

## **Resident Spotlight, May-June 2020 Residency Times**

### **Interview with Mehdi Farshchian, MD, PhD, Dermatology resident**

M. Farshchian, G. Potts, A. Kimyai-Asadi, D. Mehregan, & S. Daveluy, "Outpatient Tele dermatology Implementation During the COVID-19 Pandemic Challenge and Lessons Learned," *Journal of Drugs in Dermatology*, June 2020

### **GME: Congratulations to you and your co-authors on this publication! Could you tell us a little about your previous medical training and research experience?**

MF: I completed medical school in Hamedan University of Medical Sciences, in Hamedan, Iran. After graduation, I left Iran to complete a PhD in the Dept. of Dermatology at University of Turku in Finland, where I researched novel biomarkers for cutaneous squamous cell carcinoma. After obtaining my PhD, I decided to further pursue my research interests in the US, where I could find unparalleled academic dermatology institutions as well as a large, ethnically and culturally diverse patient population. As such, I joined the Dept. of Dermatology at Thomas Jefferson University as a postdoctoral research fellow studying the management of squamous cell carcinoma in recessive dystrophic epidermolysis bullosa under the supervision of Drs. Andrew South and Jouni Uitto. While working as a postdoc, I completed the US medical licensing examinations and participated in the dermatology residency match. Before joining Wayne State University as a dermatology resident, I completed my internship in medicine at the Nassau University Medical Center in Long Island, NY.

### **How did you become interested in dermatology?**

I started to become familiar with dermatology when I was in elementary school. At that time, my uncle, who is now a professor of dermatology, was finishing his residency and preparing for his dermatology board examination. Out of curiosity, I would flip through his dermatology textbooks and browse the pictures of skin diseases. During medical school, my interest in the field of dermatology deepened. I conducted my first clinical research project in dermatology as a third-year medical student. Later in medical school, I became involved with designing and performing clinical trials and published the findings in peer-reviewed dermatology journals. My great passion for research led me to continue dermatologic research as a PhD student, later as a postdoctoral research fellow, and now as a dermatology medical resident.

### **How did you become involved in the writing of the *Journal of Drugs in Dermatology* article? What was the publishing process like?**

The COVID-19 pandemic resulted in almost all outpatient clinics being shut down. Unfortunately, Michigan was one of the states with the highest number of patients affected with coronavirus, and we felt the need to ensure that our patients would be able to reach us even during a stay-at-home order. This crisis required us to find out a way to keep the connection with our patient and prevent patients with skin diseases from visiting emergency departments, especially when our ER colleagues could be

overwhelmed with COVID-19 patients. It was not easy to have a sudden and unanticipated switch from all routine live clinic visits to telemedicine encounters. While all our faculty members and residents in the Dept. of Dermatology were ready to provide continuation of care to those patients who suffered from skin diseases, each step in our normal clinic processes, such as registration, check-in, and billing, had to be replicated in a virtual environment. In addition, a user-friendly and HIPAA-compliant platform was needed to perform real-time teledermatology encounters in an environment that was deemed secure for both patients and physicians. After successful implementation of teledermatology at Wayne State University clinics, we decided to write an article based on our experiences with teledermatology and the challenges we encountered. We believed that publication of this article would help our colleagues all over the country and internationally find a secure and convenient platform to perform their teledermatology encounters when faced with this kind of crisis or disaster.

**The COVID-19 pandemic created a surge of interest in telemedicine practices. The *JDD* article notes that the Dept. of Dermatology had already been using telemedicine for patients at the Veterans' Administration and the Michigan Dept. of Corrections, but that after the pandemic 77% of care was delivered in this way. To what extent do you think this will change after the pandemic subsides?**

Despite opening our live clinics, we are planning to continue offering teledermatology visits. This will facilitate seeing patients who live in remote areas as well as those who are not able to physically present themselves at our clinics. In addition, after establishing teledermatology services, we realized that the virtual encounter could be an optimal method for treating a number of conditions, such as acne follow-ups. It allows dermatologists to dedicate more time to counseling and to send documents directly to the patient to improve compliance. It is common for our patients presenting in our clinics not to have their medications with them and not be aware of the medications they are using. We learned from our teledermatology experience that it is much easier for to find out what medications a patient is taking while they are at home, since they have access to their medication and can show them to us over a video call. Of course, in-person dermatology visits still outperform teledermatology visits in many aspects, such as the ability to better assess skin lesions and to perform biopsies, injections, and surgeries. Regardless, the teledermatology infrastructure should be optimized and our dermatology colleagues should become more familiar with this increasingly indispensable part of modern medicine.

**Were there areas of the *JDD* article you would like to have expanded upon but couldn't? Would you like to publish further research in this area?**

There are definitely areas that we could not include in this article due to space considerations, and we are looking into future research in teledermatology. One of the aspects that needs to be further addressed and studied is a comparison of the different platforms that being used for teledermatology. As our conversion from live clinic visits to virtual visits happened very quickly and unexpectedly due to the COVID-19 pandemic, we did not have the opportunity to perform thorough research comparing different available platforms. Another aspect that needs to be further discussed in future manuscripts is the limitations teledermatology poses and strategies to overcome or minimize these limitations. Furthermore, the excess error rate in teledermatology is one of the areas that I would like to study and

be able to provide data with statistical analysis for. We have been using teledermatology for our in-patient consult patients. We are planning to write a separate manuscript about our experience with in-patient teledermatology and share our challenges and lessons with our colleagues across the country. Last but not the least, like any other patient-provider interaction, patient satisfaction is a critical aspect of healthcare and deserves to be properly studied.

**On the basis of your residency experiences so far, what do you see as the future of telemedicine, or teledermatology?**

Given the current speed of technologic development, telemedicine and teledermatology will be an indispensable part of the future of medicine and dermatology. Increased access to the internet and video-capable phones help more patients meet the basic requirements for teledermatology. With continued improvements in telemedicine platforms and internet infrastructures, teledermatology adoption will not remain limited to this crisis. In the future, many patients will not have to travel a long distance to see a dermatologist unless a procedure is required. We will hear more about telemedicine in next few years; I foresee it as being part of our regular routine in the future.

**What are your plans on completing your residency?**

With my background in dermatological research and my endless passion for research in dermatology, I am planning to stay in academia and become an academic dermatologist.

**Is there anything else you would like to add?**

I would like to thank all the attending physicians and my co-residents at Wayne State Dermatology for their concerted effort to implement teledermatology in our department and their continued provision of care to the patients who have needed us during COVID-19 pandemic.