THE SYSTEM RULES US: UNDERSTANDING THE PERCEPTIONS OF FOREIGN INTERNATIONAL MEDICAL GRADUATES IN THE UNITED STATES REGARDING THE EDUCATIONAL COMMISSION FOR FOREIGN MEDICAL GRADUATES' CERTIFICATION PROCESS

A Dissertation Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
of the Requirements for the Degree

Doctor of Education in Professional Leadership with an emphasis in Health Science Education

by

Nancy Adossi

May 2017

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Acknowledgments

This dissertation is dedicated to all those who have ever had to immigrate from their homeland to a foreign land in search of safety, whether physical, religious, cultural, or financial, for themselves or for their families.

It is also dedicated to my mother, Kossiba Victoire Hinme, the stalwart feminist of my life who believed in me even before I was born. You are my strength and my peace in times of trouble. To my grandmother, who never attended school and only learned to sign her name, Aholousi Rosaline Dogbevi, I dedicate this dissertation to you, a woman whose powerful influence was felt in two countries; a woman whose very name still strikes awe in the hearts of all her descendants. To my dearest father, Della William Messan Adossi, you are the one responsible for showing me the beauty of migration and the responsibilities which come with it. You are also my inspiration for living life to the fullest. Thank you for being a male feminist and sticking up for me, your only daughter, and having great expectations for me. May your names continue to live on forever.

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To the lover of my soul, God, for He has indeed done great things. Ase.

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Abstract

Despite efforts to alleviate the current physician shortage, there remains a gap that is not being filled by US medical school graduates especially in under-served and rural areas. One of the solutions to this problem is to use Foreign International Medical Graduates (FIMGs) to fill residency training positions; however, the certification process for these FIMGs is lengthy and often challenging. This qualitative study sought to identify perceptions of the certification process by FIMGs and factors that they feel influence the successful completion of the U.S. certification process. Conceptually, this study was framed within critical theory as well as andragogy. The main research question was: What are the perceptions of FMIGs regarding the factors that influence or impede the ECFMG certification process? Data was collected through semi-structured interviews with six participants. Three participants were FIMGs who are currently U.S. certified practicing physicians, and three participants were FIMGs who are not currently U.S. certified practicing physicians. These interviews provided opportunities for detailed accounts of physicians' various experiences which served as the basis for all analysis. Carspecken's methodology was chosen based on its emphasis on systems and cultures through dialogical data collection. The results of these analyses indicated that all six FIMGs in the study perceive the certification process to be stressful due mainly to their status as immigrants and a general lack of support. Furthermore, an important contributing factor to successful certification was internal and external motivations. External motivation came from their families and communities and inner motivation came from a deep desire not to fail. This study may contribute to the field of health

sciences education in that it provides insight into the unique experiences of a group of FIMGs, and what educators and leaders in the field can learn about them as adult learners.

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Chapter 1

Introduction

Due to globalization trends, there are currently a substantial number of immigrants, approximately eleven million[1] based on figures published by the Migration Policy Institute, who are highly educated and could become qualified medical professionals moving to first world countries such as the United States (2016). These highly educated professionals have the potential to be of great benefit by increasing the supply and diversity of physicians in the countries to which they immigrate. More importantly, they have their own needs to fulfill and dreams that they seek to accomplish. However, many of them are currently not able to enter the physician workforce due to various reasons, including social, financial, and educational problems. This study sought to address the following challenge: The United States needs more doctors; there are currently many qualified, but not certified, foreign doctors who could fill the shortage. However, little research has explored the reasons why many foreign doctors do not become certified practicing physicians in the United States.

This research offers a unique perspective on some of the issues faced by foreign international medical graduates (FIMGs). It identifies areas of challenge for FIMGs

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[1]According to the Migration Policy Institute, as of 2014, there were 10.5 million educated adults or 29%, ages 25 and older, who were immigrants in the United States. This number may or may not account for those educated outside the US or those who entered the US with a college degree or higher from their respective native countries.

relocating to the United States. Through a qualitative approach and an analysis of data gathered from semi-structured interviews, it provides suggestions for possible areas of support, both socio-economic and political.

This introduction aims to offer a brief view into the context of the problem: the necessary form of analysis, the current statistics that illustrate the phenomenon in a large metropolitan area, and the realities that illustrate the workforce system within which FIMGs move. FIMGs are unique because of their sociological standing as immigrants[2] and also because of their potential to fill a great need for physicians in the United States. Due to the importance of FIMGs, this study looks at the sociological impression of the certification process on a population of people who are unique within society.

Background

While it is easy to point to the various quantitative studies that explore the number of immigrant physicians (approximately 160,000[3]), it is more difficult to find studies that qualitatively explore the phenomenon of highly qualified immigrants who move from their home countries to the United States in pursuit of safety and/or work in the healthcare field. In their research on international medical graduates (IMGs) who

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[2] While the true definition and characterization of an immigrant has yet to be defined, especially given the current political and global issues in the United States, the definition used for the purposes of this study includes those individuals who identify themselves as refugees, undocumented immigrants, or expatriates, as well as sponsored people.

[3]This number is based on the figure of 18% derived from author Nyapati Rao's article on *US Immigration Policy on International Medical Graduates.*

immigrated to Canada, Anne Wong and Lynne Lohfield (2008) offered the logical phenomenon framework as one befitting the study of what FIMGs face in their certification journeys, mainly because such nuances can most accurately be discovered through an approach that measures "the rich, in-depth [data] about social phenomena in their natural setting" (p. 54). The object of the Wong and Lohfield study is the certification process as it is used or experienced and perceived. This includes the lived experiences of all participants in the study (Yuksel & Yildirim, 2015).

Of the 10.5 million educated immigrant individuals presently in the United States, 30% work in the healthcare field (Zong & Batalova, 2016). It is not a new phenomenon for the United States to experience an influx of highly educated immigrants, and all of these immigrants must go through the process of becoming licensed in order to practice as physicians in the United States. This problem is especially important in the context of physicians, given the current shortage experienced by the United States.

This study was primarily focused on the phenomenon of immigrant doctors or FIMGs and the impact of the certification journey on those going through the process, especially within the landscape of a large metropolitan area with a major medical center. This phenomenon of FIMGs becoming certified is characterized by what the Chicago Council on Global Affairs identifies as "complicated, inconsistent reaccreditation processes in the United States, [which leave] many [FIMGs] unable to practice in their fields" (2016, p. 1). Some of these issues are barriers to residency, adaptation problems, and other "disorientation" concerns identified in a similar study by Wong and Lohfield (2008, p. 53).

Ultimately, the main factor when examining the problem of the dearth of information available on qualified and uncertified foreign physicians is that there is a lack of emphasis on studying the possible effects of the U.S. certification process on the outcome or number of certified foreign physicians in the context of the system of immigration. In other words, there is information missing as to how the certification process itself affects FIMGs and which factors lead to successful completion. These topics—specifically, the problems faced by FIMGs—have often been studied on their own, isolated from the system of immigration within which they appear. These issues have also been studied mostly at the stage in which FIMGs are already certified or have completed the process. The problem of FIMGs being certified appears in specific systems that might play an important role in the outcomes of certified physicians. This study was different in that it looked at the problem of qualified yet uncertified foreign physicians in the sociological and political environment within which FIMGs navigate.

Additionally, the participants in this study needed to have a uniform background in terms of being immigrants and being educated outside of the United States. In terms of the methodology, this homogeneity of background experiences served to solidify some of the discoveries. While most metropolitan cities are full of diverse people and often lack a parallel population, there is some sort of similarity of experience that can be found among immigrant populations, especially those experiencing the same educational systems (Yuksel & Yildirim, 2015). As a result, even though there may be different types of and races of immigrants within large metropolitan areas, there is a similarity in their experiences. Thusly, it is important to study the issues that possibly affect FIMGs in large metropolitan areas, such as Houston, Texas.

While many solutions have been put forth as effective ways of filling the gap, such as team-based approaches and educating more United States Medical Graduates (USMGs), this study focused on one of them: FIMGs. Specifically, this study focused on FIMGs born and educated outside of the United States prior to immigrating to the United States. Currently, there are "195,000 doctors with medical degrees from foreign countries" (Partnership for a New Economy, p. 19). This does not necessarily include FIMGs who are primarily physicians born outside of and educated entirely outside of the United States. There has been an overall decrease in foreign doctors being certified for many reasons. These reasons may be impeding the implementation of a valuable source of solution to alleviate the physician shortage.

Statement of the Problem

The problem of this study is the lack of qualitative research that studies the effect of the certification process on a possible solution to the physician shortage—FIMGs.

This study will provide information about FIMGs' perceptions of the factors of the certification process that affected their efforts to become certified. This information could serve the Educational Commission for Foreign Medical Graduates (ECFMG) in advancing its goal of certifying FIMGs with the potential of adding to the supply of physicians. In short, this is the problem this research sought to solve: the lack of qualitative information available in characterizing the factors that contribute to the successful and timely certification of FIMGs. This study sought to identify these factors, which may play an important role in completion of the certification process within the context of the phenomenon of immigration.

Purpose of the Study

The purpose of this study was to evaluate and qualitatively identify the factors that influence the success or non-success of FIMGs during the ECFMG certification process. This qualitative, descriptive research study clarifies characteristics and other findings that may ensure the successful completion of the U.S. certification process. Finally, the study suggests tangible goals and actions to revitalize the certification process and ensure successful completion rates.

Research Question and Methodology

The primary research question was as follows: What are the perceptions of FIMGs regarding the factors that influence or impede the ECFMG certification process? From this question stemmed different domains based on theories of andragogy and phenomenology. These question domains— financial, educational, and social—are in tandem with the main research question in that they are intended to provide answers to the dilemma posed in the statement of the problem. Other, additional questions focused on the demographics of the group, such as age of arrival in the United States and age at the start of the certification process.

Participants were recruited from the world's biggest medical center, the Texas Medical Center, in Houston, Texas. The choice of this facility is central and necessary to the research, given that many immigrants choose to settle in the Houston area. Thus, this research is necessary not only for its educational value but also for the benefit of the location in which the phenomenon takes place. Data was collected from FIMG

participants who were interviewed through semi-structured dialogues as guided by Carspecken's methods.

Significance and Context of the Problem

While it would be easy to explore the social effects of the certification process on FIMGs isolated from the context of immigration, as well as the context of the healthcare system and its needs, it is prudent to place this phenomenon in its appropriate sociological context. There are currently very few studies that explored the effects of the certification process upon the immigrant physicians who are involved in the system. While other variables are unknown, it is known that many FIMGs are currently underemployed and working in unskilled jobs ("UCLA Program Hopes," 2013). The reasons range from a lack of favorable available residency matches to discrimination to lack of social and financial support (Desbiens & Vidaillet, 2010; Jacklevic, 1997; Silverman, 2003; Sopher, 2014; Srivastava, 2008).

The importance of certified and qualified FIMGs and their possible contributions to the United States can be observed in certain geographic areas. A prime example of this need is expressed in a report on rural areas' needs for doctors published by the Partnership for a New American Economy (2015):

> In the state of Nevada, a shortage of pediatricians and specialists has reportedly led many families to travel hundreds of miles to other states for surgeries and specialty pediatric care… Western North Dakota, where adult patients wait months to see a doctor, small infants often fall behind on their routine checkups and shots because of a paltry supply of physicians…And in northern Washington

> State, some clinics report turning away 250 people a week who call in need of primary care. (p. 2)

These accounts aptly illustrate the need for more physicians. In the same report, the organization states that approximately 17% of practicing FIMGs are working in rural areas. This does not in any way cover the demand in those areas.

Due to the current increasing physician shortage, the need to quickly fill these vacancies is greater as exemplified through the economic theory of supply and demand: when supply is scarce, demand is bound to increase. In the healthcare sector, demand is often determined by the rise or fall in specific populations that need or require medical care. The supply is determined by the amount of physicians and other healthcare professionals available to serve those in need. In recent years, the population most in need of care is the elderly (Frieden, 2008). The population of people in the United States who are elderly, defined as 65 years and older, is 46.2 million as of 2014, according to the U.S. Department of Health and Human Services. With such a large population whose needs for medical care will only increase, the best way to describe the shortage is as "a crisis," as stated by Olivero, 2015 (p. 2). Nancy Lundebjerg, the chief executive officer of the American Geriatrics Society in 2015, described the shortage by pointing out that "people who really need the services of a geriatrician won't necessarily have access to that expertise" (Olivero, 2015, p. 3). The rise in the elderly population that is precipitating a larger shortage is due mainly to people living longer (Olivero, p. 4; Peralta, 2013, p.9). Even more importantly, the Partnership for a New American Economy (2015) found that many of the elderly population live in rural areas. But first, there are other factors that play a role in amplifying the physician shortage.

Currently, the physician supply shortage is describe as "a gap between [the population's] demand for primary care services and the capacity of primary care, as presently delivered, to meet that demand" (Bodenheimer & Smith, 2013, p.1881). In other words, there is a demand for more doctors as the number of patients increases. As mentioned previously, one reason is the growth of the elderly population in rural areas. Other reasons include the recent Affordable Care Act and/or the retirement of physicians (Bodenheimer, 2013; Glenn, 2012, p. 1881). As stated in the report published by the Partnership for a New American Economy: "Policy changes [which would lessen the effects of the physician shortage] won't have an immediate impact on the supply of physicians, considering that training a new doctor can take as long as 10 years" (p. 19). Nevertheless, there is a ready supply of FIMGs who could potentially fill this gap. The same study advocates for the use of "foreign born physicians and trainees already studying in the United States [as a] valuable resource that could help combat current physician shortages" (p. 19). Unfortunately, not much can be found on the efficacy of the certification process, especially given that "more could be done to encourage such doctors…or make it easier for foreign-born physician[s] to come to the United States and settle here for the long term" (Partnership For a New American Economy, p. 19).

Thus, the problem becomes the following: Does the certification process itself yield complications for FIMGs that make it difficult for such a population to contribute to a greater demand for physicians? At the time of this research, the certification process, in its simplest form, consists of the main United States Medical License Exams (USMLE) and a residency program. While it is known that many FIMGs are unable to complete the certification process, what is less known are the factors contributing to and the personal

and communal implications of successful or unsuccessful certifications. If the reasons for or characteristics of success are explored as a phenomenon, it would be possible to assess which processes need to be changed or amplified. These changes, in turn, could greatly benefit the FIMGs that are navigating this system.

Educational Value of the Study

The educational value of this study is critical, especially since the process of certification involves taking exams and being trained under the United States' practices and procedures. The differences between the education that international students receive and the education the education they receive in the U.S. are worth examining. Also valuable are the implications of the immigration phenomenon on future educational processes put in place by the ECFMG. Another form of educational value found in the study is the process of adapting culturally while learning in a different environment, as is the case for many of these FIMGs.

Definitions

An International Medical Graduate or an IMG is a student who is educated in the United States for his or her undergraduate degree, receives his or her medical education in a foreign country, and immigrates back to the United States for medical certification and license. These IMGs are usually U.S. citizens or permanent residents who are familiar with the culture, language, and nuances of education in the United States. However, the focus of this study is immigrant physician, and/or graduate students born and educated in a foreign country who immigrate to the United States with the hope of settling and working there. These two groups are categorized in the same way because,

once they come to the United States, members of both groups have to go through the same process to become practicing U.S. certified doctors.

