LETTERS

Improving Pharmacy Students' Education Through Enhanced Experiential Learning

To the Editor: The evolution of the educational experience of pharmacy students has been a topic of much discussion and debate. One recent Viewpoint from the *Journal* stated that, "one of the biggest changes in pharmacy education over the past 30 years is the realization that learning from classroom lectures is insufficient to prepare students to practice pharmacy."¹ As a fourth-year pharmacy student, I understand the importance of not only acquiring the technical skills of pharmacy practice, but also developing professional qualities such as flexibility and handling difficult situations. While I look forward to the end of my structured didactic education, I recognize that my lifelong professional education as a pharmacist is just beginning. I believe that more hands-on experiential education is needed earlier in the curriculum as it has been argued that didactic coursework and technical skills are not enough to make a good pharmacist. It is my opinion that providing these diverse experiential learning opportunities will pave the way for pharmacy students to meet ever-changing health care needs.

In 2006, the Accreditation Council for Pharmacy Education (ACPE) approved a new set of requirements for introductory pharmacy practice experiences (IPPEs), which should begin early in the curriculum.² IPPEs will involve actual practice experiences under appropriate supervision and direct patient care responsibilities as permitted. These courses must correlate with didactic coursework and build upon each other, leading the way to advanced pharmacy practice experiences. Students will be actively participating in activities such as communicating with patients and other health care professionals, applying basic patient assessment skills, and observing stressful or difficult situations. These activities are essential to developing professional behaviors that will remain throughout a student's career long after he or she graduates from pharmacy school.

There have been concerns brought to our attention in literature relating to the goals of IPPEs and whether or not these goals are achieved by other means. It has been suggested that many first year pharmacy students have already acquired dispensing and communication skills through employment as pharmacy technicians.³ Although it is certainly very common for pharmacy students to have

prior work experience as pharmacy technicians, there are certain tasks given to pharmacy students throughout their education that are not given to pharmacy technicians, for example, reflection exercises that are completed during the course of an IPPE. Asking students to reflect on issues such as barriers to communication that they have encountered or examples of how they handled a difficult situation helps students learn more about themselves as individuals and as professionals. Students are given the chance to gain insight about their strengths and weaknesses from their experiences and see how they can improve their own methods of practice in the future. Although I value and appreciate the vital role of pharmacy technicians, I don't believe that role allows for professional growth due to its limited scope of practice.

Another issue raised in the literature is the possibility of simulated environments as the mode for teaching skills in dispensing and communication. While this method does allow students to learn and carry out basic concepts of pharmacy practice, true demonstration of knowledge comes from real-world experiences, which can be provided by IPPEs. My belief is that simulations are useful in introducing students to fundamental techniques but IPPEs can be used to complement them by reinforcing practical applications. Learning how to prioritize tasks during a busy period of time or dealing with agitated patients are situations that unfortunately cannot be taught in a controlled environment. It is my opinion that observations such as these will encourage professional growth by promoting adaptability to various circumstances. If students are able to observe how a practicing pharmacist copes with different situations, they may decide to use the same approach or they may alter the approach to fit their individual personalities later on in their own practice. I believe in looking to preceptors and other practicing pharmacists as role models because they are the ones who help shape students' attitudes and beliefs as they continue their education and even afterwards.

As first-year pharmacy students are not expected to have the training necessary to make complex pharmacotherapeutic decisions, tailoring the IPPE to their knowledge level is necessary. Incorporating activities that help first-year pharmacy students build on foundational knowledge is key. For example, requiring students to document and reflect on a medication error observed during the IPPE course will give them the framework for identifying patient safety concerns. Experiences such as this will help expose students to important issues concerning pharmacy practice and modes of addressing these issues.

Since many institutions are currently undergoing curriculum revisions to meet the new ACPE standards or are in the initial stages of curriculum implementation, there is

very little published research concerning the impact of IPPEs on pharmacy students' educational experience. It will be interesting to examine and analyze the effects of IPPEs on students and preceptors and whether either finds them beneficial to pharmacy education.

The profession of pharmacy is constantly evolving, necessitating the need for students and educators to prepare to address these changes. Education for a career in pharmacy practice is comprised of didactic courses to establish a foundation and experiential education to utilize and reinforce that knowledge. IPPEs offer a setting for pharmacy students to learn how to interact and apply fundamental competencies in a professional manner. It is no secret that students have to take responsibility for their own self-learning and growth, particularly in a specialized discipline such as pharmacy. But it is also imperative that students are given early opportunities for development of core abilities. I feel that IPPEs should be introduced in the first year as a foundation to be built upon in future years. However, studies in this area of pharmacy education are needed to assess the usefulness of IPPEs in generating quality pharmacists. Just as anatomy and physiology serve as the foundation for pharmacology, which serves as the foundation for pharmacotherapeutics; so do IPPEs serve as the foundation for professional growth and advanced pharmacy practice experiences.

