

Pediatric Care Struggles of US Trained International Medical Graduate Pediatricians in COVID-19 Pandemic

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Abstract

Background: Pediatrician shortage and healthcare access has been a serious issue especially in medically underserved and rural areas aplenty in the USA and has further worsened during the coronavirus disease 2019 (COVID-19) pandemic. Many US trained international medical graduates (IMGs) on a visa status serve these areas to fill in the physician gap. These physicians are usually on a visa and the majority of them have approved immigration petitions. During this pandemic, the sudden changes in immigration policies in addition to the longstanding administrative backlog and processing times had posed new challenges to the pediatricians and the communities served by them. The objective of this study was to determine the demographics, level of training and practice, immigration status, the clinical role they played in the communities they served and the various professional and personal setbacks they faced during the pandemic.

Methods: A survey was created and data were collected using data collection platform "Survey Monkey". Screening questions were designed to include only IMG pediatricians on a visa status.

Results: A total of 267 IMG pediatricians qualified for the survey on a nationwide basis. Of the physicians that participated in the survey, 58.4% were working in either medically underserved or physician shortage areas, 36% of the total physicians were working in a rural setting, 10.6% of the pediatricians had to be quarantined due to exposure to COVID-19, 0.8% were infected with COVID-19 themselves, and 81.3% of the pediatricians had faced hindrance in being able to work at a COVID-19 hotspot due to work site restrictions because of their visa status.

Conclusion: IMG pediatricians play a valuable role in taking care of

the children in medically underserved areas. The challenges surrounding the immigration backlog are contributing to significant hardships for these pediatricians and their families and are causing a hindrance to healthcare access to the children in medically underserved communities during the pandemic especially limiting the pediatricians' scope and geographic radius of the practice, thus not allowing them to practice to the full extent of their license.

Keywords: Physician shortage; Pediatricians; Rural health; Healthcare shortage; Immigration; COVID-19 pandemic

Introduction

Physician shortage is an existing problem across several states in the USA and is predicted to only increase in the near future. US trained IMGs have played an integral role in providing healthcare to the children in these areas [1]. The American Academy of Pediatrics (AAP) has concluded that due to several factors such as distribution of pediatricians in the primary care sector to cater to the needs of children in rural and medically underserved areas, the rise in the number of children with chronic health conditions, physician work hour changes along with health reform efforts implemented over time to improve healthcare access for children, there is a current shortage of pediatric medical subspecialists across several fields [2]. Unequal reimbursement for similar levels of patient care between pediatricians and the physicians who provide medical care to adults is a significant cause of disinterest for medical school graduates to choose a career as a pediatrician [3]. The disparity in physician distribution due to a lack of incentive to practice in rural versus urban areas contributes to the decreased healthcare access to the rural communities [4].

International medical graduates (IMGs) have been a long-standing solution to the physician shortage in the country and make up around 25% of the primary care physicians' workforce in the USA [5].

The objective of the study was to study the demographics of the IMGs working as pediatricians across the country prior to and during the coronavirus disease 2019 (COVID-19) pandemic, their contribution to COVID-19-related patient care and the challenges they are experiencing due to their immigration status backlog which has only been magnified during this pandemic for various reasons.

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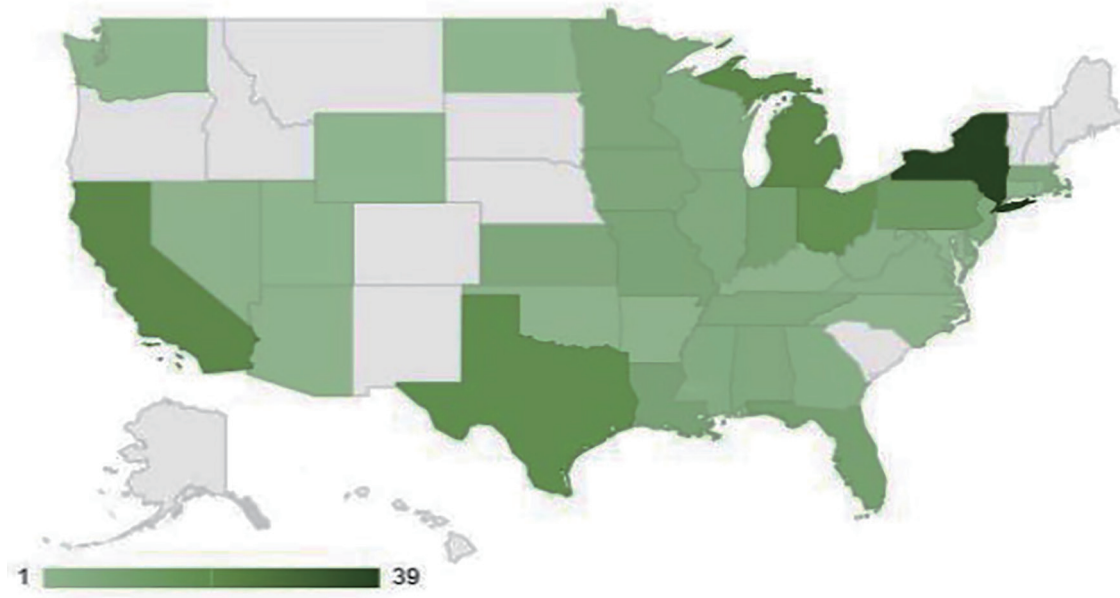


