COVID-19 pandemic challenges for International Medical Graduates (IMGs) practicing in the United States

Running head: Immigration challenges of IMGs during COVID-19

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Abstract

Purpose: Given that nearly a quarter of the US physician workforce are international medical graduates (IMGs), many of whom remain on temporary work visas for prolonged periods due to processing delays, the pandemic has posed unique challenges to these frontline workers and has arbitrarily limited our physician workforce.

Objective: The objective of the study is to understand the role of IMG physicians practicing in the US, their limitations and challenges due to immigration related issues.

Methods: Using a cross-sectional survey across social media platforms, we obtained data from IMGs regarding their role in healthcare, to the impact of visa-related restrictions on their personal and professional lives.

Results: A total of 2630 IMGs responded to the survey, Hospital Medicine (1684, 65.7%) being the predominant specialty encountered. 64.1% were practicing in Medically Underserved Areas (MUA) or Health Professional Shortage Areas (HPSA), with 45.6% practicing in a rural area. Nearly 89% of respondents had been involved with direct care of COVID-19 patients, with 63.7% assuming administrative responsibilities for COVID-19 preparedness. 93% physicians expressed inability to serve in COVID-19 surge areas due to visa-related restrictions. 72% physicians reported that their families would be at risk for deportation in case of their disability or death. Most respondents (98.8%) felt that permanent resident status would help alleviate the above concerns.

Conclusion: Easing immigration restrictions could prove significantly bolster the current physician workforce and prove beneficial in our response to the COVID-19 pandemic.

What is already know about this topic?

• There is an existing severe physician shortage in the US and the COVID-19 pandemic has dampened the available resources, healthcare workers and the number front line physicians in the US.

• As the number of COVID 19 cases continue to rise in the USA, it is key to utilize all the available physician workforce effectively, especially in rural and medically underserved areas.

What does the article add?

- Majority of the IMG physicians in the US practice Internal Medicine in a Medically Underserved Areas (MUA) or a Health Professional Shortage Areas (HPSA) in a rural area.
- 93% of these physicians expressed inability to serve in COVID-19 surge areas due to visa-related restrictions.
- 72% physicians reported that their families would be at risk for deportation in case of their disability or death.
- Easing immigration restrictions could prove significantly bolster the current physician workforce and prove beneficial in our response to the COVID-19 pandemic.

Introduction:

The COVID-19 pandemic has imperiled our healthcare workforce in an unprecedented manner in an era where healthcare is already compromised by serious physician shortage. As of early August 2020, CDC reports that more than 120,000 health care providers on the front lines were infected by the virus, and approximately 600 have died due to the COVID-19 related complications.[1]

Association of American Medical colleges (AAMC) reports that the United States will see a shortage of 22,000 physicians by 2032 as the demand for physicians continues to grow faster than supply.[2] International Medical Graduates (IMGs) trained and licensed in the US have been a vital solution to the physician shortage in the US. American Medical Association (AMA) reports that the US trained International physicians constitute for 22.7% of licensed U.S. doctors and 62% of them practice in primary care specialties.[3] This is about double the 31% of all U.S. physicians who work in a primary care specialty, helping to meet a critical workforce need.[3]

The H1b visa is a non-immigrant visa that allows physicians who are foreign nationals to work temporarily in the United States.[4] In practice, most of the IMG physicians are trained under J-1 visa during the graduate medical training, which requires the doctor to work for three years at a designated underserved facility.[5] IMGs continue to make vital contributions to the delivery of healthcare in the United States by being on the frontlines during the COVID-19 pandemic at increased risk from contracting the virus and the complications caused by it.

However, these physicians actively practicing in the United States are caught in a phenomenon called "immigration backlog" due to per country numerical limitation for employment-based immigration under the current immigration laws.[6] With COVID-19 pandemic straining most of the resources, the healthcare workforce has been weakened due to immigration restrictions which is impacting the fight against COVID-19 with no security and stability. Their personal and professional life is in jeopardy and limits their ability to contribute to the fight against COVID-19.

