Augmented reality in dentistry

Abstract

With each passing day, technology evolves, improving prospects in multiple fields in life. Whether in the applied sciences fields, education, military, sports, entertainment industry, medical field, dental field, or others. Digital transformation is a phrase that is omnipresent in a broad spectrum of business sectors, and the dental field is no exception. Technology has advanced; facilitating and helping the dentists to diagnose and treat patients. Many digital production management workflows have already been implemented into treatment protocols, especially in the fast-growing Computer-Aided Design\Computer Aided Manufacturing (CAD\CAM), Rapid Prototyping (RP), automated processing in radiological imagining by the usage of Artificial Intelligence (AI) and Machine Learning (ML), and Augmented and Virtual reality (AR\VR).

Dental and medical fields also prospered due to the variety of AR technology utilization; thus, affecting multiple departments. One of those utilisations is Image-Guided Therapy (IGT), and Image-Guided Interventions (IGI), which is image identification and tracking system that is used by surgeons to provide an accurate surgical position or to allow the surgeons to practice before the surgery. Besides surgeons, these technologies is also used by dental implantologists, for delivering a successful treatment and reduce the risk of dental implants.

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Biography

Huda Abutayyem has UAE and UK license and completed Ph.D. in clinical orthodontics from Eastman Dental Institute, UCL London, UK. I am experienced academic and specialist in the field of orthodontics, working as assistant Professor and specialist in Orthodontics, Ras Al Khamiah Dental College (RAKCODS). I had the Membership of the Royal College of Surgeons of Edinburgh (M.F.D.S). I have a number of publications posters. I was a speaker and moderator of some conferences.