

**PREPARING FOR U.S. PHARMACY PRACTICE: REGISTRATION PROCESS FOR FOREIGN PHARMACY GRADUATES**Mousa Abkhezzar¹, Valerie U. Oji²¹Department of Biology and Biochemistry, University of Houston, Houston, TX 77004, USA²Innovative Pharmaceuticals & Consulting (iPAC), Houston, TX 77084, USA***Corresponding author e-mail:** mabkhezzar@central.uh.edu**ABSTRACT**

Practicing abroad in the global health arena is a desired objective by many foreign pharmacy graduates. By definition, a pharmacist whose undergraduate pharmacy degree was conferred by a recognized school of pharmacy outside of the 50 United States and the District of Columbia, and Puerto Rico is considered a foreign pharmacy graduate. These pharmacists in order to be licensed in the USA have to pass four tests including: 1-foreign pharmacy graduate equivalency examination (FPGEE), 2- test of English as a foreign language (TOEFL), 3- North American pharmacist license examination (NAPLEX), and 4-multistate pharmacy jurisprudence examination (MPJE). There is a last requirement to complete 1500 hours internship; this may be required before or after passing NAPLEX and MPJE, depending on the specific state of intended practice. This internship has to be under the supervision of a licensed pharmacist known as preceptor. Studying and practicing abroad may be challenging, but there are opportunities and resources to navigate through the process.

Keywords: Foreign pharmacy graduate, licensing in pharmacy, FPGEE, NAPLEX, MPJE**INTRODUCTION**

Nowadays, more and more students choose to attend post-doctorate studies outside their home countries. In order to stand out from the crowd, the rush of studying abroad has been gaining popularity at an amazing rate. Studying in the USA is attractive even though it often means greater expense and more difficulties; simply because it offers several advantages.

One of these advantages is knowledge gain. The modern world needs people to have comprehensive knowledge and experience. The world is no longer a separated entity in which one part can afford to be totally independent of others. The communication and interchange in fields of Medicine, Pharmacy, Nursing, Molecular Biology, Structural Biology, System biology and other related fields are very frequent. The general or specific knowledge of other members of the global village turns to be most important to the prosperity of countries, or the

success of people. This kind of knowledge is usually better achieved if pursued abroad.

The other advantage is adaptation; in my opinion, foreign experience not only improves one's willpower and ability to adjust to a new environment, but also evokes one's capability to overcome various hardships and setbacks. Young people are considered aggressive and ambitious. Their success is not based on comfort or ease, but on their incessant efforts and their never-ending willingness to surpass themselves. In a foreign country they are confronted with greater challenges, more unsteadiness and less help from their families and friends. All these undoubtedly lead to an independent, self-supporting, resourceful person.

OBJECTIVES***Pharmacy Graduate -Personal Perspective:***

After completing a Pharm.D degree in my home country I thought that the pursuit of pharmacy abroad would be beneficial. I knew that the USA has plenty

of resources for practice and research. Therefore, I chose the USA to pursue my career. I started looking for resources that could help me to go through the certification process. According to the rules, in order to practice in the USA, I had to pass certain tests and complete certain hours of internship in order to be registered and certified as a licensed pharmacist. There is no comprehensive and useful reference to be used as guidance. Therefore, I decided to write this mini review to be used as a useful reference for foreign pharmacy graduates who are planning to pursue their career in the USA. There are four tests need to be passed: 1-foreign pharmacy graduate equivalency examination (FPGEE), 2- test of English as a foreign language (TOEFL), 3- north American pharmacist license examination (NAPLEX), and multistate pharmacy jurisprudence examination (MPJE). I will introduce each test as I go on.

Definition of a Foreign Pharmacy Graduate: The foreign pharmacy graduate examination committee (FPGEC) defines a “foreign pharmacy graduate” as a pharmacist whose undergraduate pharmacy degree was conferred by a recognized school of pharmacy outside of the 50 United States, the District of Columbia, and Puerto Rico. US citizens who have completed their pharmacy education outside the US are considered to be “foreign pharmacy graduates,” while foreign nationals who have graduated from schools in the US are not.¹

The process begins with obtaining FPGEC certification which is equivalent to a US pharmacy degree.