The certification process is defined by the three USMLE exams: Step 1, Step 2 Clinical Knowledge (CK), and Step 2 Clinical Skills (CS), along with the apprenticeship foreign doctors must go through in order to earn hours. Step 1 is a multiple-choice exam that measures the student's basic knowledge of science. Step 2 CK is also a multiple-choice exam, which assesses clinical knowledge. Finally, Step 3 CS tests the physician's ability to perform as a doctor without supervision and to communicate effectively in English with a patient.

It is important to point out that the term "immigrant" refers to many types and groups of people. It refers to any displaced person, be it a refugee, an undocumented person, or a prisoner of war; generally, this term refers to anyone who is in the United States seeking financial, emotional, or physical refuge. For the purposes of this study, this categorization also includes current immigrants who have become naturalized U.S. citizens.

Limitations of the Study

The amount of time allotted to the problem may pose some limitations. This research took place over a year, and the sample population was small to accommodate the time it took to collect qualitative data. This short amount of time may not have captured all of the data that would result in a greater collection of information.

Conclusion

This research explored the perceptions of FIMGs and the factors that affect their efforts to become certified. There are many reasons why this research is necessary and

timely; the most important reason, however, may be that this phenomenon has not been adequately explored qualitatively within its unique systems of immigration and the healthcare workforce. FIMGs are a great source of supply for the current shortage of physicians, especially since they have already been trained in another country and have previous experience as physicians. It is, therefore, prudent for leaders in health sciences to examine the causes of non-completion of the certification process and other reasons as to why these specific physicians are not becoming certified.

This research examined this problem by employing a qualitative approach that used interviews as a medium for data collection. The data was analyzed for trends that may lead to a more complete understanding of what can be changed or magnified in the process of certifying more FIMGs. Furthermore, this research may shed fresh light on procedures that may be incorporated into the certification process in the future. Ultimately, the aim is that this explorative work will launch further research in the same area.

Chapter 2

Literature Review

This study explored the phenomenon of Foreign International Medical Graduates (FIMGs) and the issues they face during the certification process. Specifically, it looked at perceived and lived effects of the barriers to certification, and disorientation issues in lived experiences reported by participants who self-identify as FIMGs. The study presents information on qualitative data that explores the problem of the lack of knowledge about qualified and uncertified foreign physicians. It does so by collecting qualitative data through semi-structured interviews. In light of the economics theory and factual data presented in the introduction, a more thorough review of the political background is necessary to further support the need for this explorative research.

Of the many issues faced by FIMGs, the most prominent issues are those in the arena of social comfort. Here, social comfort is defined as all that which aids in the resettlement or assimilation of new immigrants. There are two primary systems within which this phenomenon appears: immigration and the healthcare workforce system. The healthcare workforce system is here defined as the various stages in which medical students become certified and practicing physicians. This literature review revealed some of the already observed problems and facets of the phenomenon in both systems. First, it explored some of the studies that have addressed the immigration problems faced by many FIMGs. Secondly, this review examined the current healthcare workforce problems, the proposed solutions to these problems, and the ways FIMGs fit into the

probable solutions. In doing so, this literature review lays the foundation for the research at hand.

Definition of FIMG and Context

The Educational Commission for Foreign Medical Graduates (ECFMG) defines an IMG as "a physician who received his/her basic medical degree or qualification from a medical school located outside the United States and Canada. The location of the medical school, not the citizenship of the physician, determines whether the graduate is an IMG" (2011, n.p.). Due to this classification, the number of FIMGs is unclear given that most of the time they are accounted for along with U.S. physicians who have studied abroad. In 2013, the ECFMG reported that 76% of the 23,244 IMGs passed the certification exams (the United States Medical License Examination Steps) the first time (ECFMG, 2013). Although there was an increase in the passing rate from 2011 to 2012, there was an overall decrease in the number of IMGs[4] who registered for the ECFMG certification (ECFMG, 2013).

[4] This includes FIMGs because the study has grouped them under this title.

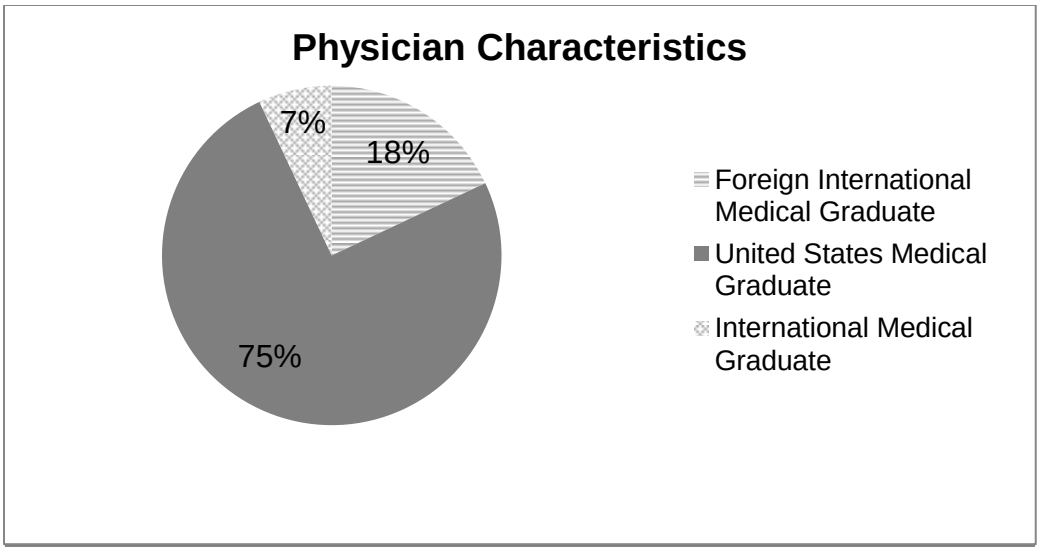

Figure 1. Approximately 18% of physicians are strictly Foreign International Medical Graduates who were not born in the United States. From Rao, N. (2012, April 1). U.S. immigration policy on International Medical Graduates. *Virtual Mirror*, 14(4), 329-337.

As a matter of fact, 2012 was the biggest match year in 30 years (Association of American Medical Colleges, 2012). The term "match" refers to the placement of medical students in residency programs in the United States. Each subsequent year of matching students is different in terms of the number of students who are chosen for residency. The process of matching is what produces physicians for the U.S. workforce. An FIMG may be a brilliant test taker, but unless he or she secures a residency match, he or she cannot contribute his/her medical skills. In 2014, there were a total of 878,194 physicians. In the years 2015-2016, IMGs made up approximately 25% of the U.S. physician workforce (Young et al., 2015). In 2012, IMGs made up 22.4% of the workforce. Of these, in 2012, approximately 7.6% were native-born U.S. citizens (Rao, 2012). This indicates that the rest, approximately 18% of the current 25%, are foreign-born (Figure 1). Given the impending shortage forecasted for the United States within the next few years as healthcare needs increase, there is no doubt that FIMGs may soon

be needed to fill this gap (Foundation for Advancement of International Medical Education and Research, 2011).

Supply and Demand

Among the issues surrounding IMGs, one of the most important involves the economic and political implications and dilemmas. To put it in perspective, consider the U.S. government's proposed 2013 fiscal budget. Specifically, "the administration propose[d] saving $9.7 billion over 9 years by reducing what Medicare pays to train new doctors" ("Proposed Budget," p. 1). Originally, Medicare funded all residencies in the United States. According to the same article, it was necessary to cut this type of funding in order to redirect it to the expansion of healthcare (p. 1). This would have ultimately led to a shortage of 60,000 physicians ("Proposed Budget," para. 4). Thus, it can be concluded that the supply of medical professionals is regulated, to a degree, by Medicare funding. As for the demand, this is mainly determined by two major factors: an aging population and recent legislative and executive measures.

To further illustrate the great need for physicians, the Association of American Medical Colleges (AAMC) in 2015 noted that the supply of physicians for 2013 was 767,100 (p. 3). The expected shortfall of physicians is estimated to grow anywhere between 61,700 and 90,400 by 2025 (IHS Inc., 2015, p. v). The demand for physicians is expected to increase from 2014 to 2025 by 111,000, or 14% (AAMC, 2015). The number of physicians in the United States in 2015 was approximately 846,000 (AAMC, 2015). Table 1 further illustrates the projected demand and supply of physicians from 2013 to 2025. Using 2015 as the baseline year, by the time doctors are trained and certified to fill this void, it will be 2025, 10 years from 2015 (accounting for four to five

years of bachelor level pre-medical studies, four to five years of medical school, and two additional years for residencies). Thus, the shortage of physicians is growing at a faster rate than the supply can produce if the United States were to depend solely on U.S. medical graduates.

Table 1

Physician Demand and Supply From 2013 to 2025

Year	Demand	Supply
2013	783,529	767,000
2025	916,729	833,700

Note. Numbers from Colby, S. L., & Ortman, J. M. (2014, May). *The baby boom cohort in the United States: 2012 to 2060* (Report No. P25-1141). Washington, DC: U.S. Census Bureau.

By 2025, the baby boomer population in the United States will account for 18.79% of the total projected U.S. population (Colby & Ortman, 2014). This will lead to a "29% increase in demand for physician visits by adults" (Frieden, 2008, p. 1). Moreover, the demand caused by the recent Affordable Care Act (ACA) will increase the shortage. Although the numerical value of the shortage that can be attributed to the ACA is unclear, the shortage can be presented in other terms: "Taking into account population growth, the aging of the population, and the impact of the ACA, the number of office visits in the United States will increase from 462 million in 2008 to 565 million in 2025" (Ault, 2012, p. 1). This means that the shortage is not just in terms of physicians, it will also affect services.

One of the viable solutions is to flood the market with a fresh supply of new physicians who will not take long to train. One source of such a supply is FIMGs. In

fact, an increase in diversity in the U.S. physician workforce was part of a campaign by the AAMC to call for more IMGs: 26% of the workforce is made up of internationally trained medical graduates (AAMC, p. 9). As a result, the shortage can be filled by certifying more FIMGs. However, the process of certifying IMGs is not currently efficient enough to fill this void because many IMGs do not finish their certification (Hu, 2011). Furthermore, as a result of not being able to finish their certification, most of these foreign trained physicians become underemployed, choosing instead to forego their physician skills for the ability to pay their bills.

Aging Population. Much of the U.S. population is currently aging. In 2030, the percentage of U.S. citizens age 65 and over is projected to be 20.3%, which is a 7% growth when compared to the mere 13.1% in the 2010 Census report (Colby & Ortman, 2014, Figure 7). Even more importantly, physicians themselves are growing older: "One out of three practicing physicians in the United States is over the age of 55 and many of them are expected to retire in the next 10 or 15 years" (Commins, J., n.d., para. 3). This means that by 2025 or 2030, the shortage will grow even more and the gap will be worse when coupled with the baby boomers' population needs. Furthermore, researchers at the University of Missouri-Columbia "predicted that by 2025, there will be a 29% increase in demand for physician visits by adults, fueled in part by the aging of the population" (as cited in Frieden, 2008, p. 3). Consequently, one of the contributing factors to the problem is not the scarcity of the supply; it is the rate at which the scarcity is growing. As noted, the aging of the current workforce has contributed to this problem. To add to this pressure, recent comprehensive laws have also influenced the demand for physicians.

In a recent study on the impact of the ACA, it was found that many "federally qualified health centers (FQHCs) expressed concern about the likely rise in demand, with staffing a primary worry" (Mahon, 2014, p. 1). Some of the stresses experienced currently by the healthcare industry are directly related to physician shortage: "Doctors must see many more patients each day to meet expenses…while dealing with [a massive amount of paperwork]" (Allen, 2013, p. 2). Additionally, due to the budget cut of $716 billion caused by the ACA to accommodate more "people through an expansion of Medicaid," the strain on the industry is even more pronounced (Allen, 2013, p. 2). Even before the ACA, the ripples of physician shortage were being experienced throughout the industry, as was observed after Massachusetts passed a similar act (Allen, 2013, p. 3). The Massachusetts Health Care Reform, passed in 2006, has contributed to an increase in demand for physicians due to the increase in insured people (Dunn & Shapiro, 2016). The Reform provides a healthcare marketplace for all eligible Massachusetts citizens. In short, the ACA has contributed in some way to the shortage. This, in addition to other issues, is precipitating an urgent response to the problem.

Proposed Solutions to Supply Shortage

Having explored the reasons for the current physician shortage, there are three possible sources to address the shortage: U.S. trained physicians, licensed personnel, and international medical graduates. A licensed person is defined as any hospital worker who works directly with patients but is not equipped to help patients to the extent of a certified licensed physician. These include personnel such as nurses, and emergency and medical technicians.

United States Medical Graduates. In 2014, there were a total of 18,078 U.S. medical school graduates. The total number of all USMGs was 85,260 in 2014 (AAMC, 2014, pp. 3-4). Taking into account the approximate five additional years of practice maturation the physicians will have to embark on prior to fully practicing as doctors, by 2019 the United States should ideally have 85,000 physicians eligible to enter the workforce. At a generalized attrition rate of 5.9% or greater and based on data provided by the AAMC, the number of medical graduates will be approximately 80,245 (Caulfield, Redden, & Sondheimer, 2014, Table 1). That rate is reflective of the years 2005 to 2010 for a five-year graduation plan. Thus, the projected supply of physicians in 2020 is 951,700 (Health Resources & Services Administration, 2008, p. 29). The most current supply is 878,194 (Young et al., 2015). According to IHS, the needed supply by 2025 will be anywhere between 939,974 and 972,894. Consequently, if all U.S. medical graduates were to be matched to a residency program (which typically does not happen due to the limited number of spots) then ideally there would be 815,845 physicians. This still leaves a deficit, or shortage, of 13,555 by 2020. This illustrates that even if the United States chooses to address the problem by supplying the market with USMGs, there will still be a large need left unmet. This leaves room for more solutions.

Team-based Approach. Another proposed solution to the problem is to allow licensed professionals to take the place of physicians in certain duties such as acute preventative care. In their article on the problem of shortage, Bodenheimer and Smith (2013) did not characterize the shortage in the usual framework of supply and demand; they saw the problem as a "demand capacity mismatch" (p. 1882). This takes the focus away from supplying the market and puts it on satisfying the customers, or patients.

In approaching the problem from this point of view, the authors proposed empowering and regulating licensed professionals such as nurses, psychologists, licensed clinical social workers, physical and occupational therapists, and pharmacists to fill some of the duties a primary care physician often does (Bodenheimer & Smith, 2013). The authors' argument for implementing team-based healthcare instead of the usual physician-heavy healthcare approach depends on the premise that it could apply mostly to relatively easy categories of illnesses such as preventive care in the forms of immunizations, cancer screenings, and counseling (Bodenheimer & Smith, 2013).

In all of this, it seems as if the authors oversimplified complex medical conditions and the professional care a physician takes in diagnosing and documenting these problems. In other words, there is a reason why currently, most of the types of services mentioned are not traditionally taught to the licensed professionals mentioned in this article. While a team-based approach with a physician as a director is legitimate, a strategy solely focused on freeing up physicians' time while putting more work in the hands of other healthcare professionals who may not have the comprehensive training is arguable, at best. Besides, the article went on to mention other factors that may play major roles in halting these efforts: money and technology (Bodenheimer & Smith, 2013). Namely, physicians are usually paid based on "piecework and required to perform the work personally," and as the authors pointed out, physicians would fight to keep their piecework, especially if a group of licensed medical professionals were to take some of these duties from them (Bodenheimer & Smith, 2013, p. 1884).

