

Evaluating Video-Based Patient Education as a Tool for Improving Oral Health Knowledge

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Patient education is a critical component of effective dental care. Traditionally, it has relied on didactic methods such as verbal instructions and demonstrations. With the growing integration of digital health, video-based education is emerging as a promising tool. However, its effectiveness compared to conventional approaches remains underexplored. This study aimed to evaluate the effectiveness of video-based patient education in improving knowledge and practices related to oral health care, compared to traditional didactic methods. A quasi-experimental study was conducted at the Dental Hospital Peradeniya, Sri Lanka, involving 60 patients, with 30 patients in the test and control groups, selected through systematic random sampling. The test group received video-based education on dental plaque formation and plaque control, while the control group received the same content via a traditional didactic method. Pre- and post-intervention knowledge was assessed using a structured questionnaire, and brushing technique was evaluated using a standardized marking grid and a tooth brushing model. Data were analyzed using SPSS version 27. Among the participants, 32 had previously visited a dentist but had not received formal oral health education. Paired t-tests (95% CI) showed significant improvements in knowledge and brushing skills in both groups ($p < 0.001$). However, independent t-tests revealed no statistically significant differences between the groups before ($p = 0.460$) or after ($p = 0.790$) the intervention, indicating comparable effectiveness. Video-based education demonstrated similar effectiveness to traditional methods in enhancing oral health knowledge and practices. Its ease of implementation and scalability make it a valuable alternative in clinical settings. Further research is recommended to assess its long-term impact on patient outcomes and adherence.

Keywords: Patient Education, video-based education, didactic method, oral health knowledge, oral health Care