Methods

Objectives and study duration:

The objective of the study was to study the demographics of the IMGs working in the COVID-19 pandemic, their contribution to COVID-19 related patient care and the challenges they are experiencing due to their temporary immigration status.

On April 6, 2020, i.e., thirty-five days after declaration of COVID-19 as a national emergency by the President of the United States, the lead investigators posted a cross sectional survey on two social media platforms (pertinent Facebook IMG physician communities and WhatsApp IMG physician groups).[7] The survey was posted repeatedly on these platforms from April 6, 2020 to April 30, 2020. To facilitate snowball sampling, the posts on the Facebook groups and WhatsApp where made shareable.

Participants:

All the International Medical Graduates (IMGs) staying and practicing in the US were encouraged to do the surveys. The physician members of these social media pages were initially screened based on their NPI numbers, type and location of practice and added to the respective groups. All these physicians were IMGs in the United States including practicing physicians, residents and fellows in training and prospective residents and ECFMG applicants.

Survey methods:

The survey was designed and circulated using "Survey Monkey." The survey had two screening questions to avoid unnecessary samples. The first question, "Are you an IMG practicing in the US?" screened out the non-IMG respondents from participation. The second question "Are you practicing in the US on a visa?" excluded the US citizens and physicians on a permanent resident status from participating in the survey.

Apart from the basic demographics like age, state of practice, specialty and subspecialty, board certification status; the details of these physicians pertinent to their and their family's immigration status (current visa status, approval for permanent residency in the US, dependent visa status of their immediate family members and status of children under 21 who do not have a US citizenship status) were analyzed.

Their involvement in the COVID-19 related direct and indirect patient care (working in rural vs urban settings/medically underserved areas, direct patient care of COVID-19 patients, "frontline caregiver" speciality, COVID-19 related administrative work) was identified.

COVID-19 exposure related direct effects to the physicians like being positive for COVID-19, getting quarantined due to the exposure, losing work days due to the sickness were reviewed. At the same time, indirect effects of the pandemic like losing days of work, taking a "pay cut" and employment termination were analyzed.

United States Citizenship and Immigration Services (USCIS) had temporarily suspended most of the immigration services two weeks prior to this study. The effect of these limited services and the potential effects of the immigration status in general were studied (risk of families facing hardship in case of the physician's disability; their risk of deportation in case of physician's death and disability; limitation to work in "hotspots" or offer "locums" and additional telemedicine services due to their VISA status) were studied.

SPSS version 26 was used to refine the data, analyze and study the available final sample.

Results:

A total of 2981 participants responded to the survey in this span of 24 days. Out of the total sample who acknowledged the survey, 37 identified themselves as non IMGs and 195 of them

already acquired permanent residency or US citizenship status, they could advance further in the study and were excluded. Further, 22 dentists (not a part of the intended study) and 97 respondents with missing or unavailable data were excluded (Figure 1).

Demographics and patient care characteristics of the IMGs in the COVID-19 pandemic:

56.8% of the sample (1493 physicians) were attending physicians, and the rest were residents/fellows in training or medical school graduates. The mean age of these physicians was 34.6 years with a standard deviation of 5.2 years. Majority of them were residents of New York State, followed by Pennsylvania, Ohio, Michigan and Illinois in that order. Majority of physicians practice Internal medicine (65.7%) followed by pediatrics, Family medicine, neurology and psychiatry. Within Internal medicine, the most commonly practiced sub-specialty is Hospital medicine, followed by cardiology, nephrology, critical care and oncology in that order. 70.6% of these physicians are board certified in their respective specialties. 64.1% of these physicians practice in a Medically Underserved Area (MUA) or Health Professional Shortage Areas (HPSA) and 45.6% of them practice in a rural setting. About 74.2% of the physicians practice in a "front line" COVID-19 pandemic specialty and 89% of them are involved in direct care of COVID-19 infected or suspected patients. Almost 64% of them are involved in administrative responsibilities of the COVID-19 preparedness in their hospitals like involvement in the command center, designing protocols etc (table 1).