Another problem is the reliance on technology that the authors propose. For example, "Computers can be programmed with standing orders to determine whether a

patient with diabetes, hypertension, or hyperlipidemia should receive a medication refill and can authorize the refill without any human effort" (Bodenheimer & Smith, 2013, p. 1885). While this grocery-store self-checkout-like idea would work perfectly in an ideal world, there is a chance that either the machine would break down and give the wrong doses or someone would hack into the system. In fact, according to Ackerman et al. (2012), in a pilot program in California, the technology failed because it just could not be prepared for all of the human variables in advance. All of this would mean increasing costs for the companies involved because they would need to hire additional staff to monitor the machines constantly. These licensed medical professionals would also need additional education and training in the relevant areas, such as computer programming and computer variables planning, which would ultimately defeat the purpose because the energy and money spent in additional training for them might as well go to medical graduates.

On the other hand, this approach may be feasible without the technological aid because it is very efficient economically to have some of the people already in the environment get more training to make up for the shortage. At least, as a short-term solution to the main problem, this would be the most viable approach. However, a long-term solution would become necessary beyond a certain point. Just as the computers malfunctioned in the event of unexpected variables, this short-term solution could encounter an unexpected variable after a certain amount of time that would make it unsustainable.

Foreign International Medical Graduates[5]. A long-term solution might be the inclusion and certification of more FIMGs. IMGs currently make up one-fourth of "all practicing physicians in the United States" and are filling spaces in primary care (Collins, Ahmad, & Gans, 2008, p. 4). However, based on Collins' (2008) findings, the prevailing viewpoint is that IMGs get "the leftovers" (Collins, Ahmad, & Gans, p. 4). Many times, this is due to the following stereotypes: "Foreign doctors cannot communicate well with patients in the United States; physicians trained overseas are not as well trained, qualified, or experienced as their U.S. counterparts; IMG physicians offer a lower quality care" (Collins, Ahmad, & Gans, 2008, p. 4). Before exploring these stereotypes, it is pertinent to explore the journey of a typical FIMG.

From FIMG to Licensed Medical Physician

One of the initial responses to filling the gap is to recruit more FIMGs or foreign medical professionals who practiced in their countries prior to coming to the United States, because they are already experienced (Collins, Ahmad, & Gans, 2008, p. 4). In order for these graduates to become practicing professionals in the United States, they must go through the certification administered by the Educational Commission for Foreign Medical Graduates (ECFMG) and train afterwards as described here:

> The process usually starts with an application to ECFMG [which] verifies medical school transcripts and diplomas…prove they speak English; pass three separate

[5] All quoted or paraphrased statements concerning IMGs imply the inclusion of FIMGs because the authors have not made a distinction in their writings. Where appropriate, the researcher has used the term FIMG when strictly referring to those types of graduates.

> steps of the United States Medical Licensing Examination; get American recommendation letters, usually obtained after volunteering or working in a hospital, clinic or research organization; and be permanent resident or receive a work visa (which often requires them to return to their home country after their training). (Rampell, 2013, para. 11)

Some physicians are not fortunate enough to complete the process, mainly due to problems related to the certification process rather than to the actual exams as implied by Rampell (2013). Here, it can be surmised that the lack of a perceived efficient educational system through which FIMGs are certified leads to fewer certified FIMGs.

A typical FIMG comes from these top five countries: India, Philippines, Mexico, Pakistan, and the Dominican Republic. Together, the FIMGs from these countries make up 42.7% of the total FIMG population (American Medical Association International Medical Graduates Section Governing Council, 2010, Table 2). Prior to coming to the United States, all IMGs obtain either a visitor or a J-1 visa, which enables them to stay long enough to pass the examinations. However, in order to qualify, each FIMG must be a graduate of a program recognized by the International Medical Education Directory (Leon et al., 2007). After this, FIMGs must obtain a certificate from the ECFMG by having their medical diplomas verified and passing the three steps of the USMLE: Step 1 and Step 2: CK, and Step 2: CS. Then comes the hardest part of the journey: finding a residency (Leon et al., 2007, p. 488).

Before exploring this second part of the journey, it is appropriate to point out that the first step costs approximately $10,000 per physician (or less, depending on the level of the IMG), including the classes taken in preparation for the exams. As a case in point,

one FIMG, Larisa Sharipova, a Russian physician with six years of schooling and three years of practice as a physician, spent approximately $5,000 “on books and exam fees” (Hu, 2011, p. 2). This takes into account the average cost of translating diplomas and transcripts ($30 per page), the total cost of the USMLE steps, from Step 1 to Step 3 ($3,295),[6] the average cost of a program that covers the review to passing the USMLE ($9,000), and finally the average cost for an English language course ($200 to $500). Therefore, by the time the FIMG is ready to apply for the residency he or she will have spent anywhere from $15,000 to $20,000 on average. Because FIMGs are typically not yet U.S. citizens, there are very few scholarships and grants available. To apply for residency, the student pays approximately $10 per program plus a flat rate of $75 just for being an international student. Thus, a student may spend as much as $275 to apply to 20 programs. Most FIMGs, in fear of not being matched, apply for more residency programs, hoping they can qualify for at least one. Once the matching takes place and matches are released, those FIMGs who are not placed are obligated to take spots that are still left open. Those who are placed must pay for the cost of attending out-of-state interviews.

Once accepted for an interview after the matches, FIMGs are often obligated to pay for travel tickets and overnight lodging for the interviews (Leon et al, 2007). If he or she is denied residency at this point, the FIMG either has to quit and go back to his/her home country (if the visa forces this predicament), start all over again, or resort to changing his or her focus to another profession. This is why many highly qualified

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[6] See Appendix C for more information.

FIMGs turn to the professions of research, pharmacy, or nursing. If the FIMG is accepted into a residency program, however, he or she must change his or her immigration status from a tourist visa, assuming he or she arrived on this type of visa, to a more permanent visa, such as the J-1 visa, in order to work in the United States. This process of changing the immigration status may take up to a year, depending on many variables, including financial and processing variables: "Delay in processing paperwork needed to be granted a visa can cause difficulties for programs waiting for F[I]MG's" (Leon et al., 2007, p. 489). The requirements for a J-1 visa include, but are not limited to, "passport with validity date of at least 6 months from the end of the intended stay," "enough funds to cover all expenses," or "a sponsoring organization that will provide full support" (Leon et al., 2007, p. 492). Along the same lines, the same authors mention how difficult the process is and how necessary it becomes to hire a lawyer. Overall, FIMGs are not certified often enough to be a source of relief for the current shortage. This may be due to problems such as financial issues, a general lack of residency programs willing to hire them, and immigration issues, which involve a profound investment of money and time.

Often, these residency spots are mainly in programs undesirable to United States Medical Graduates (U.S. IMG)s for several reasons: unwanted geographic location, degree of "malignancy; [and] poor training" (Leon et al., 2007, p. 489). It can be surmised that the authors mean malignancy to be behavior that is malevolent towards the residents. This would make the program less appealing. In addition, some FIMGs are forced to apply for programs in areas that are not of interest to them and are not their original choices. This could mean that a very good physician who practiced as a

cardiologist in his or her country would choose to become a generalist for the sake of working to provide for his or her family.

Migration Context

In general, when immigrants migrate to another country, it is to seek refuge, work, or safety for themselves as single units or for their families. In the United States alone, there has been a constant flow of migrants from other nations since its creation. Moreover, with every wave of migrants has come various perceptions of their role within American society. The Pew Research Center published data on perceptions about immigrants (2015a, b, c). This study pointed to the fact that 53% of those who identified as Republicans, 37% of those who identified as Independents, and 24% of those who identified as Democrats believed that "Immigrants coming to the United States make American society worse in the long run" (Pew Research Center, 2015a). Additionally, in the same survey, 71% of the Republicans agreed that "Immigrants in the U.S. make things worse in the area of crime; 50% of Independents and 34% of Democrats" agreed with this viewpoint (Pew Research Center, 2015a, p. 2). This shows that the general sentiment in the United States and the perception about immigrants is that they are not necessary for an excelling society. Even more interesting is the general view that immigrants do not wish to assimilate:

> The view that immigrants generally don't want to assimilate is particularly widespread among Republicans; 81% say immigrants in our country today generally want to hold on to the customs and way of life of their home country, compared with 66% of independents and 55% of Democrats who say the same. Some three-quarters of Republicans (74%) say immigrants do not learn English in

> a reasonable amount of time, compared with 45% of Democrats. (Krogstad, 2015, para. 7)

However, when the issue of the perception about immigrants is not divided among party lines, most Americans believe that immigrants are making American society better in the end (Pew Research Center, 2015a). When compared with the general sentiment of immigrants strengthening or causing a burden on American society in the early 1990s, 51% of Americans, from 2012 to 2015, showed that they believed immigrants strengthen American society in general. These two studies, both by The Pew Research Center (2015a, b) were conducted by the same organization and within the same year, with the space of five months in between. This illustrates the vast uncertainty concerning the general perception of immigrants in the United States. What is certain, however, is the immigrants' own perceptions of themselves in a foreign land.

For many immigrants in the United States, whether documented, refugee, naturalized citizen, or expatriate, there is a general sense of fear about their predicament. Especially for immigrants who are undocumented, the fear of speaking the truth about their status is so daunting that even taking advantage of programs of deportation relief is difficult for them. To date, according to the Migration Policy Institute, "Only 55 percent of the estimated 1.2 million young people eligible under a 2012 program that offered temporary relief for the children of unauthorized immigrants have applied" (as cited in Adams, 2014, para. 13). Even those who are documented and can take advantage of becoming legal citizens, experience fear, as exemplified by the number of immigrants who took advantage of the 1986 reform: only 36% of those eligible applied (Adams, 2014). Much of this fear is rooted in the general sentiment concerning immigrants as

illustrated quantitatively above; it is also due to the political environment in which these immigrants must navigate. In 1998, authors McDonald and Balgopal asserted that for many of these immigrants, what awaits them when they try to assimilate to American society are not open arms, but rather "riots, police brutality and looting of their businesses by locals" (p. 1). This is not uncommon in the current year of this research: "the [denouncement of] uncontrollable invasion of foreigners; the demands of 'procedural legalese of having the right 'papers'"; and the general fear of anyone who doesn't look "sufficiently white or sound sufficiently Anglophonic" (Rampell, 2015, p. 3). The Assimilationist Threat Scale study by Paxton and Mughan (2006) pointed to the inherent fear Americans have towards immigrants by claiming that America "has a long history of prejudice against newcomers" (p. 549). The authors argued that this "hostility is rooted in "realistic group conflict theory [in that] immigrants are resented for threatening natives' economic and material interests in the form of jobs, crime, education, and taxation" (Blumer, 1958, & Hardin, 1995 as cited in Paxton & Mughan, 2006, p. 549). Other sources of fear for physician immigrants include the barriers to assimilation and the general problems associated with assimilation.

Communication Problems. When FIMGs move to the United States, they face many issues as immigrants, which are not unlike the issues faced by other types of immigrants. These issues are primarily rooted in society's perception of them, as well as their disorientation issues. The disorientation issues include communication problems, power dynamics, and cultural adaptation. The main misconception about FIMGs is based on their nonverbal communications and their general command of the English language. The top five countries of origin for FIMGs include countries with English as a secondary

language (Hallock & Seeling, 2007). Even if the country of origin does not in any way operate in English, there are other ways in which IMGs make up for their lack of English skills.

In their study on FIMGs' communications in the workplace, Jain and Krieger (2011) used a qualitative approach on the language barriers as well as the cultural barriers faced by physicians and how they solve these problems. The authors found that in terms of language barriers due to not speaking American English fluently and understanding the colloquialisms, the FIMGs indicated that they used the following methods: repetition (verbal), eye contact (non-verbal), and a supportive touch (emotions). In terms of cultural problems, the physicians recognized the differences and made efforts to accommodate the American way of approaching patients. They changed or pronounced their words clearly and became familiar with shortened words for medical tools and concepts alike (Jain & Krieger, 2011).

In his article on immigrating to the United States as an FIMG, author Vijay Rajput (2012) talked about his problems upon embarking on the journey of becoming re-certified in the United States. Among his many issues, the most striking were those that were simple to Americans but hard for him to comprehend as an outsider. He described the challenge of understanding slang terms and phrases such as "I passed out last night," which to him, meant dying, rather than what the patient actually meant to communicate (p. 2197). These forms of communication, that is, the knowledge of slang terms and non-verbal cues, are some of the most common issues faced by FIMGs.

Rajput is not the only author to mention the awkwardness that FIMGs often face when going into their certification processes. In a study by Dorgan, Lang, Floyd, and

Kemp (2009), the authors used a qualitative methodology to measure the apparent communication barriers for IMGs. Their findings can be summarized in tandem with the experience of Rajput: Namely, most of their barriers in communicating with their patients stemmed from a "lack of communication training" as well as problems with "unfamiliar dialects" (p. 1567). A similar study in 2010, published by Huijskens, Hooshiaran, Scherpbier, and van der Horst, also pointed to the communication barriers faced by FIMGs in the Netherlands. Along the same lines, these researchers also pointed to some of the enabling factors that altogether contribute to a FIMG becoming certified. Another important issue is a tangent of many disorientation issues: power relations.

Power Dynamics. In many countries from which FIMGs emigrate, most doctors, especially male doctors, have absolute authority in terms of the respect afforded them as it concerns their person and their word as final. Most of the participants confirmed in Dorgan et al.'s (2009) research on communication skills in the IMG workforce that:

> Patient relationships in Eastern cultures are "completely different" from those in Western cultures [and that within their own cultures], physicians were regarded with a great deal of respect, and the physician–patient relationship was more vertical—that is, the physician had the authority in the relationship and, therefore, made the decisions. (p. 1571)

FIMGs are commonly not ready or trained for these decisions and dynamics, which they often face during the certification process. Moreover, these issues do not aid in increasing the supply of physicians available to fill the shortage.

Healthcare Workforce Context

As a country that was founded on welcoming those seeking refuge, the United States has always had a flow of incoming physicians from other countries. It was not until as recently as the 20th century that regulations were standardized concerning IMGs. Whereas in the past most FIMGs were from European countries, this is no longer the case. Since 1958, as attested by the ECFMG, the percentage of IMGs in the U.S. physician workforce has remained at one-fourth of the population of medical graduates (Whelan, Gary, Kostis, Boulet, & Hallock, 2002). Furthermore, the authors testified, "5000 IMGs enter US graduate medical program each year" (Whelan, Gary, Kostis, Boulet, & Hallock, 2002, p. 1079).

Table 2

Certifications Awarded in Relevant Years

Year	1998	1999	2000	2001
Certifications Awarded	1,184	5,653	6000	6000

Note. Numbers from Whelan, G. P., Gary, N. E., Kostis, J., Boulet, J. R., & Hallock, J. A. (2002). The changing pool of international medical graduates seeking certification training in U.S. graduate medical education programs. *Journal of American Medical Association. 288*, 1079-1084. doi:10.1001/jama.288.9.1079.