In order to obtain it, there are 4 steps:

1. License verification
2. Education verification
3. Passing the FPGEE
4. Passing TOEFL

Evaluating a Foreign Degree: Before taking the FPGEE, every foreign pharmacy graduate must have their foreign degree evaluated. Effective from 14 April 2006, all applicants need to request an evaluation report from educational credential evaluators (ECE).² According to NABP/FPGEC, educational requirements for applicants who were issued a pharmacy degree prior to 1 January 2003 must have completed at least a four-year pharmacy program at the time of graduation. Those who were issued a pharmacy degree after 1 January 2003 must have completed a five-year pharmacy program by the time of graduation.¹

Documents that must be submitted to ECE are official transcript (s) and proof of degree issued in sealed envelope with a school seal, stamp, or signature of an official that overlaps the flap closure

and envelope. The sealed envelope can be submitted to ECE either directly by issuing body or by the candidate. These documents must be in English.²

ECE will directly send evaluation report to NABP along with original documentation submitted for evaluation.²

FPGEC Certification: National Association of Boards of Pharmacy (NABP) provides the FPGEC Certification Program to document the educational equivalency of a candidate’s foreign pharmacy education, as well as their license and/or registration to practice pharmacy. To achieve FPGEC Certification, candidates must:

- Provide documents that verify their educational background.
- Provide documents that verify licensure and/or registration.
- Pass the FPGEE and the Test of English as a Foreign Language™ (TOEFL®) Internet-based Test (iBT).

The FPGEC Certificate allows foreign graduates to partially fulfill eligibility requirements for licensure in the states that require the Certification. Effective January 1, 2012, the FPGEE score will be valid for five years from the date of the examination. Candidates who do not complete the FPGEC Certification process before their FPGEE score expires will be required to retake the FPGEE if they wish to pursue certification in the future.¹

Registering for the FPGEE: Documents that must be submitted to NABP for registration are application form, applicable fees –which is \$1200- two photos, certified copy of ID, and official proof of a license and/or registration to practice pharmacy in the country where candidate earned a pharmacy degree. Once an applicant has successfully completed the FPGEE evaluation process, he or she will receive a letter of acceptance to sit for the FPGEE as well as detailed information on the registration and scheduling process. An FPGEE identification card, which will contain instructions for beginning the exam registration process, will also be included. Of note, the FPGEE is only offered in April and October.

When an applicant is accepted to take the FPGEE, he or she will have the opportunity to take the examination on one of two consecutive testing opportunities unless a documented work, health, personal, or visa problem prevents the applicant from taking the examination. For instance, if one is accepted for the October 2014 examination, but decides not to take the FPGEE test, one can still take

it in April 2015. In this case, the April 2015 FPGEE will be one's second and final testing opportunity. That candidate will be required to reapply for the FPGEE if he/she misses both of these testing opportunities or fails to pass on the first attempt.¹ Effective January 1, 2012, all current and new FPGEE candidates are allowed a maximum of five attempts to successfully pass the FPGEE. Those candidates who have already met or exceeded this limitation will be allowed one final attempt at passing the FPGEE, regardless of how many times they have tested prior to January 1, 2012. Those candidates who do not pass the FPGEE upon the final allowed attempt will have their program file closed by the FPGEE and will be ineligible for further testing.¹

TOEFL for English Proficiency: The TOEFL iBT, internet base TOEFL, is the only English language proficiency test accepted for candidates seeking FPGEC certification. This test must be completed by all foreign pharmacy graduates, even those who are native English speakers. There are no exceptions or waivers to these requirements.

As of March 2014, the minimum score requirements for TOEFL iBT are as follows:

Reading-22
Listening-21
Speaking-26
Writing-24

All four sections must be completed in one testing session, and scores of the four sections must be reported on one official score report. If a candidate scores less than the minimum score in any section, he or she will not be considered for FPGEC certification. TOEFL iBT score reports from international ETS test site are no longer accepted for candidates seeking FPGEC certification. These score reports are only accepted from ETS test centers located in the 50 United States and District of Columbia, Guam, Puerto, Rico, Virgin Island, Australia, New Zealand, and all eight Canadian provinces.¹ Once FPGEC certification is obtained, the next step is NAPLEX/MPJE. Some states in the USA, however, require a foreign pharmacy graduate to complete in/externship before gaining permission to sit for NAPLEX/MPJE.

NAPLEX/MPJE: NAPLEX measures a candidate's knowledge of the practice of pharmacy, it is just one component of the licensure process and is used by the boards of pharmacy as part of their assessment of a candidate's competence to practice as a pharmacist. MPJE combines federal- and state- specific questions to test the pharmacy jurisprudence knowledge of

prospective pharmacists. It serves as a pharmacy law examination in participating jurisdictions. MPJE tests candidates on

- Legal aspects of pharmacy practice, including responsibilities with regard to the distribution and dispensing of pharmaceuticals and for the care of patients
- Licensure, registration, certification, and operational requirements
- Regulatory structure and terms of the law and rules that regulate or affect pharmacists, pharmacies, manufacturers, and distributors

To take the NAPLEX and/or MPJE, candidates must meet the eligibility requirements of the board of pharmacy from which they are seeking license. The board will determine candidate's eligibility to take the examinations in accordance with the state jurisdiction's requirements. For foreign pharmacy graduates having FPGEC certification makes applicant eligible to take NAPLEX and MPJE tests. However, some states may require externship before sitting for NAPLEX and MPJE, while others may require that NAPLEX and MPJE be taken and passed before competing externship.