Figure 1. State wise distribution of survey participant US trained international medical graduate pediatricians.

Materials and Methods

About 5 weeks after the declaration of the COVID-19 pandemic as a national emergency in the USA, the lead investigators of the study published a cross-sectional survey across multiple social media communities with IMG physician members [6]. The survey was posted periodically over the month and made shareable to facilitate snowball sampling. The physician participants have filled out the survey voluntarily and were not offered any incentives in any form at any point of the study. The physician participants were authenticated based on their National Provider Identifier (NPI) numbers, specialty and location of practice. The survey was designed and circulated using “Survey Monkey” data collection platform.

To ensure that only IMG pediatricians were included in the study population, three screening questions were asked at the beginning of the survey which included the primary occupation if they were a pediatrician and if so, if they were an IMG or not and followed by if they were an IMG on a visa status or not. Only if they answered yes to all the three questions, were they included in the study.

Demographic details such as their location, level of training and subspecialty if applicable and if they were in active clinical practice were collected. Immigration details such as current visa status, approval status for permanent residency in the USA and if their family members were visa holders as their dependents were obtained as well.

We also collected information involving their work specifications such as, if the physician was involved with direct or indirect COVID-19-related patient care, their involvement in COVID-19 administrative duties and their community setting of practice (urban versus rural and medically underserved areas).

The direct effects of COVID-19 on the physicians such as

them contracting the virus themselves, number of work days lost to COVID-19 illness and need to quarantine from exposure and also repercussions such as a reduction in pay and employment termination were also analyzed in this study.

The additive hardships IMG pediatricians have to face such as the risk of deportation, the physician and their family face in the circumstance of the physician being disabled or dying, limitation to work in “COVID-19 hotspots” or work as “locums” and ability to provide telemedicine services due to the restrictions of their visa status were also studied.

SPSS version 26 was used for statistical analysis of the final study sample. Institutional Review Board approval and Ethics Board Review were not needed for this study.

Results

The final sample had 267 pediatricians who were IMGs on a visa status and had participated in the survey on a nationwide basis (Figs. 1 and 2).

Demographics, specialty and subspecialty distribution of the IMG pediatricians in the COVID-19 pandemic

All the physicians included in the survey results were IMGs and were either undergoing or had completed US pediatric residency or subspecialty fellowship training. Ages of the physicians in the survey sample ranged from 25.00 to 53.00 years with 34.50 years being the mean age of the pediatrician with a standard deviation of 4.84 years. The survey participant physicians were scattered nationwide with the most populous states being 14.6% from New York State followed by 7.86% from California and Michigan. Of the pediatricians, 56.2% were

