American Association of Orthodontists Foundation

Research Aid Award

Dr. Karen Homsi, University of Illinois at Chicago

Karen Homsi, DMD, BS, BA

Dr. Karen Homsi is an Illinois native and proud Chicagoan. Her love of education and commitment to life-long learning led her to earn two bachelor's degrees from different universities in visual communications and biological sciences. She then earned her DMD from the University of Illinois at Chicago College of Dentistry (UIC COD), where she is currently continuing her academic journey in the department of orthodontics as a third-year resident.

Dr. Homsi is committed to contributing to the foundation of orthodontic research and education. In 2015 she was the recipient of the UIC COD Summer Research Fellowship Award and



presented her findings at the AADR Annual Meeting in March 2016. She was also published that same year for a study on dental hygiene education. At the 2018 ADEA Annual Meeting, she helped lead two separate short-talk sessions on dental education from the student perspective. Her research interests include teleorthodontics, AI technology, healthcare education, health policy and access to care. Dr. Homsi is able to continue pursuing these research interests during residency in gratitude to the support of her faculty and the AAOF.

In 2021, Dr. Homsi was awarded the Charles J. Burstone Research Aid Award from the AAOF in support of her proposed investigation into the factors that influence the use of teleorthodontics by patients and providers. In collaboration with Drs. Mohammed Elnagar, Veerasathpurush Allareddy, Phimon Atsawasuwan and Maysaa Oubaidin, she seeks to identify gaps in knowledge on facilitators and barriers to providing virtual orthodontic care.

Since the COVID-19 pandemic resulted in the temporary discontinuation of non-emergent dental treatment in the state of Illinois from March 2020 until June 2020, many patients in active orthodontic treatment had little to no in-person interaction with their orthodontic provider for a period longer than typical. In response, the UIC COD encouraged orthodontic residents to conduct synchronous and asynchronous virtual visits to check-in with patients. This uptick in the usage of tele-communication platforms provides an optimal setting to explore their application in orthodontics. The proposed study aims to conduct a survey-based evaluation of the patient and the orthodontic provider experience with and perspective on teleorthodontic visits during the COVID-19 pandemic. The study objective will test the hypothesis that the existing patient-

provider relationship, internet speed and access, the stage in treatment and the basis of need for the teleorthodontic visit are associated with facilitators and barriers to teleorthodontic utilization.

The generous funding from the AAOF in support of this proposed study, will enable Dr. Homsi and her co-investigators to increase the orthodontic community's understanding of the scope of application of teleorthodontics into the current and evolving orthodontic clinical practice model. It will serve as an evidence-based reference for clinicians seeking to utilize this understudied patient-driven technology and orthodontic residency programs considering the incorporation of teleorthodontic training in their curricula.