Ashley Pham, PharmD Candidate
Creighton University School of Pharmacy and Health Professions

REFERENCES

1. DiPiro JT. Making the most of pharmacy school. *Am J Pharm Educ.* 2008;72:Article 15.
2. Accreditation Council for Pharmacy Education. Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree. Adopted January 15, 2006. Available at http://www.acpe-accredit.org/pdf/ACPE_Revised_PharmD_Standards_Adopted_Jan152006.pdf. Accessed May 12, 2009.
3. Speedie M. Introductory Experiential Education: A Means for Introducing Concepts of Healthcare Improvement. *Am J Pharm Educ.* 2006;70:Article 145.

South Asian Subcontinent Not Represented in International Pharmacy Education Supplement

Letter to the Editor: As part of American Association of Colleges of Pharmacy (AACP) President Victor Yan-chick's initiative on the globalization of pharmacy education, *AJPE* decided to go global in a quest to merge the

ideas from others on pharmacy education and soliciting pharmacy professionals from different countries/regions to educate North Americans and the rest of the *Journal* readership about pharmacy education in their respective countries. Indeed, it was a wise move to discuss pharmacy education from an international perspective and go along with colleagues from other countries. However, I was a little disappointed to see that *AJPE*'s special supplement issue on international pharmacy education (2008, Volume 73, Issue 6) did not include any articles on pharmacy education in the South Asian subcontinent, comprising India, Pakistan, and Bangladesh. Perhaps India is the only country which provides the most international pharmacy graduates to the World and also a feeder country when it comes to supplying pharmacy educators and researchers. For the past few years I've been writing about the major issues in Indian pharmacy education and highlighting the challenges and deficiencies in the pharmacy curriculum in Indian pharmacy education. My latest letter to the editor was focused on the introduction of a new 6-year PharmD program in some Indian pharmacy colleges/schools that could possibly meet the worldwide expectations on pharmacy practice requirements. I would request the *AJPE* editors to consider publishing another issue focusing on pharmacy education in the Indian subcontinent, as well as the African continent and South American continent.

Naushad M Khan Ghilzai, PhD
LECOM School of Pharmacy, Erie, PA

Look in the Looking Glass, Not Through It

To the Editor: Lucinda Maine makes the palpable observation in her December 2008 *AJPE* Viewpoint, "Election 2008: Projecting the Winners," that "real solutions" are needed for the present, less than optimal US healthcare system. Implicitly, solutions are needed to address the questionable quality of care received by patients in this country compared to healthcare in other economically developed nations and the limited access to covered services for a sizeable proportion of the population. Access to care is arguably an important quality measure that is basic to any healthcare system.¹⁻³

Insurers, pharmaceutical companies, and physicians are highlighted as those with the biggest financial stake in the system and have collectively presented barriers to finding real solutions for positive change. Groups with smaller financial stakes such as national pharmacy organizations may also be included in this category, but pharmacy students and individual pharmacists should be excluded.

The first step in seeking real solutions for the system's ills and pharmacy's role in a rational system should engage a basic principle of the scientific method – an unvarnished literal interpretation of the historical and present reality while avoiding sound-bite evidence-free analyses that are based on political philosophies.

As noted in the Viewpoint, the collapse of the financial system has changed the landscape for debate and opens the possibilities for real solutions for healthcare in this country and discussions of economically viable non-distributive roles for a much larger percentage of pharmacists in a different type of healthcare system. The collapse of the financial system should once again be a reminder that unregulated markets are not infallible.

It is heresy to be critical of lightly regulated “free markets” and capitalism for fear of being an outcast or labeled as a “socialist” or worse. A rational dialog can now ensure about solutions, perhaps beginning with: “There has never been any such thing as a healthcare market in the traditional economic sense. What is the commodity produced in a market for healthcare?”

A few examples may help stimulate some debate about seeking real solutions for the healthcare system. Richard Harris' *The Real Voice* chronicled Senator Estes Kefauver's 1959 Senate hearings that led to the passage of the Kefauver-Harris Amendments to the Food, Drug and Cosmetic Act, requiring for the first time evidence of efficacy in addition to safety testing before new drug are approved. The law was viewed by some as oppressive over regulation that would cost business. “Retail-drug associations” and Tennessee pharmacists opposed Senator Kefauver and pressured him to drop his investigation of the pharmaceutical industry during his 1960 reelection campaign.⁴

Devotion by national pharmacy organizations to free market philosophy (minimal or no regulation) has cost pharmacists dearly in an important professional role. The only pharmacist to be Food and Drug Administration (FDA) commissioner, Jere Goyan, PhD, proposed regulations that would have required pharmacists to distribute agency-approved written information that was consistent with a drug's approved professional product labeling with each new and refilled prescription.⁵ Opposition by the profession was ferocious.⁶ Goyan envisioned pharmacists as patients' primary source for useful scientifically accurate drug information.⁷ To use the economic phrase, pharmacists would have had a monopoly on drug information for patients. Dogma intervened with abhorrence for FDA regulation and now pharmacy technicians stuff prescription bags with information leaflets that have consistently failed to meet voluntary minimum quality guidelines.⁸ Some have suggested that FDA-regulated written

information be distributed at the point of prescribing, potentially bypassing pharmacy altogether.^{9, 10}

