



TWO DIFFERENT WORLDS OF PHARMACY PRACTICE AND EDUCATION – UNITED STATES OF AMERICA AND INDIA [PART 2 OF A 2-PART SERIES]

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DURING MY VISIT TO India this summer, I learned that the Indian government had approved the awarding of Pharm D. degrees in India, beginning in 2009. I received my B. Pharm from a university in India in 1974 (which, at that time was equivalent to a BS in pharmacy in the U.S.), and not one of my B. Pharm classmates went on to practice pharmacy in the classical sense (i.e., in either a retail or a hospital setting). This statistic should not be surprising, because 98 percent of “medical shops” (as pharmacies are referred to in India) are managed by personnel who have completed a two-year diploma in pharmacy (Berg, 2001). In the typical Indian hospital, it is estimated that 75 percent of pharmacy personnel have a two-year diploma; 20 percent have a B. Pharm degree; and 5 percent have a M. Pharm degree (Berg, 2001). If Indian pharmacy graduates are compared to pharmacy graduates in the United States, it can be noted that over 86 percent of U.S. pharmacy graduates actively practice pharmacy (Mott, et al., 2006).

As a pharmacy practitioner in the United States for the last decade and one who is currently teaching an all-Pharm D. class (BS degrees in pharmacy are no longer awarded in the U.S.), I have wondered whether, under the current rules and regulations of pharmacy practice in United States, the benefits of a Pharm D. education can truly be realized. In this two-part article, I provide a brief commentary based on my personal experience regarding the status of pharmacy practice and education in both the United States (Part 1) and in India (Part 2). I firmly believe that in both countries, significant changes in regulatory, legal and workplace standards are required before the true goal of Pharm D. training can be delivered, that is, in terms of optimum therapeutic outcome for each and every patient.

License Requirements and Pharmacy Practice in India

Pharmacies are usually referred to as “medicine shops” or “chemists” in India, and personnel at these shops are only required to have a two-year diploma in pharmacy. Unlike in the United States, there is no separate pharmacist licensure or examination, and no continuing education required for license renewal. Yet pharmacy is still a very real practice in India, despite these and other differences. As there are no continuing education require-

ments, I was pleasantly surprised when over 100 community pharmacists showed up at the college in Mysore when I offered a diabetes continuing education program there in the summer of 2008. Because many of these pharmacists had commuted over an hour to attend my session on a weekend, it seemed that this group was eager to gain knowledge that would enable them to better serve their patients.

Prescription, Packaging, and Pricing

Unlike in the United States, where manufacturers can price their product however they wish, all drug packages in India have a “maximum retail price” stamp on the package. This stamp limits the maximum price a pharmacy can charge for that product. Pharmacists in India earn their living by purchasing in bulk (at a lower cost) and selling the product in the retail market with a markup regulated by the government. As in the United States, Indian regulations classify the medical products into two categories – prescription and nonprescription drugs. Most prescription products sold in India are in the unit dose form. Prescription unit dose medications will have written on them, in tiny letters, “needs doctor’s prescription for dispensing.” This prescription law is rarely enforced. If a patient wants an antibiotic, blood pressure medication, or cholesterol-reducing drug, he can, in reality, get all this without a prescription.

The Right to Bear Medications and the Strengthened Street Pharmacist

While the above situation – the ability to get a prescription drug without a doctor’s prescription - may seem somewhat unwise, in my mind it is similar to the “second amendment” in the U.S. constitution, which gives people the right to carry a firearm. In both cases, the rules favor the apparent benefits given to the individual over the risk to the individual and the harmful wider consequences to society. In India there are 1700 patients per doctor, which is four times higher than it is in the United States. In rural India, the situation is even worse. If the prescription drug laws were strictly enforced, many millions of patients will have to forgo drugs which they knew they needed but couldn’t have.

This “behind-the-counter” aspect of the Indian health care system thus provides an affordable and expedient avenue of treatment for the poor or self-assured patient. If the patient is sufficiently ill, cannot treat herself, and can afford a doctor’s visit, then the patient will likely choose to go to a doctor and get a prescription for a drug addressing his or her condition. Otherwise, the patient goes to a nearby medical store and tells the ailment to the pharmacist, who often knows the patient well and can suggest a solution that the patient can afford.



Of course, the unregulated dispensing of drugs in India and other “developing” countries has unfavorable consequences as well. One major drawback is that this practice has contributed to the worldwide development of strains of disease resistant to formerly potent and effective medications. Additionally, behind-the-counter practices leave no trail or records, so a pharmacist that is negligent cannot be held accountable—a sharp contrast to what can happen in the United States, where the erring pharmacist may be liable for millions of dollars in lawsuits.

The Weakened Hospital Pharmacist

Although the street-corner pharmacist in India, often acting as a local health care provider, is powerful compared to her American counterpart, the Indian hospital pharmacist is made rather ineffectual by the country’s rules and practices. During my visit to two different hospitals in India, I noticed many sharp differences to the practices of the hospitals where I worked in the United States. Unlike in U.S. hospitals, where all doctors’ orders are sent directly to the pharmacy, in India almost all drug orders are brought to the pharmacy by patients’ family members. Patients then take the drugs back to the nurse, who makes appropriate preparations to the drugs for administration to the patient (such as for IV preparations or antibiotics that come in “Admix” bags). The nurse then administers the medication to the patient and records the administration on the patient’s medical chart. The patient is then responsible for keeping the chart and bringing it to his next hospital visit. The Indian pharmacist does not enter data into a central database, have access to the patient’s medical history, or help provide the appropriate dosage or combination of drugs. In this scenario, the pharmacist is no more than a storekeeper and has no input into the therapeutic management of the patient.

Interestingly, graduate clinical pharmacy students (as well as some international visiting pharmacy students) in that hospital did go on rounds with doctors under the supervision of a clinical pharmacist. In this way, some pharmacists are able to contribute to a better clinical outcome for the patient. This new development is certainly a good start and increases the awareness of the value of pharmacist services. However, currently numbers of patients helped are extremely limited, as the focus of this program is mainly designed to provide a learning opportunity to the students.

The recent introduction of a Pharm D. curriculum in India should be accompanied by significant regulatory and enforcement changes regarding the practice of pharmacy in India, as well as increased respect for the profession. If the system remains as it is in India, the advances made in India’s pharmacy curricula are unlikely to translate into better outcomes for patients, and most of the new

Pharm D. graduates will migrate to the United States (and other Western countries), where practice opportunities are advanced and remuneration is better.

In US - change in the Wrong Direction?

During the past year in the United States, as various interest groups have sharpened their lobbying and advertising efforts to shape the new health care system, many chain pharmacies have started offering over 300 generic drugs at \$4 per prescription. Honestly, this “price” makes a mockery of professional pharmacy services. Therefore, it is not surprising that when I had a new prescription for Niaspan filled at a local retail store recently, no pharmacist even attempted to meet with me! When I called the 800 number provided by the manufacturer, it is a registered nurse, not a pharmacist, who provided me additional information on the drug! Why?

As a faculty involved in teaching future Pharm D. students here in the United States, I am quite saddened at the plight that awaits my highly trained students in the ever-changing real world of pharmacy. With a new health care bill, there is a real opportunity—if only pharmacists could make the case to the public for greater pharmacist involvement in healthcare. Several studies show that pharmacist involvement in patient care yields better outcomes at lower costs, but with less than 30% of pharmacists in the United States participating in professional organizations, pharmacists lack the political influence to carve out a sensible role for themselves in the new health care landscape. It is high time that pharmacists join professional organizations, overcome their complacency, and demand their rightful place at the health care table.

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