Due to a change in the process by the ECFMG to include a Clinical Skills Assessment, fewer certifications have been awarded. Specifically, "Fewer than 6000 certifications per year were issued in 1999, 2000, and 2001" (Whelan, Gary, Kostis, Boulet, & Hallock, 2002, p. 1080). The total number of certificates awarded in 1998 was 1,184, which is a drastic difference from 1999's figure of 5,653 (Table 2). As a result, this addendum of a Clinical Skills Assessment was a major event, which changed the landscape. This was a

pivotal point in the history of IMGs because it changed the requirements of becoming a practicing physician in the United States: The focus changed from a purely knowledge-based assessment to a skills-based assessment.

Discrimination Against FIMGs. The article "The Unkindest Cut of All" pointed out that IMGs, in general, are indeed subjected to discrimination by general surgery residency programs (Moor & Rhodenbaugh, 2010). This is often because of the misconception mentioned earlier by Collins, Ahmad, and Gans (2008) that they do not offer the same type of care that USMGs offer. To explore this misconception, Sang-O Rhee (1977) studied the effect of medical schools on the effectiveness of U.S. physicians in comparison to FIMGs. The study was based on the idea that IMGs "are not well trained, qualified or experienced as their U.S. counterparts" (Collins, Ahmad, & Gans, 2008, p. 4). While the population used in the study is not representative of all IMGs and all USMGs, the author did find that overall USMGs performed slightly better than IMGs within their domains of residency (Rhee, 1977). Outside of their domains, however, there was no statistically significant difference between the quality of care and utilization of hospital resources such as time (Rhee, 1977, pp. 570-572).

The author further explained that the findings within domains might be due to the mean difference of IMGs who studied in "first quartile" medical schools, or the better medical schools, in comparison to IMGs from medical schools that could not be weighted. In other words, there is a statistical significance due to the presence of the weight assigned by the author to certain schools (Rhee, 1977). Rhee's research concluded that IMGs coming from better schools perform better than IMGs coming from

lower rated schools. This does not mean that IMGs coming from better schools perform better or worse than USMGs.

On another note, the findings are disputable because this study is almost 40 years old. Nevertheless, it is one of the few studies that address the judgements about quality of care between both groups. Consequently, there is no concrete evidence that FIMGs provide care that is lower in quality than USMGs. To emphasize, 25 years after Rhee's (1977) research article, Moore and Rhodenbaugh pointed out that, in fact, "Program directors [see] no clear differences in surgical skills between IMGs and USMGs" (2002, p. 228). Thus, this misconception about IMGs relies on unproven claims.

Furthermore, in terms of power, IMG physicians have grown to understand and employ a method of including patients and their opinions into the treatment and process, whereas in their own countries, the patients often did not take an active part in planning their own health (Jain & Kruger, 2011). Overall, based on this study, it is clear that IMGs make appropriate concerted efforts to communicate with others in their residency programs as well as their patients. Thus, the authors argued, there should not be discrimination against IMGs based on their lack of or inadequate communications skills.

Conclusion

This study was needed as well as imperative because as the shortage of physicians grows, the vast availability of uncertified foreign medical professionals will become more apparent. However, if the process of certification is not revamped according to the changes needed to produce more certified and licensed USIMGs, this lack of supply in an area with such great demand may have an even more significant negative impact on the healthcare industry.

Socially and economically speaking, it is important to study whether there are factors that may encourage or discourage foreign physicians from completing the certification process. In some cases, valuable physicians and/or other medical professionals drop out of the process in favor of becoming underemployed. This, in turn, may contribute to a skewed output of current employment numbers in the healthcare industry with an increasing number of foreign doctors becoming nurses (Krupa, 2012). Nevertheless, if the problem is not adequately dealt with, it will continue to contribute to underemployment or, worse, a continuation of physician shortage. Even worse, if there is no data available on the effects of the certification process on FIMGs, there may not be timely reform in this area.

FIMGs are viable sources of supply for the current shortage, especially given that the misconceptions about them are proven not to be true (Collins, Ahmad, & Gans, 2008; Hallock & Seeling, 2007; Moore & Rhodenbaugh, 2002). The road to becoming a licensed practicing FIMG in the United States is fraught with challenges that could be regulated further to improve the rate at which these individuals succeed. These challenges arise from being an immigrant and the various problems associated with migration and assimilation. Of all the problems IMGs face in the context of being an immigrant and being a physician seeking work, the main problems stem from perceptions of themselves as immigrants in a society that is confused about its own viewpoint of immigration, as well as the various barriers they face in their immigration journeys.

The purpose of this research was to explore some of the effects of the certification process on FIMGs. The importance of this research is to provide a medium through which others, specifically educational leaders in the health sciences, can understand the

many issues perceived by FIMGs as hindrances to completion of certification, or contributing factors to success in certification. This research was necessary since there is currently little qualitative research on how IMGs cope with the processes of becoming licensed physicians in the United States.

Chapter 3

Methodology

Due to the nature of the phenomenon of FIMGs in the United States, the best approach for this study is qualitative. This method is aligned with critical theory, which is "concerned with empowering human beings to transcend the constraints placed on them by race, class, and gender" (Fay, 1987, as cited in Creswell, 2003, p. 65). This study fundamentally examined how a group of people who fit into a certain educational and sub-population status perceived the constraints within the certification process. This study was likewise interested in exploring issues that arise during the process of certification and how those issues influence the outcome of the FIMGs in question. To reiterate, the primary research question was as follows: What are the perceptions of FMIGs regarding the factors that influenced or impeded the ECFMG certification process?

Given that all FIMGs are inherently different in terms of nationality and socio-economic background, a quantitative approach to the problem may possibly ignore factors that cannot be captured statistically, such as perceptions of family or community support, perceptions of expenses in studying for various exams, and most importantly, the hidden aspects of learning a new language or the learning curve involved in becoming familiar with a different culture and how all of these factors affects the learning process for an physician. However, it is important to state that this research did not seek to create a new theory on educating FIMGs. It actually sought a more ultimately practical end:

providing qualitative information for the ECFMG or any medical school leaders willing to consider the effects of the certification process on a potential source of supply for the physician shortage—FIMGs. Thus, the critical theory employed in the method of research was necessarily serving as an advocacy lens (Creswell, 2009, p. 64).

Given these viewpoints and considering that this is primarily explorative research, the data was collected through interviews. Specifically, this research employed Carspecken's method. Through this method, the researcher explored data about learning as an adult in a different system by employing questions about factors that contribute to adult learning, such as previous lived experiences and barriers.

Other theories in consideration while building the interview protocols included andragogy, which assumes the following about adult learners: They are "independent and self-directing; have (various degrees) of experience; [learn better through the integration of] learning to the demand of their everyday life; interested in immediate problem centered approaches, and are motived by internal [rather] than external drives" (Abela, 2009, p. 11). As Abela (2009) mentioned, what is missing from andragogy and what may be the deciding factor in the success of an FIMG going through the certification process, is motivation. Thus, the most appropriate theory, which also supports adult learning theory, is transformative learning theory, which advocates that adult learners learn through "established reference points" (Abela, 2009, p. 13). These reference points are essentially reflections based on the "genetic makeup and cultural assimilation" of the adult (Abela, 2009, p. 13).

Another subject necessary for consideration in adult learners in the medical sciences is motivation; specifically, the ERG model put forth by Clayton Alderfer. This

model consists of "existence which is similar to Maslow's safety needs hierarchy, relatedness which stresses the importance of interpersonal and social relationships, and growth which considers the intrinsic individual desire for personal growth (Abela, 2009, p. 12). Therefore, all these theories provided a medium through which the research pinpoints problems that arise in the certification process.

Population

The population used for this research included foreign FIMGs, both male and female, who were living in the United States. All FIMGs were from different countries and had different specialties in the medical field. Additionally, all participants were practicing physicians prior to migrating to the United States. The total number of participants was six, given the timeline of the research, as well as the rich data the researcher sought to examine. Given the amount of questions and the semi-structured nature of the data collection, data saturation was around 10 participants. However, the research was limited to six participants due to issues such as time.

The participants in the study were characterized as FIMGs with no prior education within the United States, and met one of the following criteria:

1. A medical professional who was fully certified to practice medicine and was practicing medicine either as a resident or beyond. Certain doctors were certified, but not practicing as physicians. Both types of FIMGs were invited to participate in the study.
2. A medical professional who was currently not pursuing certification to practice as a physician in the United States due to personal or professional reasons. This included physicians who chose instead to pursue nursing, pharmacy, research, or any other

type of profession, be it in medicine or otherwise. Both of these types of participants were necessary for the study, given that the main aim of the study was to explore which factors are beneficial for FIMGs to get certification and what changes, if any, need to be made in order to ensure an increase in the amount of FIMGs who become certified and practicing physicians.

Location

The study took place in Houston, Texas, a large metropolitan city in the southwestern United States. The location is unique because it houses a large medical center, which serves patients from around the world. Due to the nature of the study and the fact that physicians tend to move around according to their residency matches, there were FIMGs in the study who resided outside the primary metropolitan area of the research. The first few participants were solicited by an email announcement, which was sent to various immigrant-serving non-profit groups. From this, the primary researcher received the names of other participants through snowballing.

The individual semi-structured interviews took place at the subject's preferred location, either face-to-face and/or by technology-facilitated means (e.g., Skype, phone, or email). The consent of the individuals participating in the Skype and phone interviews was obtained through an informed consent form (see Appendix D). Since the agreement to use Skype or phone was included in the informed consent, some of the consent forms were collected by email within five days after the participant reviewed them. For face-to-face interviews, the subject was given the informed consent by the principal investigator prior to the observation. Thus, all interviews were conducted after consent forms were collected.

Sample Size

As mentioned before, there were six participants in total: three were practicing/non-practicing certified U.S. physicians and three were non-certified physicians. Each individual who expressed interest in participating was vetted for eligibility for the research. Participation in the study was determined by asking potential participants the following initial questions:

1. Did you graduate from a medical school outside the United States?
2. Did you attend any school in the United States?
3. Are you certified to practice medicine?
4. If yes, are you employed as a resident or doctor?
5. If no, are you pursuing certification?

Data Collection

All participants were interviewed according to interview protocols intended to understand the different aspects of the theories mentioned above. All data collection was through transcripts of audio recordings or thick notes. Due to privacy concerns, all participants were informed via the consent forms that the interviews would be audiotaped for transcription. For the participants who denied consent for audiotaping, the primary researcher instead recorded the participants' words in writing and gave them an opportunity to review the notes for accuracy. Moreover, for those who did not give consent to be audiotaped, the primary researcher explained that the interviews would be longer due to the live transcription needed to capture data. In this way, the primary researcher ensured enough time during the interviews to record everything.

Because of the semi-structured questions, the principal researcher reminded subjects that there were no right or wrong answers. Subjects were given an opportunity to ask further questions at the end of the interview. At the end of each interview, all participants were asked for permission for a second or third interview, both verbally and in writing through email. The goal of this follow-up interview was to clarify information and capture any data not collected in previous interviews. For the final step of the interview process, subjects were asked to read the final notes of the interviews to ensure that the text was reflective of their answers and viewpoints and to correct, modify, add, and/or edit any texts of the interviews.

Subjects in this study did not receive tangible benefits for their participation. Nevertheless, they were thanked for their participation and contribution for the advancement of research. All subjects were asked to dedicate a maximum of six hours towards the research with one hour per session, which was spread over several days, at their discretion. For some participants, one hour was allotted for observation (per permission), four hours for questions, and the last hour was allotted for a final review of transcripts and notes of interviews.

The main variables explored included motivation and reference points in relation to learning as an adult and adapting to a different culture. The researcher also placed an emphasis on lived experiences, asking questions that required the participants to recall specific examples of issues they faced as FIMGs. Other variables measured in relation to the certification process included experiences in medicine and medical school, dependency on others, mediums of learning, and the role of culture in integrating learning into everyday life in America (Abela, 2009). These variables were chosen to examine the

main question of how the certification process influences the outcome of becoming a practicing FIMG in the United States.

Method of Research

The main methodology employed was Carspecken's methodology. This methodology was chosen based on its examination and viewpoint of systems and culture. This research used a qualitative approach research method (Carspecken, 1996) and collected data through observations and interviews. In doing so, the research employed an interview protocol based on the research question and various observations made prior to and during the study. This method was chosen because of its emphasis on the viewpoint of systems and culture. Given that many of the participants were from different cultures and were navigating within a system, it was necessary to approach the research from this perspective. This consisted of collecting dialogical data through interviews; explicitly reconstructing the data gathered; placing the information and data gathered within the body of literature and research already composed about this specific topic and how it can play an important role in the future; and, finally, constructing a probable theory or summative suggestions based on the findings. This theoretical framework is practical in terms of establishing much-needed primary records of experiences, which could pave the way for appropriate changes in the process of certifying those who enter the United States with medical education and experience.

Given the qualitative nature of this study, an initial hypothesis was not necessary. However, based on various articles written by FIMGs such as Vajay Rajput, 2012, it was originally surmised that many of the FIMGs who participated would indicate a general lack of support and lack of external, rather than internal, motivation as some of the main

reasons why they were not seeking certification, or as some of the reasons why they were successful in their certification pursuits. Furthermore, those who were successfully certified and practicing would indicate an affinity to the U.S. medical education system and great support as one of the main reasons they were successful.

Ethical Considerations

All participants in the study were required to sign an informed consent form as approved by the Institutional Review Board. This document described the research procedures as well as the time needed for each interview, so that each participant was well aware of the time commitment. Additionally, all participants were informed verbally and in writing that their respective names and all other identifying information would be changed in order to keep their identities protected.

In order to ensure the quality and integrity of the research, all information was kept on a secured USB drive. All recorded information, as well as any transcripts of the interviews, is currently in one central location. The information on the USB drive is password protected, with the researcher the only person with knowledge of the password. After the research was conducted, all information was turned over to the committee chain to be kept on file according to guidelines from the Institutional Review Board.

The signed consent forms of all participants were secured in a protected environment. Due to the nature of some of the questions, the participants were given the freedom to formally resign their participation by email should they choose, as outlined in the consent form. The researcher recognized that for some of these participants, it took courage and a great amount of support for the participants to talk about their experiences. Accordingly, it was vital for all participants' identities to be carefully handled. Subjects

were given pseudonyms, and the transcripts do not show their real names. A separate file was used to link the pseudonyms to the participants' real names.

The researcher ensured that all precautions were taken in order for the participants to feel safe. All participants were given the freedom to choose the times and days that worked best for their schedules. Participants were also given the freedom to choose the medium through which they were interviewed. In addition, in order to ensure that the participants were well aware of the impartiality of the research, all were informed that the research was not being funded, nor was it affiliated with any other entity.

Data Analysis

In order to analyze the data collected, the researcher employed methods including validity reconstruction and pragmatic horizons. The reliability of the data was ensured through methods such as peer debriefing, power analysis, and member checks. Validity reconstruction is a form of analysis which looks at the "possible meanings one could read from a social act" in Carspecken's words (1996, p. 113). This means that some participants' words were examined for what was normal or not normal according to them (based on their perceptions and experiences). Validity reconstructions look at the reasons behind what participants say. This form of analysis goes hand in hand with pragmatic horizons, which examines the foreground and background definition of a statement based on the observations of or previous diction used by the participant. Pragmatic horizon analyses and validity reconstructions answer this question: What is the underlying meaning that is unspoken but present in the data collected and how does it compare to the immediate meaning of the particular unit of analysis? Both forms of analyses seek to expose the trends present in the data collected.