A reality check: PharmDs with nationally accredited residencies filling dispensing roles in corporate pharmacies. In a parallel universe, 5-year baccalaureate pharmacists (6 years with required experience for licensure) receive full salary and benefits for reviewing patients' drug profiles, counseling them, and interacting with prescribers. And the owner of the pharmacy receives \$50.00 for each pharmacist-patient interaction from the government. Can this be reality?¹¹ Pharmacists practicing in the northeast only need to travel to the province of Ontario and ask “why not in the US?”

No, the Canadian healthcare is not a socialist system. . . it is an oligopoly, a single purchaser or payer system. The difference is that healthcare in Canada is a public service; here it is an enterprise that has implications for the practice of pharmacy. In a market driven system, the number of prescriptions filled per hour is the economic gauge of success. Reviewing drug profiles, patient counseling, and a recommendation not to fill a prescription are economic liabilities. When healthcare is a public service, these activities are not economic liabilities but can improve the quality of pharmacotherapy while controlling or reducing drug and other associated costs.

Comparative studies have consistently suggested that overall, based on objective measures, the highest quality healthcare provided in the US is by the Veterans Administration (VA) system.^{12,13} This healthcare system residing within the US meets the classical definition of a socialist system. Pharmacists' important contributions in non-distributive patient centered care in the VA system are well known. Until our market-based healthcare system is changed to a public service, patient care will remain profit-centered care.

National pharmacy organizations have a vested financial interest in the status quo. They depend on revenues and support from hospitals, insurers, and pharmaceutical companies for their operations. To believe that these groups only function behind an influence-proof firewall and only in the best professional interests of members and patients is not a literal interpretation of reality—instead, it is looking through the mirror and seeing the healthcare market wonderland.

Sana R. Sukkari, BSc Pharm, MPhil, PharmD
Larry D. Sasich, PharmD, MPH

REFERENCES

1. Hussey PS, Anderson GF, Osborn R, et al. How does the quality of care compare in five countries? *Health Aff* 2004;23(3):89-99.
2. The Commonwealth Fund. International Comparison: Access & Timeliness. Commonwealth Fund, 2006. <http://www.commonwealthfund.org/>

American Journal of Pharmaceutical Education 2009; 73 (3) Article 56.

commonwealthfund.org/snapshotscharts/snapshotscharts_show.htm?doc_id=409110. Accessed May 12, 2009.

3. DeNavas-Walt C, Proctor BD, Smith J. Income, Poverty, and Health Insurance Coverage in the United States: 2006. U S Department of Commerce U S Census Bureau, 2007. <http://www.census.gov/prod/2007pubs/p60-233.pdf>. Accessed May 12, 2009.

4. Harris R. *The Real Voice*. New York: Macmillan; 1964.

5. *Federal Register*. July 6, 1979 (44 FR 40016).

6. Dickinson JG. FDA Patient information pioneer Jere Goyan dies at 76. FDA Webview, 2007. <http://www.fda.gov/default.php>. Accessed May 12, 2009.

7. Goyan G. Fourteen fallacies about patient package inserts. *West J Med*. 1981;134:463-8.

8. Kimberlin CL, Winterstein AG. Expert and Consumer Evaluation of Consumer Medication Information-2008: Final Report to the U.S. Department of Health and Human Services and the Food and Drug Administration. Food and Drug Administration, 2008. http://www.fda.gov/cder/news/CMI/final_report.pdf. Accessed May 12, 2009.

9. Food and Drug Administration. Summary of Public Hearing On FDA's Use of Medication Guides to Distribute Drug Risk

Information to Patients. Food and Drug Administration, 2007. <http://www.fda.gov/cder/meeting/SummaryPublicHearingMedicationGuides.htm>. Accessed May 12, 2009.

10. John A.Gans, PharmD. Executive Vice President, American Pharmacists Association. May 19, 2008. RE: Docket No. FDA-2008-N-0162. Agency Information Collection Activities; Proposed Collection; Comment Request: Prescription Product Labeling: Medication Guide Requirements.

11. Ontario Ministry of Health and Long-Term Care. MedsCheck FAQ for Ontario Residents. Ministry of Health and Long-Term Care, 2007. <http://www.health.gov.on.ca/cs/medscheck/faqs.html>. Accessed May 12, 2009.

12. Jha AK, Perlin JB, Kizer KW, Dudley RA. Effect of the transformation of the Veterans Affairs health care system on the quality of care. *N Engl J Med* 2003;348(22): 2218-27.

13. Asch SM, McGlynn EA, Hogan MM, et al. Comparison of quality of care for patients in the Veterans Health Administration and patients in a national sample. *Ann Intern Med* 2004;141(12): 938-45.