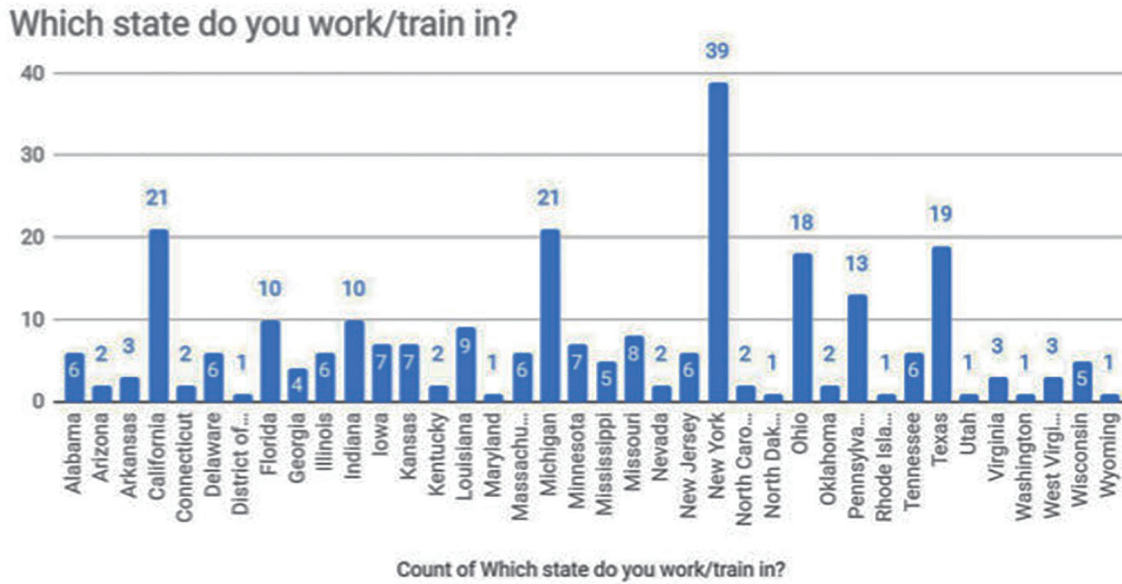


Figure 2. State wise distribution of survey participant US trained international medical graduate pediatricians.

physicians in practice, 19.5% of those surveyed were training as pediatric residents and 24.3% were in training in pediatric fellowships (Fig. 3); 22.8% of the pediatricians were practicing as general pediatricians and 16.4% were training in general pediatrics at the time of the survey. The rest were training in various pediatric specialties or practicing in them.

Immigration status and location of practice of the IMG pediatricians serving the pandemic

All the pediatricians included in the survey were on a visa status. Of the physicians, 34% were in training status on a J1 visa, 60.8% of the physicians were on H1 visa status, 20.5% of the physicians were working in underserved or physician shortage areas as part of J1 waiver jobs and 11.2% physicians

had completed working the J1 waiver years of service. Of the physicians that participated in the survey, 58.4% were working in either medically underserved or physician shortage areas. Of the total physicians, 36% were working in a rural setting. Of the total physicians, 78.3% were the primary visa holder for the family. Of the total physicians’ families, 53.2% would face hardship in terms of deportation in the case of the physician becoming disable or dying.

Ramifications of immigration policy changes on pediatric patient care in the pandemic

At the time of the survey, United States Immigration and Citizenship Services (USCIS) had in the face of the pandemic suspended premium processing and other visa-related services

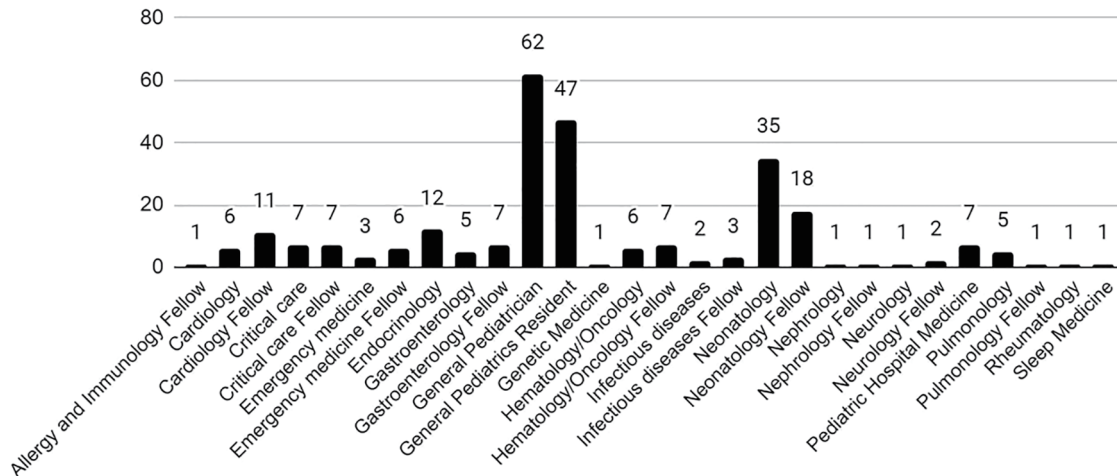


Figure 3. Level of training and pediatric specialty/subspecialty chosen by survey participants.

which would affect 54.4% of the pediatricians in providing seamless healthcare to the children of their communities. Of the study sample, 87.3% were involved in direct patient care involving COVID-19 positive and suspected patients. Of the total pediatricians, 36% were involved in administrative duties involving COVID-19 pandemic preparedness within their healthcare systems. Of the pediatricians, 10.6% had to be quarantined due to exposure to COVID-19 and 0.8% were infected with COVID-19 themselves. Of the pediatricians, 8.1% had to lose work days due to their illness or quarantine. Of the pediatricians, 25% had to take a pay cut or work less number of hours and 1.7% of the pediatricians lost their employment due to the financial crisis of their healthcare system through the pandemic. Of the pediatricians, 81.3% had faced hindrance in being able to work at a COVID-19 hotspot due to restrictions of the visa status they were stuck in. Of the pediatricians, 35.2% had been approached by healthcare systems, state health departments and recruiters requesting to take shifts at an area of staffing shortage in dealing with COVID-19. Of the pediatricians, 44.1% could not participate in telemedicine services due to their visa restrictions. Of the pediatricians, 92.7% were from countries that are facing administrative backlog in processing IMGs on a visa with an approved green card status. Of the IMG pediatricians of our study sample, 41.9% had been approved for a green card status but were stuck in administrative backlog and were thus being hindered professionally by visa restrictions. This had led communities to be deprived of physician availability and the physicians themselves facing more personal hardships than their fellow pediatricians.