A primary procedure for ensuring the dependability of the data undertaken by the researcher was in repeating the question more than once, in more than one way. This ensured that the answer to the core of the question was clearly stated and not muddled. The trustworthiness of the study was not secured through consistency checks in recorded interviews as well as through non-leading questions.

The role analysis has necessarily revealed the participant's presentation of himself or herself within the system during the study. This concept particularly focuses on how participants act in relation to others within the system through reported data. This is often implicit. Because role analysis is often reserved for studies that include observations of the interaction of participants within the system, this analysis was not used for all participants due to the lack of data based on raw observations of the participants within their systems.

Power analysis falls under normative-evaluative claims because it examines the role of the researcher in influencing the participants' choice of words. This necessitated member checks, which were meetings with the participants in which the researcher presented the reconstructive data and notes to the participants to insure that all data collected reflected the participants' lived experiences.

Additionally, peer debriefing with a fellow researcher who was conducting similar research was needed, given the nature of the participants and the danger of biases from the primary researcher. In this debriefing, the researcher presented all analyses to the peer and asked if any analysis was skewed or wrong based on the data collected. This peer debriefing took place in a manner that protected the identity of all participants in the study. The primary steps in Carspecken's methodology, which was used for the analysis,

in no particular order, are centralized in Step 1 through Step 3 (Observation, Reconstructions, and Dialogical Data collection).

Thus, the trustworthiness of the data collected was ensured through strategies, which included repetition of questions and power analyses. The analysis of all data included validity reconstructions and the consideration of pragmatic horizons. All of these methods lent themselves to ensuring that minimal bias was present in the collection and analysis of the data.

Limitations of the Study

One of the major limitations of the study includes its time period. This study would benefit from a longitudinal study in which qualitative data about the effect of the certification process was collected from participants and turned into practical steps, which could then be applied to other FIMGs. Another limitation of the study is the number of participants.

This study would have also benefited from having more researchers, which would have allowed a greater range of participants and a larger number of participants. The data would be richer and far more diverse: Each experience is unlike the other. This would mean that the study could look at FIMGs in four of the biggest metropolitan areas in the United States with the greatest numbers of immigrants. This would also have benefited the study in that peer debriefing is one of the strongest forms of guaranteeing the constancy of the study. Because of this, both limitations should be avoided in expanding the research.

Conclusion

In summary, Carspecken's methodology was employed for this study; particularly, the first three steps of his methodology. Essentially, the analysis employed an andragogy lens to look at variables that contribute to adult learning and the various issues associated with migration. The ethical considerations were addressed with all participants prior to the gathering of data. There were six participants and all were informed of the purpose of study prior to being allowed to participate. In order to ensure the reliability and validity of the study, various methods were undertaken including peer debriefing and consistency checks. Furthermore, despite the limitations of the study, it holds great promise for future studies dedicated to the subject at hand.

Chapter 4

Findings

This research looks at some of the pertinent issues foreign International Medical Graduates (FIMGs) face in relocating to the United States. Six FIMGs were interviewed for the research according to interview protocols following Carspecken's methodology (1996). For the purposes of confidentiality, this thesis will refer to each participant by an identifying number: P1, P2, P3, P4, P5, and P6 in no particular order. The objective of this study was to explore issues that arise during the process of the Educational Commission for Foreign Medical Graduates (ECFMG) certification. The main research question asked: What are the perceptions of FMIGs regarding the factors that influenced or impeded the ECFMG certification process? This chapter will present the findings of the study in an attempt to answer this question.

Summary of Demographics

All six participants were below the age of 30. Three of the participants (P1, P5, and P6) were practicing physicians in the United States. P5 and P6 were from Nigeria and the other four were from Iraq. P1, P2, P4, and P6 were all males and P3 and P5 were both females. The other three (P2, P3, and P4) were seeking certification and work as doctors. Of these three, two participants did poorly on their United States Medical Licensing Examination (USMLE) and one had yet to finish all of his USMLE exams. Three of the participants were legal permanent residents or green card holders, two had legal resident status, and one was a refugee who had been granted asylum. Of the three participants with permanent legal residence, two of them had previously been on a work visa. All

participants were interviewed in person or by phone (with video for all except for two participants) according to their individual preferences, which they indicated on their consent forms. Four of the participants, P1, P4, P5, and P6, gave permission to be recorded and transcribed. The other two participants, P2 and P3, did not give permission to be recorded, and the researcher relied on non-verbatim live transcriptions of these participants' responses. Quotations from these interviews are presented in paraphrase form without quotation marks.

Table 3

Summary of participants.

	Gender	Country	Status	Immigration Status
P1	Male	Iraq	Certified Physician	Legal Permanent Resident
P2	Male	Iraq	Not certified	Legal Permanent Resident
P3	Female	Iraq	Not certified	Legal Permanent Resident
P4	Male	Iraq	Not certified	Refugee
P5	Female	Nigeria	Certified Physician	Work-Based residency
P6	Male	Nigeria	Certified Physician	Work-Based residency

Note. All participants' data are summarized in this table.

Analysis of Data

In analyzing the data, the first step taken was initial coding, based on Carspecken's methodology (1996). The transcripts were examined for words that appeared the most frequently or terms and phrases that all of the participants mentioned. These were the following: family, fresh graduate, immigration, culture, USMLE, stress,

shame, and immigrant. In some cases, the audio tape and the transcripts were cross-referenced for accuracy. For the two participants who preferred not to be recorded, the live transcription notes proved useful for this analysis. Most of this coding was guided by the covert or concealed categories of questions; meaning each code appeared within a certain topic and many appeared across topics, such as the code of immigrant and stress.

After this, the data was analyzed for initial meaning. In the case of P2 and P3, only audible information was available, as they were interviewed over the phone rather than in person. The rest of the participants' words were reconstructed based on observed nonverbal communication, which had a large impact on the meanings assigned to the codes here. The data was then analyzed based on its validity according to objective, subjective, and normative-evaluative claims. Objective claims were factual, such as the fact that programs impose a higher price on applications for residency after an applicant has submitted a certain number. Subjective claims are generally claims based on the felt experiences, such as P6's claim that he was "very ashamed" of his thick accent. The strongest normative claims came from the males and Nigerians in the study who asserted that they needed to be doctors and needed to succeed. All of the participants hesitated in making evaluative claims about the certification process, choosing instead to cautiously remain neutral.

To further ensure validity, the researcher relied on peer debriefing with a fellow researcher working on a similar study. Additionally, the data was triangulated with field notes and non-verbal observations. For the two Nigerian participants, the data was collected after the researcher was given permission to observe them at their practice briefly for less than thirty minutes. After these analyses, the data was analyzed for

meaning according to the original research question. From this second level of analysis arose the following codes: shame and stigma, lack of support, and motivation.

Participants were interviewed in a semi-structured environment. The interview process led to the refinement of the original research question to ask: What are FIMGs' perceptions regarding the factors that influenced or impeded their own journey through the ECFMG certification process? The interviews revealed that all participants perceived the certification process to be stressful and filled with hardships particular to their status as FIMGs.

Even though they perceived the journey as stressful and filled with hardships, they also all agreed that the certification journey was necessary to their survival as immigrants within the United States. Furthermore, they all felt the ECFMG certification process, over time, became embedded in their identities as immigrants and as professionals because it shaped their experience as immigrants in America. The certification process took up much of their lives and their experiences as their daily lives revolved around it. Those who succeeded in becoming U.S. physicians primarily viewed their journeys as a successive timeline of hard work and inner strength. Those who have not yet succeeded in securing positions as practicing physicians named particular factors in the certification process as roadblocks that prevented their success. Both groups of FIMGs, currently certified and uncertified, viewed the educational aspect of studying for the exams as challenging. Moreover, the two groups generally agreed about the entire process being stressful. Both groups generally viewed the social aspects of the certification process in a negative light. Both groups also described the financial aspect of the certification process as the largest barrier they had to overcome. At the same time,

three of the Iraqis—the fourth is a refugee—described the financial burden as less than they expected, while all of the Nigerians and the Iraqi refugee described it as more expensive than they expected.

Results

Analysis of the interview transcripts revealed three emergent codes relevant to the research question:

1. Shame and stigma
2. Lack of support
3. Motivation

In relation to shame and stigma, several referenced not being new graduates; others mentioned language and culture as a source of stigma related to being an immigrant. Two participants felt embarrassed about issues dealing with language. In relation to lack of support, participants referenced lack of financial support. Finally, motivation, in terms of being highly educated adult learners, was another finding that is worthy of note. The sections below expand on these categories with selected supportive statements as expressed by the participants.

Shame and Stigma

When asked how they perceived their journeys, all six participants expressed concerns about perceptions, by others, of them as foreign. The non-practicing physicians felt that they had been unable to separate themselves from their foreign identities. A recurrent theme in relation to stigma among these participants was that they would not be able to secure positions without excelling in every way to erase their foreign-ness. In particular, they felt that imperfect scores on the USMLE exams would make it impossible

for them to gain positions. The sections below describe the sub-categories of stigma and shame: different aspects of their lives or backgrounds that the FIMGs felt had increased the stigma they faced and shame felt by some of the participants.

Fresh Graduates. Fresh graduates are FIMGs who completed medical school less than five years before coming to the United States. Most programs, which hire FIMGs, prefer such doctors. As P1 explained, "[Residency programs] put that on their website -- like their requirements. For example…we want applicants within 5 years of graduation" (P1, Part 3, p. 6). Participants explained that institutions prefer fresh graduates over graduates with more experience because they value knowledge of scientific concepts over actual practice or experience in the field, and they fear graduates of older vintage may have forgotten their knowledge or not be up to date. P2 theorized that hospitals and medical institutions want doctors who have knowledge of developing trends. They see newer graduates as more versatile than people who have been practicing or have specialized in the same practice for years.

Among the participants, only one qualified as a fresh graduate, and she had not succeeded in scoring within the high range (260-300) on the USMLE for which she had hoped. P3 is from Iraq and she graduated in 2012. She came to the United States in 2014 and started her application for ECFMG certification (by completing Step 1 of the USMLE). By all accounts, she would have been considered a fresh graduate, had she started her application process for residency programs in 2015 or any year prior to 2017. However, factors such as a recent baby, depression from missing her family in Iraq, and not being able to adapt to the language and culture in a timely manner may have

negatively influenced her ability to focus on studying. The other five FIMGs were also practicing doctors in their home countries for years after graduating prior to coming to the United States. As P1 described, being a fresh graduate is a very important aspect for hospitals/residency programs looking to hire physicians:

> [W]e have a lot of people that are great physicians, but they are just seven years past graduation or six years because, you know, they work for three-four years as physicians in their countries, and then they decided to come over here and now they have a problem, because they've got maybe good scores but not that super-good. (P1, Part 3, P. 6)

P4 also referenced the need to score high on the USMLE because of not being a fresh graduate:

> [I]f you have, if you are a fresh graduate you can only get not high marks, only pass above or go with the average, your chances will be almost…for Internal Medicine not much let's say like other minor branches like Surgery, Dermatology or something like that, but with Internal Medicine, Pediatrics and so on it just is so…they'll go with 90% budget so old graduates it will be going down below 50, 40 or 30%. So you must have a high, high score [if you are not a fresh graduate]. (P4, Part 2, p. 5)

P5 referenced similar difficulties; she had been out of medical school for more than four years when she applied to residency programs. As she said, "I was considered an old graduate by the time I started applying to be matched. At that time, I had been out of school for approximately four years, give or take a few months" (P5, Part II, p. 4). P5 practiced medicine for two years in her home country. She felt that not being a fresh out

of school graduate had worsened her chances of finding a job even more than her immigration status. P6 had been out of school and practiced in Nigeria for five years. He mentioned friends who are fresh graduates, saying that they experience much less pressure than he has of scoring high on the USMLE exams.

P3's status as a fresh graduate did not mean that she did not worry about her USMLE exam scores. She took the exam the first time and scored below 240; she despaired of getting a position because of this. She was considering dropping the attempt to gain certification, because she felt that a potential match would view taking the exam a second time negatively.

Immigration. Immigration, itself, was not a finding during the study; however, all participants described immigration issues as one of their greatest sources of stress in the certification process. All felt that the issues associated with immigration had determined their ability to focus on studying for their exams and to focus their energy on achieving certification. For example, participants had to insure their immigration records permitted them to work in the United States and that they applied for residency programs with a history of accepting international students. All participants mentioned the stigma attached to being foreign doctors and that they felt they had to choose specialties or localities that are undesirable to United States Medical Graduates (USMGs). For example, P4 said:

> We are not applying for the…for the surgery or something like. Because you know even the minor batches because these are….they ask frankly they want U.S.

> graduation. Because U.S. graduation it is like a demand …because you know when there are [few] spots and most[ly] [USMGs] want these spots…...
>
> [They don't] need to go to El Paso or something like that…[but] to get help for me and my friends even to get jobs, we can go to Alaska. (P4, part II, p. 21)

At the end of the day, P4 "need[s] to be a doctor", so he'll compromise on specialty and location (P4, part II, p. 21).

Those who had not secured positions as practicing physicians believed that stigma of foreign doctors had been the key barrier. When asked if they believe that the stigma can change, they all expressed fears that it could not, that USMGs would always be favored. They also thought that immigration issues made employers wary. The practicing physicians also described some difficulties communicating with patients and gaining their trust as a reason for stigma.

All the FIMGs referenced their legal immigration status as a barrier. The salience of this issue complicated the data gathering: some participants refused to describe their own legal status. P2's and P3's interviews were not recorded, and both are from Iraq. They both expressed their concerns that discussing their immigration status in a recording would put them at risk because they were immigrants from Iraq. The other four participants, while willing to talk about their immigration statuses, chose not to expand on the issue. P1, P2, P3, P4, and P5 were all interviewed during the 2016 presidential campaign. P6 was interviewed after President Donald Trump took office. P6 mentioned more than once that he was completely uncomfortable discussing his immigration status.

In fact, the sampling process had confirmed that all participants held legal documentation of their presence within the United States. P1 is a legal permanent

resident, P2 and P3 are legal residents who have family within the United States who sponsored them, P4 is a refugee, and P5 and P6 hold work– based legal status. None were citizens yet, and all recognized that as immigrants they had an uncertain position in the country. P1 mentioned during his interview that he was up for citizenship within a few days of his interview. He seemed unsure, at the time of the interview, if he would gain citizenship. Even with permanent legal status, their legal statuses could be revoked for reasons of crime or in some cases, purely at the discretion of an immigrant judge. Immigration was an important factor in all of the interviews as they all took place during the charged political atmosphere of the presidential election in 2016, which focused on legal and illegal immigration.

Language. All of the FIMGs reported that their work required them to speak with people with differing accents and dialects. P1 was the only participant who said that this did not pose a problem in his work because he had learned English as a child in Iraq. In response to a question about difficulty with language, he noted the difficulty he encountered when he moved to Louisiana:

> The guy that called me to deliver my furniture, I couldn't understand anything from him. I was like, 'I'm sorry, I can't understand anything you're saying.' And he tried to speak more slowly. That was the only time in my six years here in the States (P1, Part II, p. 8).

