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Gamification in e-Health: strategies for oral health

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Abstract

Background: Gamification in healthcare is an innovative approach that uses game elements to motivate and engage patients in healthy behaviors. Gamification in oral health uses various game elements to create engaging and motivating experiences for patients [1-7]. Some of the most common elements include goals and challenges to achieve, rewards to obtain, competition, feedback, and the creation of an engaging narrative [1-7]. **Objective:** To analyze the benefits of using gamification to promote Oral Health. To present implementation models that have been successful in the last 3 years. Methods: A search was made in PubMed, Cochrane Library, B-On, and Scielo, considering articles published between 2020 and 2025, in English and Portuguese. The study selection strategy followed the PICO framework (Population: oral health patients; Intervention: gamification in oral health promotion; Comparison: other oral health promotion strategies; Outcome: improved oral health practices). The selection and analysis of studies were carried out according to PRISMA recommendations. Results: Gamification in healthcare can bring several benefits, both to patients and healthcare professionals. Some of the main benefits include: increased adherence to treatments: gamification can make treatments more fun and engaging, which can increase patient adherence; promotion of healthy habits: gamification can encourage physical exercise, healthy eating, optimized oral hygiene habits, dentist monitoring and other oral health-promoting behaviors; improved management of chronic diseases: gamification can assist in the management of chronic diseases, such as diabetes, hypertension or periodontal disease, by making monitoring and treatment more fun and engaging; reduction of stress and anxiety by providing a fun and relaxing experience; improved communication between patients and healthcare professionals. Conclusions: Gamification and ehealth are interdependent: gamification enhances user engagement in e-health through game elements, while e-health broadens the application and personalization of gamification in healthcare. In oral health, gamification improves motivation, facilitates learning, encourages long-term hygiene habits, and reduces dental anxiety, representing a key strategy in global oral health promotion.

Keywords: gamification; e-health; oral health; oral health promotion; literacy; games

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