

## LETTERS

### **The Teaching Mission of Pharmacy Practice: Promoting Academic Pharmacy Careers Early On**

*To the Editor.* I was delighted to see the article “Impact of a Pharmacy Education Concentration on Students’ Teaching Knowledge and Attitudes”<sup>1</sup> in your March issue. I am a P4 student currently participating in an academic rotation. During the course of my experience, I have found myself wondering, “Why aren’t more pharmacy students looking to academia as a career option and what can be done to change this?” After thinking about what I had learned during previous years of my pharmacy school education, I came to the conclusion that students are not introduced to the idea of academia as a career until too late in their studies; a fourth year rotation experience should not be a student’s first introduction to the world of academia.

Much of pharmacy education focuses on becoming a good clinical practitioner. However, pharmacists also have a teaching role, regardless of setting. Pharmacists educate patients, other health care practitioners, technicians, and students in both classroom and practice settings. We need effective pharmacists in practice, but we also need effective faculty members to develop students into practitioners. If colleges and schools fail to introduce academia as a career option, they will soon find themselves without faculty members to instruct incoming students. Steps need to be taken so that greater numbers of students become cognizant of academia as a career. Reading this article made me hopeful that steps are being taken to address this concern. I was curious to know whether other schools were also offering courses in education. After reviewing Web sites of pharmacy schools across the United States, I found very few schools that included this option as part of their course offerings. Courses similar to the one described in the article should become more common in the elective offerings of pharmacy schools across the nation. If students learn how to teach, they may be more inclined to use those skills. There may be a fair number of students who confirm their “calling” after taking such a course. There may also be students who join these electives out of curiosity and realize that academia suits their personality and goals.

In addition to this path of introduction, I would also propose that first-year pharmacy students be introduced to academia through their introductory pharmacy practice experiences (IPPEs). The Accreditation Council for Pharmacy Education 2007 standards, guideline 14, states that “most pharmacy practice experiences must be under the supervision of qualified pharmacist preceptors licensed in

the United States.”<sup>2</sup> In addition, guideline 14.1 states “Preceptors should hold full, shared, adjunct, or other defined positions in the college or school. . .”<sup>2</sup> If the preceptors for IPPEs are recommended to hold a position in the college or school of pharmacy, this would be an ideal opportunity for introduction of academia by simply enlightening students about the different roles they perform. Allowing students to experience academia as a specialized IPPE would create an additional, more focused opportunity for students’ interest in academia to be nurtured. The student’s experience could then culminate with an academic rotation during the fourth year.

More pharmacy schools should consider following the example of the University of Southern Illinois School of Pharmacy. It is my hope that pharmacy schools will recognize the need to encourage students to investigate academia sooner in their education and will take active measures to help their graduates fulfill one of the promises found in the Oath of a Pharmacist: “I will use my knowledge, skills, experiences, and values to prepare the next generation of pharmacists.”<sup>3</sup>

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### **Postgraduate Programs in Clinical Pharmacy and Pharmacy Practice: Are We Heading in the Right Direction?**

*To the Editor.* The concept and practice of pharmaceutical care and outcome-based pharmaceutical services has led to the development of numerous postgraduate programs in clinical pharmacy and pharmacy practice across the world. These postgraduate programs are offered either through coursework, mixed mode, or research mode. Generally, the objectives of coursework and mixed mode

programs are to enhance clinical knowledge together with research skills. Conventionally, the objective of a doctorate program (PhD research work) is to produce independent researchers. Research being the primary focus of a doctorate program in basic and applied sciences is appropriate, but for clinical/practice sciences, acquisition of clinical skills should not be overlooked. Most of the PhD programs in pharmacy practice in Australia, the United Kingdom (UK), and the Asia-Pacific region are purely research-driven with little or no emphasis on the acquisition of practice skills. Such programs are inadequate, especially for tomorrow's clinical pharmacy and pharmacy practice academicians who are supposed to be leaders in both practice and research. Arguably, the required clinical/practice skills are covered well during undergraduate courses, but not all undergraduate programs across the globe are clinically oriented, and advanced clinical/practice skills can always be incorporated into the curriculums of higher degree programs.<sup>1,2</sup> These programs are suitable only if coupled with a clinically oriented undergraduate program. The only example of such a clinically oriented undergraduate degree is the doctor of pharmacy (PharmD) program in the United States.

Well-structured, mixed mode PhD programs have potential to overcome this problem. Few mixed mode programs, such as the doctor of pharmacy (DPharm) at the University of Auckland, New Zealand,<sup>3</sup> doctor of clinical pharmacy at the University of South Australia, Australia,<sup>4</sup> and doctor of philosophy (clinical pharmacy) at the Universiti Sains Malaysia, Malaysia,<sup>5</sup> have been developed. These programs focus on the acquisition of both clinical and research skills. However, the utilization of evidence-based effective teaching and assessment methodologies in these programs remains to be demonstrated. In addition, there is no evidence to support that the quality of graduates produced by such mixed mode programs is better than the traditional research-based doctorate programs. Extra course fee, longer course duration, shortage of skilled prac-

ticing academicians, and additional workload for clinical faculty members are potential barriers to offering mixed mode doctorate degrees. Centralization of financial and human resources, together with careful selection of students can help overcome the said problems.

In summary, there is a need to review and revise current doctorate programs in clinical pharmacy with a view to equip future academicians and practitioners with necessary knowledge and skills required to become competent researchers and practitioners. Thorough research is needed to assess the current needs and future demands of the clinical pharmacy profession, together with curriculum design and methods of instruction and assessment. In our view, it is an issue of great importance that should be dealt with professionally, without any political or commercial interests.

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