P1 mentioned multiple times during his interview that no one ever questions him about what he means or asks him to repeat himself. He did mention, however, that language plays a vital role in the matching phase of the certification process:

> Like, in my interviews, because when you interview for a residency or for a job, they focus on that kind of stuff because they want to hire people they can understand. It's very important for them. So that's part of the evaluation that they have in mind before they accept you. This is something they have to make sure that you are doing well during the interview. That's why they talk to you about different kinds of stuff. Maybe because they are interested and maybe because they are just trying to test your English and see how you engage on different kinds of subjects. (P1, Part 2, P. 4)

He reiterated the point in his third interview (P1, Part 3, p.2). P2 and P3 also mentioned that the level of spoken English plays an important role in the residency interview process, in addition to any experience FIMGs may have as researchers.

P2 referenced the difference between the English he learned in school, which is spoken in Iraq, and American English in terms of vocabulary and expressions. He also mentioned that the first few months he lived in the United States were difficult because of needing to learn slang terms, dialects, and jargon the USMLE requires and his peers used. P2 had studied English in high school. He said that television had been instrumental, including that the show, *House,* helped him learn medical jargon.

P3's voice got softer when she mentioned that she was disappointed in her own difficulties with English. She said regretfully that people would make jokes and she did not really understand the jokes or follow the conversation. She expected herself to be better than she actually was at understanding their jargon. She described finding that her American colleagues perceived it as unfriendly when she did not laugh at a joke because she did not understand it. As a result, she avoided friendly conversations with coworkers

because she felt ashamed about such interactions. She also worried about how she would handle doctor-patient communication in the future because of linguistic barriers.

P5 and P6 also expressed their problems with being understood because of their accents. P5 said:

> Many people had a hard time understanding my English because apparently I had a deep voice and a thicker accent than I have now and I remember one time when I visited a testing center in Houston to learn more about the exams…the receptionist, she said at that time, she wasn't able to understand and she was actually rude to me and she told me to look online for more information. (P5, Part 1, P. 4)

P5 felt the receptionist had refused to give her service and felt the action was discriminatory against her as an immigrant. P6 also said that his thick Nigerian accent affected how people treated and perceived him. He mentions he would often avoid speaking so as not to call attention to himself. He was so ashamed of his accent that he went through the effort of perfecting his English so as not to sound so foreign:

> Since I had a really thick accent, I would talk to people and they would have a very hard time understanding what I was saying. It was really tough for me because I was supposed to be a doctor, you know, a smart person. But here I was, I was with a weakness and as a man, that was really hard for me. I tried my best to change my accent and make it sound more pleasing and correct as you can hear…the practice paid off (P6, Part II, p. 5).

As a result, he had to change a part of himself because of his shame in not being able to sound like an American. As mentioned above, this shame also influenced his identity as a doctor.

Of all the participants, P4 had the most difficulty with English. As he said, he had migrated quite recently. The problem he described is common when experiencing diglossia: "I felt confused because I'm a doctor but it's different between the practices in English in Medicine. You're dealing with medical terminology while the social life is different. The social English life is different. So it took me some time to have adaptation here" (P4, p. 4). Others described the same problem, if perhaps to a lesser extent, as they had been in the country longer. Houston has language-learning resources available through partnerships with local community colleges and other organizations that might address participants' problems, but most were unaware of the resources and none had taken advantage of them. In a self-reinforcing loop, many feared asking for help; incidents such as P5's story of being told to go research online because of her accent made participants wary of seeking help.

Culture. All participants had a certain level of culture shock when they came to the United States. They saw America as less conservative than their countries of origin. P2 referenced women's liberty in the U.S. in contrast to women's liberty in Iraq in a positive way. He noted that women are freer to pursue their educational and career goals outside of their husbands' households than in his country of origin, Iraq. He spoke with pride of his wife, who is also an FIMG. He also mentioned U.S. diversity in a neutral way, but seemed very interested in the different approaches to dealing with different cultures. As a non-practicing physician who works in a hospital setting as a researcher,

he said he observes and perceives the differences in cultures. As he said, Houston is far more diverse than he is used to and he encounters people of many different ethnicities as a researcher in his work setting.

P3 had a very different reaction to U.S. culture from P2's. She said that she immediately became depressed upon encountering the culture here in the United States. She attributed her disappointing scores on her USMLE exam to culture shock; she said that adapting to the culture had made it difficult for her focus on studying. As a woman from a conservative and collectivist culture, she was not prepared to face the opposite in America. The United States gave her a new appreciation for her mother's culture as a woman in Iraq and her own identity as an immigrant and new mother. She said that her family, both her husband who came with her to the United States and her parents back in Iraq, had been vital in helping her adapt to U.S. culture.

P4 described his perception of the difference between Iraqi and American culture thusly:

> When you have your family around you… you know we are from the eastern culture. The eastern culture is different. Always the family is…even when someone gets married you will stay with your family and try to get a house beside them, yes. Because it is not like the western culture, in the western culture when someone gets above 18 he will go out from his family and find his life. (P4, Part 2, p. 15)

P4, here, is describing the deeply rooted collectivist society in Iraq. P4 did not have his family around him, which he found very stressful. He did not know any families as tight knit as his own had been. He rarely had the chance to speak with his parents due to the

political unrest in Iraq, and he wished they had joined him in America. He is worried about his family's safety and specifically, his father's health. P1, P5, and P6 are here without close family ties as well, but they have greater opportunities to speak with their families and they find this comforting.

P5 and P6 mentioned a very different aspect of cultural disconnect. P5 practiced in Nigeria for two years and she mentions that the doctor patient relationship is very different in the two countries:

> Even though I was a woman, [in Nigeria] I was respected because of my education and health, my degree choice. But here you see, the patient didn't care who you were. They were very involved in their healthcare process and they make decisions. In Nigeria the doctors have a heavier weight in decisions and that they determine the best course of action and I noticed that here the patients would ask for other options and even suggest their form of treatment and their medication. (P5, Part 1, p. 4)

The other Nigerian participant, P6, observed the same difference in culture. He felt the contrast even more strongly because he is a man and Nigeria is highly patriarchal. In villages which he had worked, the elders would alert everyone he was treating that they considered his word as above their own. However, unlike P5, he expressed that he likes working with patients who are more engaged in determining their treatment process. He said that he saw even patients who do not like coming to see him as a pleasant challenge: he can encourage them to make lifestyle changes to improve their health.

Lack of Support

The primary lack that participants described in terms of support was financial. Some had families in the United States who helped them get by and others received financial support from their families at home, institutional support or employment support. P5 took two years to find funding to complete all of her exams, and P6 had studied for a pharmacy technician certificate in order to ensure he had enough money for the Kaplan courses to prepare for the USMLE exam. All of them worried about money, saying they had faced unanticipated expenses. P2 and P3 both had children during the certification process and they found the expenses greater than they expected. All of them knew of a program administered by a local college to help recent immigrants pursue their education, but only one applied for it. He had been able to take his USMLE exams at a significantly reduced price because of it.

Finances. The four Iraqi FIMGs had more financial support than the Nigerians. All of them received some money from family overseas or family here in the United States, and one also had financial and career help from a family member who was already in the United States and practicing as a physician. As P1 said, "My family [was made] so happy by supporting [me]…. I think it is the point of everybody's life that the reaches when his happiness starts to be the happiness of other people" (P1, Part II, p. 4). He knew his family missed him and felt it made them feel better to support him. He said that his family had given him a total of $25,000 in support and that he had maximized his ability to survive on minimum funds by living in Las Vegas for a few years before he found steady employment as a resident in Houston. He was also the only one to take

advantage of the financial aid program available through a local college before it was defunded.

P4, the refugee from Iraq, mentioned that he did not receive institutional support from the refugee agency for his examinations and this became a source of stress for him. P5 took two years to find funding to complete all of her exams. P6 had various jobs and even went for a pharmacy technician certificate in order to ensure he had enough money for the Kaplan courses and USMLE exams. Those who were able to secure financial support (P1, P2, P3), especially from family overseas, did not experience as much of a negative impact on their certification journeys. The two Nigerian participants had to survive, at first, by taking on employment as Certified Nurses Assistants (CNAs), as a waiter, or paid observers. Two other participants worked at lower-level jobs during the certification process. Family members had helped them with connections, and the jobs provided some income during the certification process. The Iraqi refugee had yet to secure a job.

Low-level medical jobs, such as nurses' assistants, would hardly cover the costs FIMGs face in the certification process. P1 had institutional funding others lacked: the community college program in which he participated presented him with a grant that paid for part of his exams. But they all faced higher costs in securing matches than USMGs because they felt the need to apply to more programs. P1, P3, and P4 emphasized this in particular, providing numbers of applications to be in the hundreds. Most USMGs apply to 20 programs at the most. As the participants explained, they applied to at least 100 to 200 programs because they feared not being matched because of prejudice against internationally educated immigrants. As a result of this, the match rates for a USMG is

approximately 50% or more, while the match rate for an FIMG, especially those who are not fresh graduates, is approximately less than 10%, based on the participants' accounts. The match rate could only increase if FIMGs applied for more programs. The institution that oversees the process imposes additional fees per application on any student who applies to more than thirty. Participants said that they had spent more than $3,000 on applications alone because of this, and had to pay travel expenses to go to interviews in distant cities as well. P1 affirms this with the following statement:

> So, you have to pay, I don't know, I think $10 for each program up to 30 programs. And after the 30 programs, you have to pay $30 for each program. And, we apply to from 150 to 200 programs. And this is plus the additional fees for the transcript and other verification that they had to do. So, total, you had to pay around $35-$4000 at once. Pssh. It goes like this. (P1, Part II, p. 7)

As green card or work visa holders without the permanence of U.S. citizenship, they were at substantial disadvantages in the matching process—beyond prejudice, employers worried they would not remain in a position.

Every participant described USMLE exams as a hardship as well. Three participants (P1, P2, and P4) mentioned a program through a local college that had once helped refugees with such expenses; they recognized the political atmosphere as a reason it had been defunded. Aware that not being a fresh graduate put them at considerable disadvantage, P1, P2, P4, P5, and P6 also felt that they needed to purchase additional instruction to improve the chances of scoring above 250 on the exams. P1 took Kaplan courses for his USMLE exams: two courses for USMLE Step 1 and 2; he said he had spent more than $12,000 (P1, Part 2, p. 5).

Day to day living expenses also posed a challenge for all participants. All of the participants had jobs during the certification process except for P4. P5 was staying with her aunts during her certification process, but as she said, "I did what I could in the name of securing money to pay for the bills and also survive because there was a limit to how much my aunts could help me. They had their own families and lives" (P5, Part I, p. 5). P4's family is supporting him because he has yet to find a job. As a refugee, he has qualified for minimal aid from an agency that is helping him acclimate to Houston. He also mentioned that his knee problems necessitate that he find a job that is less strenuous than the ones the refugee agency are able to find for him. All participants relied on financial aid from institutional and employment sources, even if they had familial help.

Motivation

Interviews suggested the importance of extrinsic motivation in the process. FIMGs present an interesting case for educational research. They are highly educated adults who essentially become new learners within an unfamiliar educational system. Research shows that adult learners benefit from programs that hinge on their internal drives rather than external drives (Abela, 2009, p. 11).

External Motivation. As mentioned before, one of the most important codes was family, which serves as the focus of external motivation for all participants. All of the participants mentioned their communities as a source of motivation, whether their families or the group of FIMGs from their home countries. As P1 said, "My family, they were very supportive. As I told you before they supported me through all the years and that was very important for me to succeed at what I did" (P1, Part 1, p. 2). In discussing his reasons for wanting to become a certified doctor in the United States, P4 said he

misses his father and his family in Iraq, pointing to the fact that he initially wants to succeed for his family to be proud of him and so that he can, in return, financially support them. P5's aunts live in the United States, and she mentioned weighing proximity to family in selecting where she would live while completing her certification exams and residency. Other participants said that the expectations of their family members played a role in their motivation to finishing. P6 said his family had told him failing to get his certification would be a disgrace to them. P3 and P4 had family in the United States and their comments said that these connections helped them stay motivated in the certification process. Thus, extrinsic motivation, in the form of motivation from others, namely close family and motivation to please their families, clearly plays an important role in the learning process for FIMGs.

Along the same lines, P1 has a job as a physician, but he said he had experienced a period of depression at not being nearer to achieving his career goals of becoming an internal medicine physician. He wished to work as an internist but had taken a job in a different specialty because it was offered and he had no expectation of receiving an offer in the area he wanted to practice. He said his family had helped him at that time by reminding him that he was here in America to succeed as an immigrant and as a physician and he was achieving that; he realized he could be self-actualized in a different specialty. P3 had also experienced a period of depression when she did not achieve scores high enough to be matched for her certification. Like P1, she turned to her family for motivation when she lost her internal motivation.

Also, money was the second most important motivator in seeking certification. Participants mentioned external motivation in that working in a low-level medical job

during certification served initially as external motivation, as they saw such jobs as valuable sources of exposure to knowledge that the USMLE exams would test and useful connections for the matching process. Truly, the only person with internal motivation for working a low-level medical job was P2, whose curiosity is satisfied by observing the various differences in culture displayed at his job.

Intrinsic Motivation. As for intrinsic motivation, P4 said, of the USMLE: "I encourage myself and this is like…. I'm walking in a tunnel, a dark tunnel and mostly there will be hope to go out from this tunnel. Because this exam is the most difficult exam in the world" (Part 2, pg. 16). It is a personal challenge for him, and because of this, he feels that he must succeed. While this was the starkest statement, others expressed similar feelings. P1 said, "if you want to achieve your goals you have to take every minute, every second and make it count and do something that will help you to reach your goals… you have to be dedicated… but you have to keep in mind that you are here for a goal" (Part 1, p.3-4). Here, he is speaking of his own internal motivation of challenge: he knows the journey is challenging, but he is willing to press onward. P5's intrinsic motivation comes from the knowledge that she has no other choice but to succeed. It is a personal goal for her to ensure her livelihood in the United States. However, she eventually left the United States due to fear of persecution. P6's source of internal motivation was also based on challenge: he no longer wanted to be a stagnant doctor in Nigeria and he wanted to learn more procedures just for the sake of becoming more knowledgeable and as a result, he moved to the United States. Therefore, for him to give up on the certification process would be to acquiesce to a stagnant life.

Conclusion

All participants interviewed for this research study perceived the certification process to be stressful, yet necessary, in building their identities within the U.S. Stress caused by the shame associated with language difficulties and cultural differences, as well as being an immigrant and the stigma of not being a fresh graduate (except for P3) had all posed difficulties during the certification process. Other significant struggles involved insufficient finances. Additionally, all participants mentioned motivation to be a contributing factor to their initial reason for initiating the certification process and eventually, in certain cases, to their success, claiming that their family encouraged them or enabled them to focus whenever they felt lost. The FIMGs who are currently practicing physicians have a greater sense of inner motivation, while the participants who are not practicing physicians rely more on their external sources of motivation, primarily, their families.

