

LETTERS

Career Perspectives of Future Graduates of the Newly Implemented 6-year Pharmacy Educational System in South Korea

To the Editor. Developments in the pharmacy education system are being implemented in many countries worldwide.¹ Traditionally, South Korea followed a 4-year pharmacy education program and required graduates to pass the national licensing examination to become a registered pharmacist.² Pharmacy practice in Korea has changed significantly since a new prescription law was enacted in 2000 that separated prescribing and dispensing functions between physicians and pharmacists.⁴ The pharmacists were required to perform drug use evaluation and medication teaching and counseling for patients prior to dispensing. However, pharmacists' compliance with these professional activities has been suboptimal because of the country's insufficient pharmacy education and training system which did not sufficiently prepare current pharmacists to provide these services. With the implementation of a pharmacy education reform program in 2009,³ the existing pharmacy educational system was expanded to a 6-year (2+4) program. The new curriculum will increase the number of required courses in clinical pharmacy and ensure students complete a sufficient practical and internship period that will adequately train them to cope with the recent changes in the job descriptions of pharmacists. The new curriculum will also align South Korea's pharmacy education system with the global trend toward 6-year pharmacy programs.⁵

To major in pharmacy, students must have completed at least 2 years of an undergraduate college program. They must also take a Pharmacy Education Eligibility Test (PEET) before beginning the 4-year program of pharmacy education, regardless of their undergraduate major or age. The PEET examination includes subjects like biology, chemistry, physics, and mathematics, as well as verbal and quantitative sections. Students must also submit their score on an internationally authorized English test such as TOEFL (Test of English as a Foreign Language) and TOEIC (Test of English for International Communication).⁶ Because of this change, no freshmen were admitted to the college of pharmacy in Korea between 2009 and 2010. Korean students appeared for their first PEET in 2011.⁵

The new program includes pharmacy practice experiences based on an experiential core curriculum (internship

or residency training) divided into 2 phases. The first phase is the introductory pharmacy practice experience (IPPE) for 2 credits (70 hours), where students are exposed to model pharmacy practice environments within the pharmacy college, under appropriate supervision of preceptors to provide students with the opportunity of experiencing distinct professions, bridging them into advanced pharmacy practice experience (APPE) courses.⁷ The second phase or the APPE includes a 1 year (33 weeks/ 1330 hours for 28 credits) of internship/residency training that provides students with in-depth courses and professional experiences that relate to their specific area of expertise. The APPE is further divided into a core (18 weeks/ 730 hours for 16 credits) and elective (15 weeks/600 hours for 12 credits) curriculum where the students are required to work closely with a faculty advisor/preceptor in specified tracks such as clinical pharmacy track, industrial pharmacy track, and pharmacy research track.

Approximately 1,351 pharmacists are expected to graduate with a 6-year (2+4) pharmacy education from 35 colleges of pharmacy in 2015.⁸ Beginning in 2011, 2 groups of students, including freshmen from 2012 and sophomores from 2011, are pursuing their education under the newly implemented system. The Korean pharmacy students' career perspectives in the present context were unknown. We surveyed pharmacy students about their career perspectives and the factors that influenced their preferences under the newly implemented system. Eight hundred nineteen (81.9%) students from 14 government and private pharmacy colleges responded to the survey questionnaire. Among the respondents, 46.8% were male and 53.2% were females. The age of the majority (55.3%) of respondents ranged from 20-25 years. The PEET preparation duration in 56.9% of the students was between 6 months to 1 year. The majority of the students (57.4%) decided to pursue a professional pharmacy degree during their prepharmacy university education. Job stability (55%) and interest in the profession (21.5%) motivated students in their career selection. Most students (82.7%) considered self-willingness the main factor in their career selection, while a few were influenced by family (13.8%). Only 15.9% desired to pursue higher education after graduation. The 3 most preferred areas of practice after graduation were community (28.6%), industry (21%), and hospital (18.3%). Students believed personal aptitude (40.9%) and professional environment (26.7%) might influence their career path. Few students desired to study abroad (2.7%). When asked what the most interesting part of university life was, 44% said the study of pharmacy itself, 32.3% said

involvement in peer relationships, 3.8% said participation in volunteer activities, and 3.1% said involvement in student association activities. Almost all of the students (92.9%) rated their overall satisfaction with university life under the new pharmacy educational system as satisfactory.

While the 6-year (2+4) educational system is expected to offer integrated experiences with a balance of theory and practice,⁹ Korean students are yet to get exposure to pharmacy practice experience based on experiential core curriculum like IPPEs and APPEs. Thus, follow-up study in the near future would be beneficial in determining whether our anticipated findings correspond with actual events.

Eunyoung Kim, PharmD, PhD^a

Saurav Ghimire, MPharm^b

^aCollege of Pharmacy, Chungang University, Seoul,
South Korea

^bCollege of Pharmacy, Chungnam National University,
Daejeon, South Korea

REFERENCES

1. El-Awady EE, Moss S, Mottram D, O'Donnell J. Student perspectives on pharmacy curriculum and instruction in Egyptian schools. *Am J Pharm Educ.* 2006;70(1):Article 9.
2. Kwon K, Park JH, Kim J, Lee SK. Proposal of the implementation of an international pharmacy graduate preliminary examination. *J Educ Eval Health Prof.* 2008;5:2. <http://dx.doi.org/10.3352/jeehp.2008.5.2>. Accessed February 11, 2013.
3. Chun CB, Kim SY, Lee JY, Lee SY. Republic of Korea: health system review. *Health Syst Transit.* 2009;11(7):1-184.
4. Cho HK. Challenges and opportunities posed by a new prescription law in South Korea. *Am J Health Syst Pharm.* 2002;59(18):1780-1782.
5. Korean Pharmaceutical Association. <http://www.kpanet.or.kr/>. Assessed November 8, 2012.
6. Ewha Voice. College of Pharmacy Announces New Admission Plan. <http://evoice.ewha.ac.kr/news/articleView.html?idxno=1913>. Accessed February 11, 2013.
7. Chisholm MA, Dipiro JT, Fagan SC. An innovative introductory pharmacy practice experience model. *Am J Pharm Educ.* 2003;67(1):171-177.
8. Choi SE. Development of new pharmacy degrees from the Korea University's perspective. U21 Health Science Annual Meeting. <http://u21health.mty.itesm.mx/>. Accessed February 11, 2013.
9. Yang E, Shin TJ, Kim S, Go Y, Lee S. The pedagogical validity for a six years curriculum in pharmacy education. *Korean J Med Educ.* 2005;17(3):225-238.