If a board of pharmacy has not made a candidate eligible to test within two years of the date that the candidate initially registered with NABP, the candidate's record with state will be closed and all fees will be forfeited.³

Internship: The last requirement for licensure is completing internship. For me, this involves completing 1500 hour of internship to practice in Texas. This internship experience must be gained in a pharmacy licensed with the Texas State Board of Pharmacy, under the continuous and direct supervision of a licensed pharmacist who is registered as a preceptor with the board. A pharmacist-intern can not be credited for more than 50 hours per week. In most of states one must first take 1500 hours of internship and then will be eligible to take NAPLEX and MPJE tests. But in some other states such as Texas one must take NAPLEX and MPJE first and then begin internship.

According to Texas State Board of Pharmacy, foreign pharmacist-intern registration expires if any of following occurs:

- The pharmacist-intern does not take the NAPLEX and/or MPJE in Texas within 6 calendar months after FPGEC certification
- The pharmacist-intern fails the NAPLEX or Texas Jurisprudence examination

- After passing the NAPLEX and Texas Jurisprudence examination, the pharmacist-intern does not complete 1500 hour internship requirement within 2 years of the examination date.⁴

Personal Perspective: I graduated from Tehran University of Medical Sciences with a Pharm.D degree, and then I decided to pursue my career in the USA. I applied for different PhD programs in the field of Molecular Biology, System Biology, Molecular Pharmacology, and Chemical Biology. Finally I was accepted to Cell & Molecular Biology program at the University of Houston. My current research involves studying new potential targets such as signal transducer and activator of transcription 3 (STAT3) and transient receptor potential cation channel, subfamily C 6 (TRPC6). I have been able to demonstrate effect of new inhibitors of STAT3 and TRPC6 to manipulate these targets with the hope to cure or halt progression of kidney diseases into end-stage renal disease (ESRD).⁵⁻⁷ Meanwhile, I passed all the tests and for internship I decided to be engaged in gaining general pharmacy practice experiences including medication therapy management (MTM) experiences^{8,9} with a focus on the elderly, Psychiatric and HIV/AIDS populations.¹⁰ One thing that I found rather difficult in the process of certification was finding a preceptor for my internship. Unfortunately, I was not able to locate one through the board of pharmacy, and the retail chain pharmacies that I approached were not willing to accept foreign pharmacy graduate interns. Based on my personal experiences, the only option that most candidates will have is finding independent pharmacies or compounding pharmacies.

A Preceptor's Perspective: As the daughter of a retired diplomat, I gained a global perspective from a very young age, and have travelled abroad often. As an American with both U.S. and foreign pharmacy degrees, I have an appreciation for the foreign pharmacy graduate. Taking on a foreign graduate could naturally make a potential preceptor hesitant; questions about knowledge base, cultural differences, and English language proficiency may come to mind despite the equivalency credentialing process. There are also the factors of limited time and number of available precepting slots, even for U.S. trained pharmacy students. There have been an ever increasing number of pharmacy programs at U.S. colleges and demand for experiential training sites in recent years.

Nevertheless, precepting the foreign pharmacy graduate is usually an exciting opportunity for

exchange of ideas, where all are enriched. These graduates often have a clear sense of purpose and maturity, and have much to offer in learning about global health. In practice settings where students from multiple institutions are assigned for internship, the foreign graduate adds to the flavor of any team learning experiences. State Boards of Pharmacy or NABP resources typically offer needed information on competency areas that can be applied to precepting the foreign pharmacy graduate. Some state boards may assist by referring individuals to local or state pharmacy associations that can help link preceptors and graduates. Foreign graduates may also explore online at www.medpolicy.com if there is an interest in identifying a potential site for internship.

The typical preceptor has an academic background or at least a love for teaching, and as such is also a student mentor as well. This also applies to the preceptor of the foreign pharmacy graduate. Besides the usual discussions about career, there may be additional matters that needs that might arise. Working with the foreign graduate on additional writing or oral presentation projects may be helpful to help them excel with language proficiency. The U.S. preceptor can also help the foreign pharmacy graduate begin to establish new professional contacts and networks. Immigration status concerns might exist; many might have come into the U.S. to study with a J-Visa or H1 Visa, and might be in the process of applying for a National Interest Waiver that would facilitate them remaining in the USA after completion of their educational studies. Such individuals often are highly productive in their work ethic and scholarly activity, and in some instances their educational institution or their pharmacy employers may be impressed enough to assist in the permanent residency application process.

U.S. pharmacists are involved in public health and medical ministry activities both here and abroad; some colleges and schools of pharmacy partner with other educational programs abroad,¹¹ especially in resource-limited nations, which in turn raises awareness of and possibly interest in U.S. pharmacy practice.

CONCLUSION

Studying and practicing abroad in an increasingly global health arena is a desired objective by many foreign graduates and is expected to continue. The experience may be challenging, but there are opportunities and resources to navigate through the process, and enrichment opportunities for both intern and preceptor.

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