Discussion

At the onset of the COVID-19 pandemic, in order to avoid risking exposure, parents had been hesitant in bringing their children to outpatient clinics for their wellness visits [7]. Preventative care is the cornerstone of pediatric care. This trend has posed several concerns for pediatricians which include delay in vaccinations creating the fear of secondary outbreaks of vaccine preventable diseases and also has caused delays in timely screenings and referrals [8, 9]. The unfortunate lapse in care the pandemic has created has increased the workload pediatricians have to catch up with. The pandemic has also created the burden of having to shift to telemedicine services which several pediatric practices did not have in place in pre-pandemic times and is still not possible to set up for all practices thus further delaying children from getting the medical care they need.

During the COVID-19 pandemic, reorganization of pediatric services was required in many hospitals, which reduced the services and the space previously assigned to pediatric wards to use pediatric beds for patients of all ages with COVID-19 [10]. Pediatricians had been reassigned to adult patient services across several healthcare facilities to deal with the increased number of hospitalizations with the rapidly rising number of COVID-19 cases [11]. These have been speciality specific unique circumstances that pediatricians have needed to face.

IMGs have always helped bridge the gap in rural health-

care needs in the USA [12]. Most of the IMGs use J-1 exchange visas to complete their pediatric residency training in the USA, with the expectation that they will return to their home countries for 2 years. In order to help retain these US trained pediatricians, there are several legislative 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 which direct these physicians to the communities whose children need them the most [13]. After completion of a pre-set number of years of service in these communities, these pediatricians become eligible to apply for a permanent resident status in the USA [14, 15]. Based on the country of birth of the applicant, the wait times can vary widely among applicants. The top few countries that these graduates hail from are India, Canada, Pakistan and Nigeria [16]. Some of these applicants have the longest wait times, up to 150 years before they become eligible to adjust their status to that of a permanent resident due to their country of birth [17, 18].

Hundreds of physicians have died of COVID-19 across the globe and thousands of healthcare personnel have contracted the infection in the USA [19]. The loss of our limited physician workforce makes it even harder for children in rural USA to find a provider several miles away to have their healthcare needs met.

The pandemic amplified the additional need for physicians in the “COVID-19 hotspots” or in rural hospitals which were already short of physician coverage. Of pediatricians in the sample, 87.3% were involved in direct care of COVID-19 proven or suspected patients.

In current times, there are a few federal legislations that have been introduced to help this section of the physician workforce [20, 21]. The “Healthcare Workforce Resilience Act (S.3599)” was introduced in April 2020 to strengthen the state and nation’s physician workforce in the COVID-19 crisis by recapturing the unused visas from previous fiscal years for doctors, nurses and exempt these visas from country caps [20]. Reauthorization of the Conrad-30 waiver program (S. 948) allows all states nationwide to retain and recruit up to 35 IMGs into their rural states which is an increase from the existing 30 and grants the physicians permanent residency at the end of 5 years of service provided in a medically underserved area [21, 22].

Our survey is limited by the timing of the study as it was conducted in April 2020, when the COVID-19 pandemic was in the early stages in the USA. We anticipate that the hardships faced by the physicians will worsen with the ongoing pandemic.

Conclusion

IMG pediatricians continue to play a valuable role in taking care of the children in the underserved populations of this country during the COVID-19 pandemic. The challenges surrounding the existing immigration policies and the constantly changing immigration policies through the pandemic are making it hard for IMG Pediatricians to render the most effective and seamless healthcare to children across the nation.

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Financial Disclosure

No financial funding was required for this study.

Conflict of Interest

The authors declare that they have no conflict of interest.

Informed Consent

Not applicable.

Author Contributions

SVM has designed and performed the study. DV and SVM have drafted the manuscript and did critical editing. DV and SVM have assisted and supported in sample collection and subsequent analysis with statistics. PA and DG have carefully supervised this manuscript preparation and writing.

Data Availability

The authors declare that data supporting the findings of this study are available within the article.

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