

American Association of Orthodontists Foundation

Biomedical Research Award

Dr. Thikriat Al-Jewair, *State University of New York at Buffalo*

Dr. Al-Jewair is Associate Professor and the Director of the Advanced Education Program in Orthodontics at the University at Buffalo. She is a Diplomat of the American Board of Orthodontics and a Fellow of the Royal College of Dentists of Canada in Orthodontics and Dental Public Health. Dr. Al-Jewair currently serves as administrative board member on the ADEA Council of Advanced Education Programs and as treasurer for the Buffalo Section of the AADR. She has published over 65 peer-reviewed papers and book chapters on orthodontic treatment outcomes, adult and pediatric sleep-disordered breathing, and evidence-based orthodontics. Her current research focuses on studying the effects of orthodontic interventions on sleep bruxism and obstructive sleep apnea with automated mandibular movement monitoring.



Sleep bruxism (SB) is considered the most damaging among all oral parafunctional activities, yet, little is convincingly known regarding its exact prevalence, etiology, and management in pediatric populations. In the absence of the gold standard audio-video polysomnography, previous studies have relied heavily or entirely on parental/guardian reports of SB for their children. Subjective reports were not found to be useful indicators of SB. Further studies using accurate diagnostic modalities are needed to fully understand the prevalence and management of this disorder. Orthodontists are uniquely positioned to evaluate the clinical signs and symptoms of SB and its anatomical risks in growing orthodontic populations. Orthodontists' understanding of craniofacial growth and development and the management of dental and skeletal abnormalities allows them to contribute to the multidisciplinary management of sleep disorders. The overarching goal of this study is to improve our understanding of SB and its orthodontic managements among children and adolescents.

The American Association of Orthodontists Foundation (AAOF) played a pivotal role in the advancement of Dr. Al-Jewair's academic career. She previously received the Orthodontic Faculty Development Fellowship Award which allowed her to conduct two important research projects and supported her development as a clinician and educator. Dr. Al-Jewair is grateful to the AAOF for its generous support of her research and to the orthodontic profession as a whole.