Immigration characteristics of the IMG physicians serving the pandemic:

Table 2 explains the VISA and immigration status of the physicians. Almost 62% of them are practicing in a H1b status, either with or without a J1 waiver requirement. About 45% of

them have their immigration petition for permanent residency approved but most of the physicians in this sample (81.6%) were in a "immigration backlog" as their country of origin was India. 43.3% of the physicians had an immediate family member like a spouse or a child on a dependent VISA and 77.6% of them were the primary VISA holders of their families. A substantial number of physicians (10.3%) of them had a child who could "age out" i.e. a child under 21 years of age and not born in the United States.

Patient care and immigration related challenges faced by the physicians in the pandemic:

IMG physicians serving the COVID-19 patients were not immune to the exposure from the COVID-19 infection. 11.5% of the physicians were quarantined in this time period due to some sort of exposure to the virus. 28 physicians (1.2%) were infected by the virus and a significant number of the physicians lost a few days of work due to the exposure or infection. Almost one-third (30.4%) of the physicians were going through a loss or decrease in pay due to the pandemic related issues and 19 of them (1%) lost their jobs in the pandemic (table 3).

Table 3 also illustrates the immigration related challenges of the IMG physicians during the pandemic. 90.6% expressed the concern that their families face hardship due to their unemployment or disability during the pandemic. 71.8% of them were worried that their families are at a risk of deportation in light of the primary VISA holder's disability or death. Furthermore, when USCIS suspended premium VISA processing services in March 2020, 65% of the physicians felt that this could affect their stay or work in the United States. When asked to rate on a scale of 1 to 4 asking what was most concerning to them in the COVID-19 pandemic, they reported risk of getting infected, risk of family deportation, risk of losing job and risk of facing financial hardship in that particular order. 98.8% of the physicians did express that a permanent residency status will solve most of their concerns and challenges.

During the pandemic, almost 57% of these physicians were approached by a recruiter or a hospital to provide part time services in COVID-19 designated hot spots. Close to 83.8% of them were also willing to serve in a designated COVID-19 hotspot where there is a desperate need of physicians or shortage of doctors. However, 93.1% of them reported that VISA related restrictions limited them from providing additional coverage in these places. Work VISA restrictions also limited 67.8% of them from providing telemedicine services.

Discussion:

Our study shows that a significant proportion of the frontline US physician workforce is adversely impacted by their immigration status, especially "immigration backlog" during the COVID-19 pandemic. Easing these restrictions could significantly bolster our already existing physician workforce and prove beneficial fighting the COVID-19 pandemic.

Even before the pandemic, with significant representation in primary care specialties and promoting access to healthcare in both sub-urban and rural communities, IMGs played an important role in delivering healthcare to underserved America. With a looming crisis in the supply of internists in different parts of the country, IMGs always had an indispensable role in COVID-19 front line specialties like internal medicine, hospital medicine, critical care and infectious diseases. [8,9] IMGs constitute 24.5% of all actively practicing specialists in the United States and constitute a significant percentage of physician workforce in areas with a large percentage of COVID-19 cases.[10,11] Our study findings specify that nearly 65.7% of the physicians are involved with primary care in different healthcare settings across the country and among them 64.1% of

the physicians were practicing in medically underserved areas. We also observed the significance of IMG physicians contributing towards healthcare during the COVID-19 pandemic with 74.2% in the frontline specialties and 89% involved with direct care of COVID-19 patients. We also noticed that significant number of them were even involved in hospital and system administration working as command directors or protocol designers for pandemic preparedness.

Among a few other VISAs like H1b visa and O1 visa, most of the IMGs use J-1 exchange visas to complete their residencies in the US, with the expectation that they will return to their home countries and spend at least two years.[12] Given the resource intensive process of training a physician, there are several programs in place such as the Appalachian Regional Commission (ARC) program, HHS Visitor exchange program, Delta Regional Authority (DRA) program and the Conrad J1-waiver 30 program, with the primary purpose of retaining the physicians to serve areas of the United States with inadequate physician access after their graduation.[13] These are several ways in which rural communities have traditionally recruited and retained immigrant doctors and built lasting relationships. Our survey does show that 45.6 % of IMGs are fighting the COVID-19 pandemic in rural communities and almost 64% of them are practicing in a medically underserved area.

