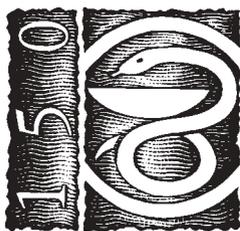


A P h A



1852-2002

Trends and Events in American Pharmacy, 1852–2002

For 150 years, the progress of American pharmacy and the development of the American Pharmaceutical Association have been intertwined.

American pharmacy has changed enormously since a group of 20 men met in Philadelphia on October 6, 1852. For these founders of the American Pharmaceutical Association (APhA), the primary issue of the day was drug quality. No laws regulated pharmacy practice and patients were treated according to symptoms rather than specific disease. Anyone with sufficient funds could open an apothecary.

Despite the difficult issues of the day, founding delegate William Procter, Jr. who later became recognized as the “Father of American Pharmacy,” expressed optimism about the future of pharmacy:

“Fewness of numbers should not deter pharmacutists from associating. A dozen well-disposed men can accomplish wonders when enlisted in a common cause and animated by a single interest.”

This session highlighted the many accomplishments of the profession of pharmacy during the last 150 years. The speakers explored the history of pharmacy governance, the construction of APhA headquarters, the emergence of modern pharmacotherapy, and a historical perspective on pharmacoconomics.

George B. Griffenhagen, RPh, former editor, Journal of the American Pharmaceutical Association, and past-honorary president, APhA, Washington, D.C.; David Brushwood, RPh, JD, professor of social and administrative sciences, University of Florida College of Pharmacy, Gainesville; John Parascandola, PhD, historian, U.S. Public Health Service, Department of Health and Human Services, Silver Spring, Md.; and Stephen Schon-delmeier, PharmD, PhD, professor and department head, Department of Pharmaceutical Care and Health Systems and PRIME Institute, University of Minnesota College of Pharmacy, Minneapolis.

The History of Regulation in Pharmacy

David Brushwood, RPh, JD, described the evolution of pharmacy regulations and how pharmacists came to be self-regulators of their profession. In 1852, at the dawn of U.S. tort law, a Kentucky court ruled:

“Purchasers have to trust their druggists. It is upon his skill and prudence they most rely. It is his duty to know the properties of his drugs, and be able to distinguish them from each other. It is his duty to qualify himself so that, when a prescription is presented to be made up, the proper medicines, and none other, be used in mixing and compounding.”

Although this ruling seems self-evident today, it would not have been so 150 years ago, Brushwood noted. Until then, the prevailing legal tradition was caveat emptor (let the buyer beware). In a significant shift, the court recognized the pharmacist’s duty to the patient’s health and welfare, distinguishing the practice of pharmacy from the business of ordinary merchants.

Moving into the 20th century, Brushwood reviewed other regulatory milestones in pharmacy, including: the U.S. Pure Food and Drugs Act, which Congress passed in 1906 to protect the public from adulterated or misbranded medications; the U.S. Food, Drug, and Cosmetic Act of 1938, which directed the U.S. Food and Drug Administration to require new drugs to be shown to be safe before marketing; the 1952 Durham-Humphrey Amendment, which restricts availability of certain medications to a prescription-only status; and state ant substitution and generic substitution laws.

Laws affecting pharmacy practice continue to evolve, Brushwood noted. For example, most states now allow collaborative drug therapy management agreements, which have greatly expanded pharmacists’ ability to provide pharmaceutical care and participate as members of the patient care team.

Constructing APhA Headquarters

In his presentation, George B. Griffenhagen, RPh, told how the historic APhA headquarters came to be located on Constitution Avenue in Washington, D.C. In 1869, APhA president John Kidwell acquired the rights to the marshy land where APhA headquarters were subsequently built. John Russell Pope designed the building and groundbreaking took place July 1, 1932. Construction took slightly more than a year, with Vermont marble used for the outer facing.

In the late 1950s, the federal government began construction of U.S. Department of State offices next to APhA. Dwarfed by its new neighbor, APhA made plans to enlarge its original building with an annex in the rear. The annex was dedicated in 1960 during the APhA annual meeting. Plans now are underway to expand APhA headquarters again and replace the annex with a new building to provide three times the current amount of office space.

The Development of Therapeutics

John Parascandola, PhD, reviewed noteworthy developments in drug therapy over the last 150 years. In the mid-1800s, the pharmaceutical armamentarium contained few effective drugs, and drug therapy more closely resembled that available in the Middle Ages than modern times. Most diseases were not well understood and conditions now considered commonplace, such as high blood cholesterol or anxiety disorders, were not even recognized. Medical care was based largely on the notion that illness resulted from excessive excitement or enfeeblement of the body systems, and drugs were classified as either general remedies, such as “excito-motor stimulants” and tonics, or local remedies, such as emetics and cathartics.

The second half of the 19th century brought revolutionary changes in the biomedical sciences. The germ theory of disease emerged and the fields of bacteriology, pharmacology, and biochemistry became established. As science-based medicine began to take root, health care providers increasingly selected specific treatments based on the underlying pathophysiology. This approach eventually led to the discovery of major classes of modern medications, including antibiotics, antipsychotics, and chemotherapeutic agents.

Large-scale manufacturing also had a profound effect on the preparation of pharmaceuticals. Automation in the modern pharmaceutical industry has essentially replaced the compounding pharmacist as the primary source for drug preparation.

Looking toward the future, the genetics revolution is ushering in a new era of drug discovery and treatment. Compared with our medical forebears, who used a sort of pharmaceutical shotgun approach to illness, health care professionals will increasingly use genetic information to employ highly focused therapies to treat diseases.

Pharmacoeconomics

Stephen Schondelmeyer, PharmD, PhD, discussed important historical trends in pharmacoeconomics. He noted that the U.S.



Philadelphia pharmacist William Procter, Jr., “Father of American Pharmacy”

population is increasing by 1% per year, with the elderly population outpacing general population growth. While the elderly use more medications than the overall population, they are not solely responsible for rising drug expenditures. Since the mid-1980s, prescription drug costs have grown

faster than health care expenses in general, which in turn have risen faster than the overall economy. The average retail price of a prescription medication rose from \$2 in 1950, to \$15 in 1990, and to about \$50 in 2001. The spiraling cost of prescription drugs now is at the forefront of the nation’s public policy agenda.

Dr. Schondelmeyer noted that the nation’s pharmacists dispensed 400 million prescription medications on an outpatient basis in 1950. That number jumped to 1.5 billion in 1980, then doubled to 3 billion in 2000. The rising number of prescriptions has fueled the current shortage of pharmacists, because the supply of pharmacy practitioners has not kept pace with the growing demand for prescriptions.

Summary

- The mid-19th century was a watershed for the governance of American pharmacy, marked by the founding of APhA in 1852 and the recognition that pharmacists had a duty to protect patients’ health and welfare.
- Drug therapy has undergone a dramatic transformation since the pharmacological shotgun approach of the mid-1880s, propelled by progress in the biomedical sciences, including the recent genetics revolution.
- The rising number and cost of prescriptions is a leading public policy issue and a contributing factor to the current shortage of pharmacists.

Editor’s note: A special *Journal of the American Pharmaceutical Association (JAPhA)* series, “150 Years of Pharmacy,” provides more information on the history of American pharmacy. The series may be accessed online at <http://www.aphanet.org/about/sesqjapha.html> or in *JAPhA* issues from 2000 to 2002.

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