Chapter 5

Conclusion

This research sought to qualitatively analyze the perceptions of the certification process by Foreign International Medical Graduates (FIMGs). It captured data through semi-structured interviews of six participants, three of whom were practicing physicians and three of whom were seeking work as physicians. The gap the research addresses is the lack of qualitative research available on FIMGs' perceptions of the certification process. This population is important because of nationwide physician shortage, as FIMGs may be one of the available solutions to fill the ongoing need. The collected dialogical data was coded and analyzed based on the adult learning theories and how FIMGs perceive the phenomenon of being international doctors going through the certification process. The main finding is that all FIMGs interviewed perceive the process to be stressful in general and especially due to being immigrants. Another finding was that those who succeeded in becoming physicians generally have higher intrinsic motivation than the others. All of these findings were analyzed by using Carspecken's methodology. Additionally, the author's own perspective and understanding of the issues aided the analysis of the data collected.

Perspective of the Author

The researcher is also an immigrant in the same age bracket (less than 30 years) and is from a third-world country, much like all of the participants in this study. At the time of this writing, the researcher is an immigrant whose legal status is not guaranteed much like the participants in the study. Due to many similarities between the researcher and the participants, most of the issues the participants mentioned resonated with the

researcher including learning English and adapting to the culture. On a positive note, this background enabled the participants to feel at ease and at time, empowered to talk openly about their experiences. Nevertheless, it became prudent for the researcher to identify ways of keeping bias out of the analysis. Methods such as peer review and debriefing were essential to the success of this study. This unique perspective is thus illustrated henceforth.

Shame and Stigma

At the time of this writing, globalization and immigrants are both points of contention in the United States. However, as the literature review section of this research indicated, the United States has shortages in various parts of the physician workforce, which are likely to worsen as the population ages, and expands, and FIMGs present a reasonable alternative to address these shortages. One of the main findings has been that FIMGs often feel that their identity as foreigners precedes their eligibility to be counted as viable within the healthcare workforce, and they are unable to separate their identities from their values. Central to this category were expressions of doubt in their own ability to secure positions without being the absolute best. They all expressed their need to score above 260, which is roughly the 90^{th} percentile, as not too many people score in this range, which would have especially aided the FIMG participants who were not fresh graduates.

Fresh Graduates. The FIMG participants who are not fresh graduates recognized that stigma attaches to doctors who are more experienced and they fear they will not score high enough to overcome this. This stigma is defined as a mark of disgrace associated with the gap of years from being out of medical school. The genuine fear of

being rejected based on this criteria pushed all of the FIMG participants to financially invest in help to study for the USMLE exam. FIMGs thought, and they may be right, that avoiding stigma would cost them money. Based on the findings of the six participants, it can be concluded that FIMGs fear the stigmatizing effect of not being a fresh graduate or a medical graduate who has been out of medical school for five years or more. This stress from inward stigmatization they carry has some effect on the outcomes of those who are unable to complete the certification process successfully, such as P3. As a result of this fear, they invest emotionally and financially in seeking the highest scores possible on the USMLE exams. They perceive higher scores on the USMLE as a way to negate the prejudices they would face as FIMGs.

This finding, in particular, was unexpected, given that during the literature review, there were not many researchers who pointed to the time limitations imposed on FIMGs. It seems to be a very important issue for all participants interviewed because it was not just that they needed to be certified, all of their decisions, from educational to personal, depended upon this facet of the certification process. To all of the participants, their individual experience as physicians within their own countries was a great source of pride for them because their occupation as physicians continues to be a great part of their identities. After all, this is the reason why they choose to pursue practicing as physicians here—because this is their passion. However, the emphasis that residency programs place on the number of years out of medical school discourages them from pursuing the certification process with passion. As immigrants developing their identities within a foreign country, this can negatively influence their processes of adaption—to have their

identities as practicing doctors in their field displaced by a need from residency programs for fresher graduates who have just finished medical school.

Implications for Leaders in Health Sciences. Perhaps the most important factor, which educators of FIMGs and programs, which enroll them, should address, is their adaptation to America. This includes issues such as language, culture, and the connotations of being an FIMG in America as well as a positive consideration for the years of practice some FIMGs bring to the workforce.

Based on the findings of this study, educators and administrators should create programs to educate FIMGs in coping with immigration and the various responsibilities of moving from one country to another such as adapting to the language and culture as a highly educated adult. Residency programs should also be educated, at the administrative level, about FIMGs and the particular challenges they face as well as the strengths they bring. There should be more programs for language learning and financial support. Programs such as the one P1 mentioned that provide funding for professionally educated immigrants should be created or, if they have been de-funded, re-funded. Counseling focusing on family communication could be helpful. The extra fees that accrue for higher number of program applications constitute a real hardship and should be reduced or abolished. The benefits would also profit USMGs and that might ameliorate the current physician shortage in the long run.

The preference for fresh graduates may be depriving the profession of excellent doctors. All of the participants who were not fresh graduates had used their time fruitfully in medical practice and have skills that would benefit the hospitals and practices they might join as well as patients. The fact that P6 enjoys working in an environment where

his patients' concerns are revered suggests that the effect of employment history may be unpredictable. Theories of andragogy suggest that practice helps adult learners become better at retaining new information because gives them past experiences on which to draw.

Language and Culture. In the United States, FIMGs have to learn how to interact with patients as physicians and as foreigners. All participants described cultural adaptation as an inescapable part of their certification journey because it influenced their interactions with their coworkers and patients much like their issues with language. Five out of six participants felt that Americans had difficulty understanding them or considered their way of speaking as inferior in some way. All found adapting to the culture stressful.

This finding is weighty because both language and culture are important factors in any immigrant's experience in a new country. In the literature review of this research, author Vijay Rajput (2012) is quoted as explaining that language was one of his problems in adapting to his new surroundings in the United States. This is similar to the findings in this study: all of the participants had a hard time not just in understanding the colloquialisms but allowing themselves time to get used to the language and culture. Based on observations and coding, it appeared as though all participants were in a hurry to adapt quickly to the language and the culture so that their sole focus can just be on passing their USMLE exams with a certain high score. Participant 6, who felt so certain that his accent was a hindrance that he chose to actively learn how to change it to sound more like his patients, exemplifies this.

Even in terms of cultural adaptation, the literature review had identified that one of the main issues is the shift of respect or power dynamic for doctors between eastern cultures and western cultures. This was seen in all participants, even in the experiences of the participants from Nigeria, a country which is not typically identified as having an eastern culture. However, this shift in power dynamics may signal back to the individualistic culture found here in the United States versus the collectivistic culture found in the countries from which the participants immigrated. An emphasis should be placed on the importance of FIMGs taking their time to adapt to the culture because, as observed in Participant 3, her inability to adapt accordingly to the culture while preparing for her exams, ultimately led her to depression.

On another note, immigration had taken a toll on all participants, even though they did it under disparate circumstances. None had violated any immigration laws, but they were concerned that their legality would be questioned. This finding was timely given the political environment at the time of the research because of the general sentiment by the current president, Donald Trump, on keeping immigrants out of the country. Generally, fear of immigration status is found in communities of undocumented immigrants. However, for the participants interviewed, even though they were legal, of their own accounts, there was still a great amount of fear present. This fear, it seemed, was rooted in the uncertainty of the political environment and in the uncertainty of their own individual situations of becoming certified physicians. P5, whose legal status was based on her work, left the United States for Canada to avoid the risk of persecution after the election. Before she left, she was working as a physician in a local practice. Even though she achieved her goal, the uncertainty of her immigration status, although legal,

led her to leave everything she had built here in the United States to seek certification in another country.

Implications for Leaders in Health Sciences. The findings of this study suggest that programs that have more cultural understanding of FIMGs and that providing American cultural education can help FIMGs adjust. This implies both teaching educators who encounter FIMGs to understand how cultural adaptation takes place in adults and providing resources for FIMGs to learn more about the American English language and the United States' culture. The fact that participants do not know about resources available to them to improve their language skills implies that improving such information might be useful to FIMGs. Furthermore, the fact that P4, the participant with the greatest difficulty in speaking English, knew of language programs available through his refugee agency and did not take advantage of them suggest that FIMGs will focus on exam preparation over language learning. This speaks to the power of the stigma attached to being an FIMG: they invest as much energy and as much money as possible in ensuring they pass with scores high enough to guarantee a glance at their applications.

The program that had helped P1 had lost its federal funding, which proved unsupportive for someone like P4, who was a recent refugee. If the federal government were to fund more programs, the programs might have an incentive to advertise more to the FIMG communities and to create systems to support FIMGs and their unique needs. Local government and institutions are unlikely to be able to provide sufficient funds.

Perhaps another implication for leaders in this field is that more residency programs should advocate for FIMGs by reaching out to their government representatives. There should be more policy engagement on behalf of FIMGs to secure a

more secure way for them to receive the permanent residency status. Finally, leaders in the health sciences should look for ways to influence immigration policy so that participants such as P5 do not leave the country in search of a safer haven.

Lack of Support

As adults who are beginning their lives in a new country, FIMGs are clearly very much in need of financial support and help in adapting to American culture and language. They have a significant amount to offer to the United States and will repay support they receive in their contribution to our society. All of the FIMGs interviewed for this study migrated by themselves without blood-related family members, such as parents and siblings, accompanying them. Even though they settled with family members and spouses, in certain cases, only one participant had an immediate family member here in the United States. They all experienced moments of doubt and turned to their families overseas for support. This suggests that familial support is sometimes critical for adult learners to keep going through their educational processes, in addition to the obvious support of financial aid and resources for adapting to a new country.

Finances. Not only do FIMGs face the day-to-day financial struggles of being immigrants without high-paying jobs, they also face the struggles of finding funding for the costs associated with certification. Some had to decide whether to pay their cell phone bills or contribute towards their next USMLE exam. For those with young children or newborn babies, such choices were particularly complicated.

The two participants who did not have any help from their family members expressed the most tension about financial issues. The fact that both are from Nigeria suggests that immigrants from particular countries may experience more financial

disadvantages than others. All of them had struggled to secure meaningful work that would support their financial needs as well as keep them learning. Because all participants were living primarily with a family member, their focus for financial support was in ensuring the funds for exams and application needs. One participant, P1, was able to secure a grant through a program administered at a local community college. However, they all expressed that more institutional funding would have helped them focus on their certification exams and acclimating to the country.

Besides language and culture, the most urgent issue faced by FIMGs is a lack of financial support. As the participants of this study illustrate, FIMGs are not just single people who immigrate here alone or remain alone. Some of the FIMGs are married and/or have children. Even for those who do not have children, the financial burdens they face are incredibly discouraging. For the participants in this study, this seems rooted in the shift from collectivist societies where financial responsibilities are shared to individual societies where financial responsibilities are not necessarily shared. Even though all of them received some form of financial support, it still was not enough because the costs of becoming certified were simply overwhelming.

Implication for Leaders in Health Sciences. Greater financial resources would give FIMGs an opportunity to make themselves stand out during the USMLE exams and the matching process. P4, P5, and P6, who did not have significant financial support from their families, felt greater urgency in their certification journey because of lack of money. Familial support only mitigated this somewhat.

This implies that programs that seek to help FIMGs or educators/hospitals looking to attract FIMGs should focus on making more funding available. Even small amounts of

money, such as grants for traveling to interviews or paying off electricity bills, would help an FIMG focus more on studying and preparing themselves for the exams. Relieving financial stress on particular areas of their lives would grant free permit for FIMGs to allocate greater energy to certification. If such a program were to be implemented in different locations, be they hospitals or institution settings, case management would permit tailoring of a grant program to each FIMG.

Motivation

In this category, the research identified marked differences between FIMGs (P1, P5, and P6) who are practicing as physicians. These three had the greatest intrinsic motivation. The group of FIMGs who are not practicing physicians (P4, P5, and P6) rely more on extrinsic motivation. Both intrinsic and extrinsic motivation played a role in the certification process for all participants, however.

The FIMGs who participated in the current study received significant encouragement when their families reminded them of their support. Many of them called their families frequently during their certification journeys, but if they had to choose between saving for an exam and a cell phone bill, they could experience a disruption. Intrinsic motivation came in the form of wanting to be physicians just because they liked being doctors or to challenge themselves.

Given that all of participants struggled with a lack of financial support, it was an unexpected finding for all of the certified participants to have a greater sense of intrinsic motivation rather than extrinsic motivation—generating a higher income as physicians. Nevertheless, this finding further exemplified an earlier point that the FIMG participants'

identities are rooted in their work as physicians. As a result, doing what they loved became a personal goal, something for which they were willing to make sacrifices.

Implications for Leaders in Health Sciences. In order to increase intrinsic motivation, programs might offer counseling to help FIMGs understand their own journeys, to reflect on their goals, and establish why they are pursuing certification. Because two participants experienced depression, it would also be ideal for programs or the ECFMG to provide free psychological counseling resources for FIMGs. One way that educators might increase extrinsic motivation is by encouraging FIMGs to keep in regular touch with family members, especially if they come from cultures that emphasize collectivism. This could include providing international phone cards for FIMGs; international phone cards might be a good piece for a welcome package from the ECFMG for new arrivals. Ideally, the educator designing these programs should be an FIMG familiar with the issues described in this research or what it means to be an FIMG beyond the educational issues.

Limitations

This study has relevant findings useful for many educators and leaders in the health sciences; however, it has certain limitations. First, the collection of and analysis of dialogical data for this study took place within seven months and had a sample of six participants. The study also did not follow participants as they went through the certification process. This study might benefit from being framed as case studies in which participants are studied from the beginning of their certification (preferably as soon as their first month of arrival within the United States) until the end of their journeys. A larger number of participants might produce more robust findings, although the small

sample size permitted an in-depth approach with multiple interviews with each participant.

Another limitation of the study is the location and the origin countries of the participants. The study took place in Houston and involved people from two countries of origin, Iraq and Nigeria. Thus, its findings may not be relevant to other immigrant communities experiencing the certification process in other cities, although the significant differences between the Iraqis and the Nigerians suggest that even these two communities provided some breadth of findings. The anti-immigrant sentiment building in the United States, at the time, was a challenge in the sampling process, as many people who were approached hesitated to speak about their experiences.

A second limitation was that interviews took place in English. Without funding for a translator, the many Cuban physicians learning English to take their USMLE in Houston encountered by the researcher at the time could not take part; interviews in their native language might also have been more illuminating with those who did participate, especially those who are not very comfortable communicating in English. There were points at which participants struggled to express their meaning in English, and they expressed the wish that they could explain it in their native language. However, the researcher's status as an immigrant helped in the establishment of rapport in interviews.

Recommendations for Future Research

A phenomenological study on a greater scale with a greater number of researchers might provide more robust findings. A qualitative study of 10-20 FIMGs per certification level (certified or non-certified) would create greater diversity of responses. A longevity study conducted over five years would provide a greater analysis of the changing

perceptions of the FIMGs as they go through the process. Such a study would provide more insight into the needs of the FIMGs at different stages. Having more than one researcher would also provide a wider perspective and address the possibility of bias in any one researcher.

The research also might benefit from covering a greater number of places. FIMGs are often matched to rural hospitals, which are suffering a severe physician shortage. This would reveal challenges that FIMGs might face in areas that are unlike Houston. This would require funding for travel expenses and incentives for the participants, which the researcher did not have. On several occasions, participants were identified but dropped out due to a lack of incentives. Research conducted in participants' native language(s) might also illuminate issues not revealed in the current study.

