### LETTERS

## A Pharmacy Practice Residency (PGY1) with an Emphasis on Academia

One of the most difficult challenges for schools and colleges of pharmacy is the recruitment and retention of faculty members. According to the American Association of Colleges of Pharmacy (AACP), approximately 56% of vacant faculty positions exist due to lack of academic-based qualifications and this percentage is expected to increase.<sup>1</sup> Factors associated with this shortage include the increasing number of pharmacy schools, and lack of teaching experience and research exposure among residents, resulting in lack of interest in a career in academia.<sup>2-5</sup>

Research articles have examined teaching experiences and variables that influence a pharmacy resident's interest for academic faculty positions.<sup>2-4</sup> Sheaffer and colleagues identified predictors associated among first-year pharmacy residents (PGY1s) with academic career choices. Residents who had opportunities to engage in small teaching groups, were exposed to teaching seminars, and participated in course design and/or assessments in their residency programs were more likely to consider faculty positions.<sup>3</sup> McNatty and colleagues examined the correlation between teaching experiences and academic career choices among American Society of Health-System Pharmacist (ASHP) residency programs. Positive factors that influenced residents to pursue faculty positions were providing didactic lectures; participating in problem-based or small group learning seminars; and serving as a primary preceptor during their residency term.<sup>4</sup> In summary, authors have identified the need to increase teaching exposure and increase academic-based training in order to increase residents' preparedness to pursue faculty positions, and potentially alleviate the faculty shortage.<sup>2-5</sup>

Loma Linda University School of Pharmacy (LLUSP) recognized the difficulty in recruiting qualified faculty candidates, so in an effort to address this issue, a pharmacy practice residency program (PGY1) with an emphasis in academia was implemented. The LLUSP PGY1 program (ASHP-accredited) consists of clinical requirements (75%) and academic requirements (25%) upon completion. Each resident is required (1) to provide didactic lectures (approximately 3 hours or more depending on resident interest); (2) to provide experiential teaching and case-based or problem-based group conference seminars (40 hours; 2 hours per session); (3) to assist in syllabus development; (4) to participate in faculty and preceptor development

workshops; (5) to participate in a school-wide committee (ie, curriculum, assessment, admissions) and faculty meetings; (6) to participate in clinical research with an emphasis in research design and statistical analysis; and (7) to mentor pharmacy students, as a primary preceptor. Academic electives are offered to residents who have a particular specialty interest (ie, cardiology, drug information). Exposure to academia through the LLUSP PGY1 program does not fully equip residents to become full-time academicians; however, it may mentally prepare them to pursue a career in academia. Residents may initially express an interest in academia; however, with minimal academic exposure in PGY1 residency programs, it may be insufficient to build a resident's confidence to pursue a career in academia. LLUSP has had positive and encouraging experiences with past and current residents. Currently, 1 of 3 residents who has completed this program is a now an assistant faculty member at LLUSP. A further effort to reinforce teaching concepts into the residency program includes the incorpo-ration of teaching certificates.<sup>6,7</sup> To further address the need to incorporate additional clinical research in residency programs<sup>5</sup> with additional development in teaching and service, LLUSP is in currently developing a PGY2 Academic Residency Program and/or Academic Fellowship. To our knowledge, a limited number of pharmacy practice residency programs require this level of exposure to academia. Job descriptions for academic faculty position requirements include clinical practice, teaching and scholarship. To alleviate the recruitment challenge, more PGY1 with an Emphasis in Academia must be created to meet the standard job description for faculty positions.

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#### REFERENCES

 Vacant budgeted and lost faculty positions-academic year 2004 -2005. ACCP Institutional Research Brief Volume 6. Available at: http://www.aacp.org/Docs/MainNavigation/InstitutionalData/ 7309\_IRBNo6-Facultyvacancies.pdf. Accessed November 3, 2008.
Clark CA, Mehta BH, Rodis JL, Pruchnicki MC, Pedersen CA. Assessment of factors influencing community pharmacy residents' pursuit of academic positions. *Am J Pharm Educ.* 2008;72(1). Article 3.
Sheaffer EA, Brown BK, Byrd DC et al. *Am J Pharm Educ.* 2008;72(3). Article 49.

 McNatty D, Cox CD, Seifert CF. Assessment of teaching experiences completed during accredited pharmacy residency programs. *Am J Pharm Educ.* 2007;71(5):Article 88.
Ellis JJ, McCreadie SR, McGregroy M, Streetman D. Effect of

pharmacy practice residency training on residents' knowledge of and interest in clinical research. *Am J Health-Syst Pharm.* 2007;64:2055-63.

6. Castellani V, Haber SL, Ellis SC. Evaluation of a teaching certificate program for pharmacy residents. *Am J Health-Syst Pharm.* 2003;60(10):1037-41.

