## **The International Congress on Health Studies**

## INTEGRATION OF ARTIFICIAL INTELLIGENCE AND VR/AR TECHNOLOGIES IN ORTHODONTICS: VISUALIZATION OF TREATMENT RESULTS AND COMMUNICATION WITH PATIENTS

Sherzodbek Ruziev (Kokand University Andijan Branch); Nigmatov Rakhmatulla (Tashkent State Dental Institute); Nigmatova Iroda (Tashkent State Dental Institute)

Modern dentistry, especially orthodontics, is reaching a new level closely connected with the rapid development of information technologies. Today, artificial intelligence (AI), virtual reality (VR), and augmented reality (AR) technologies are entering orthodontists' daily practice. These innovative technologies not only improve the treatment process but also enable communication between orthodontists and patients to reach a new level. In this article, we provide detailed information about current and future applications of artificial intelligence and VR/AR technologies in orthodontics, their importance in visualizing treatment results, and establishing effective communication with patients.

Keywords: Dentistry, Orthodontics, Artificial Intelligence, Virtual Reality, Augumented Reality