmacy. I am also pleased that ACCP is playing an important advocacy role and exerting influence at both the national and international level.

We are living in a unique time in which national health care reform is an intensely debated topic. We spend more on health care than any other country in the world. Yet reports of the Institute of Medicine (IOM) during the past decade have shown that our health care system is fragmented, uncoordinated, and impersonal and that far too many individuals receive suboptimal therapy or experience harm from medications.[2-4] The escalating health care expenditures are simply not sustainable.

A RAND Corporation study found that 46% of patients failed to receive recommended care, and 11% received unnecessary care; patients with diabetes and

pneumonia received less than 50% of recommended care.[5] An ASHP (American Journal of Health-System Pharmacy) national survey showed that pharmacist consultations were provided for drug information, dosage adjustments/pharmacokinetics, and antibiotic use in 75% to 90% of hospitals; less than 50% of hospitals, however, provided pharmacist consultations in areas such as anticoagulation, pain management, medication history or adherence, and patient education.[6] We found that 25% of adverse drug events in pediatric patients were preventable. Of importance, however, only 5% of these could be prevented by improving the transcribing and dispensing phases; 95% could be prevented at the medication ordering, administration, and monitoring stages of the medication-use process,[7] emphasizing the need for more pharmacist involvement in direct patient care. The literature contains ample evidence showing that pharmacy services can improve health outcomes in a cost-effective manner.

Because of this evidence and the outstanding work done by pharmacists, we are now recognized as important players in health care delivery. An IOM report indicated that "because of the immense variety and complexity of medications now available…the pharmacist has become an essential resource…and this access to his or her expertise must be possible at all times."[1] This is a tremendous recognition and a tribute to our collective contributions.

An obvious question is, What actions can we take in pharmacy to seize the opportunity to improve health outcomes? We must lead the right agenda with a resolve to achieve the positive outcomes of health and well-being and ignite the passion for conducting high-impact practice, research, teaching, and service.

Lead the Right Agenda with a Resolve

Leaders should have a clear vision and strive to do the right thing. We must emphasize quality over quantity, value over volume, and outcomes over process or structures. As we develop and lead this agenda, we need to keep in mind what Albert Einstein said: “Not everything that counts can be counted, and not everything that can be counted counts.” We should align our agenda with the national agenda for health care reform and improvement. Our practice, teaching, research, and service activities should center on improving the quality, effectiveness, safety, access, and affordability of medications. Pharmacy’s contributions must be “essential” rather than just “nice to have.” At The Ohio State University Medical Center, we had 10 clinical pharmacy specialists in 1999, and we now have 40, mainly because their services are considered essential.

Hood has proposed P4 (personalized, predictive, preventive, and participatory) medicine as an important component of health care reform.[8] The current health care system is often reactionary: interventions occur after the diagnosis of illness, and the illness burden exponentially rises with age. The health care reform should reward illness prevention and the application of knowledge about pharmacogenetic and environmental factors for individualized therapies to mitigate illness burden.

We must provide bold and energetic leadership to offer patient-centered care in all settings. This will require knowledge, skills, and confidence, not only to effectively manage illnesses but also to educate individuals to prevent illnesses or their complications. We must strive for value-driven innovations, multidisciplinary collaborations, and continued learning with persistence to achieve a transformational

change. The new practice models need to be supported by technicians, technology, patient data, coordination, collaborations, and payment for services.

Ignite the Passion for High-Impact Practice, Research, Teaching, and Service

I have experienced the value of pursuing a passion in my professional career. As I was completing an M.S. in pharmaceuticals, it was a coincidence that I heard about the Pharm.D. program; I immediately fell in love with the idea that I could help patients get better and also do clinical research to improve health outcomes. Thus, I decided to enroll in a Pharm.D. rather than a Ph.D. program. I enjoyed teaching as a graduate student, so I decided to pursue an academic career. Moving from internal medicine to pediatrics appeared risky because I did not even have a rotation in pediatrics during the Pharm.D. program, but moving to pediatrics offered an opportunity to work in an exciting area. The past 32 years have been a lot of fun. When we pursue our passion, we do our best work and commit to lifelong learning. It is not really "work." As Thomas Edison said, "I never did a day's work in my life. It was all fun."

We must attract the students, residents, and fellows and mentor them to ignite their passion to enhance the quality, safety, and positive outcomes of medication therapy for patients. Patients and caregivers with different backgrounds and values should be at the center of all of our complementary activities in practice, research, teaching, and service. Although our traditional health care model focuses on the biologic dimension of an illness, social, cultural, and behavioral aspects must also be given consideration to improve the quality of life. More than 2500 years ago, Hippocrates, the "father of

medicine," said, "I would rather know the person who has the disease, than know the disease the person has."

It has been a privilege to have a career in pharmacy. I feel grateful to my colleagues and to the administration at Ohio State and Nationwide Children's Hospital for the opportunities in practice, teaching, research, and service; to students, fellows, and collaborators who chose or agreed to work with me; to ACCP and so many of you here for my professional development and lasting friendships; and to my family here and in India for their continued support because I would not be here today without them.

In closing, I would like to share a quote attributed to an Italian immigrant at the Ellis Island Museum in New York: "Well, I came to America because I heard the streets were paved with gold. When I got here, I found out three things: first, the streets weren't paved with gold; second, they weren't paved at all; and third, I was expected to pave them."

Before coming to the United States 36 years ago, I was well aware that the streets here were not paved with gold, but I had no idea that I would have so much help and support in paving them with you. Thank you so much for your support and this recognition!

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