After completion of their assigned period of service in their respective waiver programs, they become eligible to apply for a permanent resident status in the United States, often colloquially referred to as a "green card".[14,15] However, due to the limited annual quota of green cards, which are allocated based on the country of birth of the applicant, the wait times can vary widely among applicants. Due to the sheer number of applicants from countries like India and China, expectedly higher from the two most populous countries in the world, these applicants have the longest wait times before they become eligible to adjust their status to that of a permanent resi-

dent, leading to the phenomenon of "immigration backlog".[16] Our study shows that 45% of the physicians serving the pandemic have their immigration petition for permanent residency approved but most of them (81.6%) were in an immigration backlog.

Immigrant physicians practicing on a work visa are authorized to work only under an employer who has filed an H-1B petition with U.S. Citizenship and Immigration Services.[17] During the COVID-19 pandemic, many hospitals and employers were not able to sponsor a work permit petition for the front line physicians as applying for a new H-1B petition is a complex, multistep process that might take unto several months. These restrictions left IMGs not be able to fight the pandemic in the areas that needs them the most. In our study, though 57% of the sample physicians were approached by a recruiter or a hospital to provide part time services and though a significant majority of them (83.8%) were willing to offer such services, 93% of them were able to offer coverage in such designated COVID-19 hotspots. During the early peak of the pandemic, states like New York waived the requirement of state license to practice in the hotspots, however, VISA was a limiting factor for the state to recruit IMG physicians to fight the pandemic. [18]

In March 2020, the federal administration expanded Medicare coverage of telemedicine services and relaxed requirements related to the Health Insurance Portability and Accountability Act. [19] This allowed patients to access doctors using a wider range of communication tools, such as FaceTime and Skype. Most states waived license requirements for telemedicine.[20] Unfortunately, these actions were far from adequate in solving the crisis considering the fact that work VISA restrictions also limited 67.8% of them from providing telemedicine services.

Though conducted in the earlier part of the pandemic, we found that 11.5% of the IMG physicians were already quarantined due to symptoms related to COVID-19 and nearly 1.2% of the physicians were infected by the virus. As of September 2020, more than 7000 healthcare

providers have succumbed to the disease with United States reporting almost 1000 healthcare professional deaths.[21] We estimate the number of IMG physicians infected from the disease is way higher than what was reported in our study. If IMG physicians were to succumb to the pandemic, or if they were disabled and could no longer fulfill the work visa, it would put their family at risk of being deported. A large majority (43.3%) of the IMGs in our sample had an immediate family member like a spouse or a child on a dependent VISA. A significant majority, 77.6% of them were the primary VISA holders of their families. A substantial number of physicians (10.3%) of them had a child who could "age out" i.e. a child under 21 years of age and not born in the United States. An "aged out" child would have no choice but leaving the country or finding an independent VISA for himself or herself as they cannot be a dependent of the parent's VISA.[22] With 81.6% of the physicians facing immigration backlog due to their temporary immigration status, even the slightest delay in the processing of VISA services, the physicians are put at risk of deportation from the country with their ongoing stay at risk.

Healthcare disparities whether they are gender based, race and ethnicity related or geography related have foiled our healthcare system at multiple levels. [23,24] At the same time, the challenges faced by 24% of our physician workforce (IMG physicians) further hamper the care of the underserved and rural communities. Understanding the factors that lead to shortage of physician supply during the COVID-19 pandemic in the United States is very critical. According to 98.8% of the physicians in this sample, a permanent residency status will solve not only the present situation during this pandemic. Diverse provider workforce with the patient population turning more heterogeneous builds up resilience of the healthcare system in various specialties to combat any challenges that may hinder access to healthcare in every corner of the country by augmenting the healthcare workforce and to fill up the practice gap left by US medical graduates.

Conclusion:

As the country surpasses 210,000 COVID-19 deaths, and as hospitals brace for a second wave of infections and as hospitals increasingly sound the alarm about staff shortages, physician immigration remains an area that needs to be addressed to give the country's strained health care industry the support it so desperately needs.[25]

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