Conclusion

This research sought to present the perceptions of the ECFMG certification process by FIMGs in the Houston area. It does so by presenting qualitative data, which has been analyzed based on Carspecken's methodology. First, the research identifies the context in which the problem appears--the current physician shortage in the United States and the phenomenon of professionally educated immigrants moving to the United States. It goes on to provide background on the shortage and what factors are contributing to the need for more physicians as well as a few proposed solutions for the shortage. The literature review goes further in explaining the background of the phenomenon and what it means to be an FIMG and the various parts of becoming a fully certified physician in the United States. The purpose of this research was to clarify characteristics which contribute to the completion of the certification process by FIMGs. The problem this

study sought to solve is the lack of purely qualitative studies which look into the perceptions of the certification process by FIMGs.

The findings center on three major themes and sources of stress: shame and stigma, a general lack of support, and sources of motivation. Under each theme were other categories presented in the data analysis: immigration, culture, the preference for fresh graduates, finances, and external and internal motivation. In general, based on the perceptions of the participants studied, the research indicates that future leaders and educators involved in the ECFMG process should consider securing resources to tackle those perceptions. This would aid in increasing the number of FIMGs certified to lessen the ever-increasing shortage in the physician workforce in the United States.

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Appendix A:

Immigration Status of IMGS, 2008

TABLE 13

Citizenship/visa status of all resident physicians and IMGs on duty in ACGME-accredited and in combined specialty programs, December 1, 2008

Citizenship/Visa status	Total		Resident physicians, No. (%)[a] IMGs[b]	
Native U.S. citizen	69,740	(64.5)	4,366	(14.8)
Naturalized U.S. citizen	9,408	(8.7)	2,705	(9.2)
Permanent resident	8,620	(8.0)	5,965	(20.2)
B-1, B-2 temporary visitor	126	(0.1)	122	(0.4)
F-1 student	305	(0.3)	23	(<0.1)
H-1, H-1B, H-2, H-3 temporary worker	4,984	(4.6)	4,777	(16.2)
J-1, J-2 exchange visitor	4,280	(4.0)	4,152	(14.1)
Refugee/asylee/displaced person	89	(<0.1)	84	(0.3)
Other	534	(0.5)	437	(1.5)
Unknown citizenship/foreign born	6,009	(5.6)	4,152	(14.1)
Unknown citizenship/unknown birth country	4,081	(3.8)	2,705	(9.2)
Total	**108,176**	**(100.0)**	**29,488**	**(100.0)**

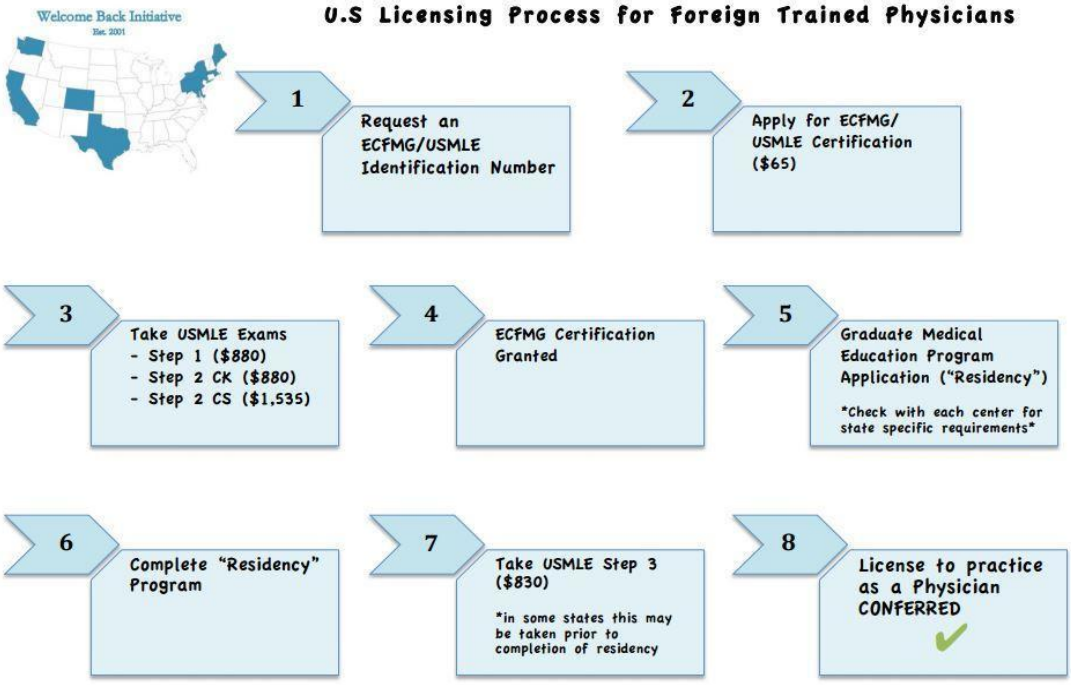
Accreditation Council for Graduate Medical Education (ACGME), 2009

a Includes resident physicians on duty as of December 1, 2008, reported through the 2008 National GME Census. A total of 181 programs (2.1 percent) did not provide updated information on residents by March 1, 2009. For these non-responding programs, resident physicians reported from the last received survey were moved into their next year in the program or graduated, and new residents were added from the 2008 National Resident Matching Program when available.

b Does not include graduates of Canadian medical schools.

Appendix B:

Certification Process For International Medical Graduates



Appendix C:

University Of Houston Consent To Participate In Research

PROJECT TITLE: International Medical Graduates and the Certification Process: A qualitative study understanding the U.S. certification system's influence on the supply of IMGs towards the Physician Shortage

You are being invited to take part in a research project conducted by Nancy Adossi, a doctoral student in the Department of Curriculum and Instruction in the College of Education at the University of Houston. The project is being conducted under the supervision of Drs. Lee, McNeil, Watson, and Robin.

NON-PARTICIPATION STATEMENT

Taking part in the research project is voluntary and you may refuse to take part or withdraw at any time without penalty or loss of benefits to which you are otherwise entitled. You may also refuse to answer any research-related questions that make you uncomfortable. If you are a student, a decision to participate or not or to withdraw your participation will have no effect on your standing.

PURPOSE OF THE STUDY

The purpose of the project is to analyze the certification and learning process for foreign international medical graduates—medical graduates who were born, raised, and attained their medical degree in their own country prior to coming to the United States to become a U.S. certified medical doctor. In doing so, this research project seeks to identify ways in which the certification process could be improved and to propose changes to the process. The study, specifically the interviews, will last for approximately two months with each subject's participation being at least three 45-90 minutes interview blocks. Each participant is free to withdraw at any point during the study.

PROCEDURES

You will be one of eight subjects invited to take part in this project. Each interview will take place in a public space and/or medium as determined/chosen by the participant.

This project seeks to examine the impact of the medical certification process upon foreign international medical graduates, or international medical graduates born and educated in a country other than the United States. In doing so, it seeks to find ways in which the certification process can be altered or changed in order to enable more foreign International Medical Graduates the opportunity to become certified in a more efficient manner. The following specifics describe the research in details:

* Prior to interviews, all participants will be observed for an hour by the principal researcher:

* This can be in the form of shadowing in which case, the participant will be observed at their home or with close family and friends wherever they feel comfortable.

* This observation is only to establish the primary record and may not involve dialogical data.

* Participants will need to be available for observations.

* All participants will be interviewed at least three times in person, by telephone, by skype.

* A participant must be an international medical graduate with absolutely no prior education within the United States and meet one of the following criteria:

* 1. A medical professional who is currently fully certified to practice medicine and is practicing medicine either as a resident or beyond.

* 2. A medical professional who is currently not pursuing certification to practice as a physician in the United States due to personal or professional reasons.

* The interviews will take place according to the subject's convenience: including time of interview and form of interview.

* Each interview will take anywhere from 45 minutes to 90 minutes.

* Each interview will be audio recorded and transcribed later. Each participant's identity will be kept confidential and each participant will be given an identifying number.

* Each participant will have the opportunity to review their responses in a one hour session after all three interviews.

* An example of an interview question will be: "Describe some of the similarities and/or differences between the educational process in your country versus the educational process here in the United States".

CONFIDENTIALITY

Every effort will be made to maintain the confidentiality of your participation in this project. Each subject's name will be paired with a code number by the principal investigator. This code number will appear on all written materials. The list pairing the subject's name to the assigned code number will be kept separate from all research materials and will be available only to the principal investigator. Confidentiality will be maintained within legal limits.

RISKS/DISCOMFORTS

Due to the nature of the study, there will not be any discomfort. The researcher is responsible for insuring the safety and privacy of all statements. Also, all participants have the right to waive publication of their statements, should they, at any point, wish to do so.

BENEFITS

While you will not directly benefit from participation, your participation may help investigators better understand the obstacles through which international medical graduates traverse such as the financial commitments, the time commitments, and how the process can be improved or changed in order to better benefit other international medical graduates in the future.

ALTERNATIVES

Participation in this project is voluntary and the only alternative to this project is non- participation.

Subjects may incur the cost of parking for public spaces which may need paid parking.

PUBLICATION STATEMENT

The results of this study may be published in scientific journals, professional publications, or educational presentations; however, no individual subject will be identified.

AGREEMENT FOR THE USE OF AUDIO TAPES

If you consent to take part in this study, please indicate whether you agree to be tape-recorded during the study by checking the appropriate box below. If you agree, please also indicate whether the tape recording can be used for publication/presentations.
* I agree to be audio tape(s) during the interview.

* I agree that the audio tape(s) can be used in publication/presentations.

* I do not agree that the audio tape can be used in publication/presentations.

* I do not agree to be audio taped during the interview.

If you do not consent to be audio-taped, then you will not be able to participate in the face-to- face interview.

AGREEMENT FOR THE USE OF SKYPE

If you consent to take part in this study, please indicate whether you agree to use Skype by checking the appropriate box below. Skype will be used to discuss the informed consent, conduct the individual face-to-face interview, and the follow-up interview if any. If you decide to use Skype, know that Skype is a free, high quality video conferencing program that allows individual to see and hear each other. All Skype calls are encrypted to ensure privacy and confidentiality.

Skype does not record or keep record of any conversation.

* I agree to use Skype.

* I do not agree to use Skype.

If you are interested in participating in a confidential Skype interview for the purpose of this research project please forward your skype contact information to this email address nadossi@uh.edu. Your Skype information will remain confidential and will not be communicated to anyone. I will use your Skype information strictly for the purpose of this study only.

AGREEMENT FOR THE USE OF PHONE

If you consent to take part in this study, please indicate whether you agree to use the phone by checking the appropriate box below. The phone may be used to discuss the informed consent, the research project, confirm the time of appointment, cancel an appointment, or for a follow up interview.

* I agree to use the phone. Please forward your phone number by email at nadossi@uh.edu. Your phone number will remain confidential and will not be communicated to anyone. I will use your phone number strictly for the purpose of this study only.

* I do not agree to use the phone.

STORAGE AND RETENTION OF DATA

* I will download the interview from the tape-recorder directly on a password-protected area of my personal computer to control unauthorized access.

* The downloading will create an MP3 file format. In addition, data will also be saved on an encrypted flash drive. This encrypted flash drive will be stored in a safe deposit box located at the principal investigator's bank.

* The tape recording and transcribed interviews will be stored on a password-protected area of my personal computer and save on an encrypted flash drive. This flash drive will be stored in a safe deposit box located at the principal investigator's bank.

* Printed transcripts of the interview will also be kept in a locked file.

* All data including the audio recordings will remain on the University of Houston property for a minimum of 3 years following completion of the study. The data is complete when all data analysis is finished.

* All research data collected during this project is subject to the University of Houston data retention policy found at www.research.uh.edu/OCG/Guide/Post- Award_Section/Data_Retention.html

CIRCUMSTANCES FOR DISMISSAL FROM PROJECT

Your participation in this project may be terminated by the principal investigator

* if you cannot keep appointments due to a personal or professional situation;

* if the principal investigator determines that staying in the project is not in your best interest

SUBJECT RIGHTS

1. I understand that informed consent is required of all persons participating in this project.

2. I have been told that I may refuse to participate or to stop my participation in this project at any time before or during the project. I may also refuse to answer any question.

3. Any risks and/or discomforts have been explained to me, as have any potential benefits.

4. I understand the protections in place to safeguard any personally identifiable information related to my participation.

5. I understand that, if I have any questions, I may contact Nancy Adossi at nancyadossi@hotmail.com. I may also contact Dr. Sara McNeil, faculty sponsor, at 713 743-4975.

6. Any questions regarding my rights as a research subject may be addressed to the University of Houston Committee for the Protection of Human Subjects (713-743- 9204). All research projects that are carried out by Investigators at the University of Houston are governed be requirements of the University and the federal government.

SIGNATURES

I have read (or have had read to me) the contents of this consent form and have been encouraged to ask questions. I have received answers to my questions to my satisfaction. I give my consent to participate in this study, and have been provided with a copy of this form for my records and in case I have questions as the research progresses.

Study Subject (print name):

Signature of Study Subject:

Date:

I have read this form to the subject and/or the subject has read this form. An explanation of the research was provided and questions from the subject were solicited and answered to the subject's satisfaction. In my judgment, the subject has demonstrated comprehension of the information.

Principal Investigator (print name and title):

Signature of Principal Investigator:

Date:

Appendix D

IRB Letter

UNIVERSITY of HOUSTON

DIVISION OF RESEARCH

June 8, 2016

Ms. Nancy Adossi
Curriculum and Instruction

Dear Ms. Nancy Adossi,

The University of Houston Committee for the Protection of Human Subjects (2) reviewed your research proposal entitled "International Medical Graduates and the Certification Process: A qualitative study understanding the U.S. certification system's influence on the supply of IMGs towards the Physician Shortage" on May 26, 2016, according to institutional guidelines.

The Committee has given your project unconditional approval; however, reapplication will be required:

1. Annually
2. Prior to any change in the approved protocol
3. Upon development of unexpected problems or unusual complications

Thus, if you will still be collecting data under this project on **June 2017,** you must reapply to this Committee for approval before this date if you wish to prevent an interruption of your data collection procedures.

If you have any questions, please contact Danielle Griffin at 713-743-4057.

Sincerely yours,

for
Dr. Rebecca Storey, Chair
Committee for the Protection of Human Subjects (2)

PLEASE NOTE: (1) All subjects must receive a copy of the informed consent document. If you are using a consent document that requires subject signatures, remember that signed copies must be retained for a minimum of 3 years, or 5 years for externally supported projects. Signed consents from student projects will be retained by the faculty sponsor. Faculty are responsible for retaining signed consents for their own projects; however, if the faculty leaves the university, access must be possible for UH in the event of an agency audit. (2) Research investigators will promptly report to the IRB any injuries or other unanticipated problems involving risks to subjects and others.
At that time, your project was granted approval contingent upon your agreement to modify your protocol as stipulated by the Committee. The changes you have made adequately fulfill the requested contingencies, and your project is now **APPROVED**..

Protocol Number: 16463-02 Full Review: Expedited Review: X

316 E. Cullen Building Houston, TX 77204-2015 (713) 743-9204 Fax: (713) 743-9577

COMMITTEES FOR THE PROTECTION OF HUMAN SUBJECTS.