7. Romanelli FR, Smill KM, Brandt BF. Teaching residents how to teach: a scholarship of teaching and learning certificate program for pharmacy residents. *Am J Pharm Educ.* 2005;69(2):Article 20.

# PharmD in Pakistan: A Tag or a Degree?

We are pleased that our initial letter to the editor, "The PharmD Degree in Developing Countries," received attention and resulted in several letters of response being published.<sup>1</sup> We would like to summarize some of the issues raised by other colleagues.

In the letter "Controversy of PharmD Degree," published in *AJPE*, the principal author opinionated the similarity of pharmacy degrees issued throughout the world. We found it difficult to agree with this perspective-that the "PharmD tag" is the only solution-because the curriculum is neither fully industry-oriented nor clinically aligned.

In contrast, the letter penned by Ghayur not only deserves merit but energizes us to share the experiences we had during 3 months in pharmacy institutes and pharmacies in Pakistan.<sup>2</sup> In fact, the doctor of pharmacy (PharmD) degree in Pakistan was started without any planning. Thus, it is not incorrect to say that the PharmD degree is just a tool to help students qualify for job opportunities in Gulf countries<sup>1</sup> as well as to make the so-called "doctors" eligible to sit for the license examination in the United States or elsewhere. While working on my PhD project in Pakistan, I (S.J.) had an opportunity to interview final-year PharmD students at 3 public and 3 private universities. The students were apprehensive about their future because "this new curriculum, without any proper clinical attachment, with just a couple of visits to hospitals, would serve the purpose is a doubtful issue." They expressed a strong sense of discontentment over the forced conversion from the 4-year bachelor's degree program for which they were admitted to a 5-year PharmD program without their consent. Not even proper clinical affiliation with inadequately trained staff (in one instance clinical pharmacy was taught by a zoologist) they perceived the PharmD degree program as a mere "hoax" with no light at the end of tunnel.

Likewise, the co-author of this letter (Z.B.), while delivering a lecture as a Malaysian pharmacy expert to pharmacy institutes in Pakistan, was speechless to answer one pharmacy student's question: "Sir, why in Pakistan, clinical pharmacy comes under the umbrella of Pharmaceutics"?

Just to endorse the views penned down by Ghayur<sup>2</sup> regarding non-availability of pharmacists on pharmacies as well as selling of prescription drugs without prescription, we would like to describe our experience here. A visit to a pharmacy in Karachi, Pakistan, being run by non-professionally trained drug sellers, exhibited not only brand sub-

stitutions without the consent of a doctor but also antibiotic dispensing without a prescription. The most nerve-racking observation was the supply of benzodiazepine available on consumer demand. Interestingly 25 consumers mentioned different names of the benzodiazepine class of drugs and bought a whole month's supply without a prescription.<sup>3</sup> Interestingly, despite the absence of pharmacists, every pharmacy has a license to sell medicines thanks to many of our fellow pharmacists who lease their degrees annually to any layman who wants to open a chemist shop or pharmacy.

With gaps even in the bachelor of pharmacy curriculum, accompanied with sparse recognition of pharmacists as healthcare providers in the healthcare system of Pakistan, we are unable to comprehend to what extent switching to the PharmD degree would be justified. The PharmD could be required in developing countries; however, a systematic plan of action would be needed to give due recognition to pharmacists as they are still an underrated group of health professionals. Regarding India's recent scheme for adding the PharmD, the Health Ministry has paved the way for Indian pharmacy practice training and education by giving formal approval for PharmD regulations.<sup>4</sup> The PharmD course is comprised of 6 academic years, with 5 years of study and 1 year of internship and residency. Six months of the internship and residency is spent in a general medicine department and 2 months each in other speciality departments. The clerkship, coupled with a research project covering areas of biostatistics and research methodology, as well as concepts of pharmacoeconomics and clinical research, is also in place.<sup>4</sup> However the effectiveness of any such scheme largely depends on its delivery and execution, as well as the availability of clinical pharmacy staff members.

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#### References

1. Jamshed S, Babar ZU, Masood I. The PharmD degree in

developing countries. Am J Pharm Educ. 2007;72(3):Article 71.

2. Ghayur NM. Pharmacy education in developing countries: need for a change. *Am J Pharm Educ*. 2008;72(4):Article 94.

3. Jamshed S, Zaheer ud din Babar, MI Ibrahim. Benzodiazepines as chocolates! *BMJ* Rapid Responses. http://www.bmj.com/cgi/eletters/ 337/aug28 1/a658 Accessed September 05, 2008.

4. Pharm D regulations. *Gazette of India*. New Delhi, May 10, 2008. http://www.pci.nic.in/