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## KEEPING "BASICS" IN BALANCE

As this column is being written, the Washington metropolitan area is experiencing a severe short-term water shortage attributable to malfunctioning equipment. Other water shortages ominously face the area due to a combination of decreased precipitation and increased demand. The prospect of long-term water shortages may well have been avoided had various plans been implemented a decade or two earlier which called for a comprehensive series of dams and other water-related projects on the upper Potomac River which provides the city's major source of water.

However, the timing was off in the sense that this comprehensive proposal was advanced at the tail end of the nationwide dam-building era of the postdepression years. Delays resulted during which the pendulum of public sentiment swung so far in the other direction that not only was the comprehensive plan abandoned, but the opponents were successful in blocking approval for even a scaled-down version.

Since the oil embargo of the winter of 1973-74, the entire country has been going through alternate periods of "feast or famine" with respect to energy use and conservation as well as legislative proposals and tax incentives to modify or affect use of our energy resources.

Approximately 15 years ago, the Washington suburbs were in the midst of a tremendous building boom which threatened to pave over the entire metropolitan area with real estate and other development. Conservationists successfully brought an abrupt halt to this activity about 7 to 8 years ago through the implementation of various sewer and water-line restrictions as well as other zoning controls which virtually put a complete brake on development in the local area. The supply of new housing then did not keep pace with demand and the prices for comparable property more than tripled during this period.

The common element in all of the examples cited above—as well as others which could be mentioned—is that Americans have a characteristic tendency to go overboard in one direction or the other in various programs, policies, projects, and activities. The result is a type of "overkill" which, while rectifying the original concern, frequently creates a greater problem in its place.

We see a similar tendency in our approach to education. On taking office during the Annual Meeting in New York City in late May, Academy of Pharmaceutical Sciences President George Zografi laid out some of his concerns about the future of pharmaceutical research and the training and education of future pharmacy students.

President Zografi traced the recent history of pharmacy education in the United States and the marked improvement in the quality of scientific knowledge developed and taught in pharmacy following World War II. He went on to say:

*"This led to a marked increase in graduate education and, in turn, to an influx of many well-educated pharmacists into scientific research and development. At the same time, we were producing well-educated pharmacists who became practitioners, but we were deficient in not providing the type of professional education and training which allowed large numbers of these individuals to utilize their education in their practice to the fullest extent. More recently, the directions pharmacy practice must take have become clearer and the schools of pharmacy have responded with greater emphasis on such areas as therapeutics, biopharmaceutics, and clinical education."*

But Dr. Zografi went on to caution his listeners:

*"However, I now detect a general climate which is tending to downgrade the importance of basic science knowledge for professional practitioners—knowledge which must serve as a basis for the uncertainties of our future professional practice. It often appears that all of pharmacy's problems are being blamed on our so-called over-emphasis of the basic scientific portion of our educational program."*

There is a good deal of merit in Dr. Zografi's concern. Pharmacy education, as in the case of the subjects discussed in the opening paragraphs of this column, has been subject to sharp swings in attitude depending upon what may be of current primary interest and concern. In our efforts to remedy past omissions and deficiencies, it would be indeed regrettable if the basics are neglected or fall from favor.

We need only look at our national experience at the grade school level of education. As our educators eagerly embraced the so-called modern methods, they were quick to discard and even reject the basic elements. The result has led to a hue and cry among high school and college educators with respect to the students who are now reaching those levels. Repeatedly, we hear complaints that "Johnny can't read" and "Mary can't add."

It appears to us that if pharmacy education in its effort to meet the need for therapeutics, biopharmaceutics, and clinical education displaces the basic sciences—rather than supplements them—we run the risk that a parallel situation will develop with respect to our pharmacy graduates. In conclusion, both of these elements are necessary for competent practitioners, and they must be kept in proper proportion by those responsible for pharmacy education.

—EGF