Development of an app for the dental care of Deaf people: Odontoseñas

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Background: Most Deaf people are often illiterate and communicate via sign language, hindering their dental care, causing high levels of oral morbidity and feelings of unfairness by the dental staff. Objective: To achieve effective communication between the dentist and the Deaf patient using an app. Materials and methods: Focus group were conducted by a team comprising dentists, Chilean Sign Language (ChSL) interpreters, Deaf people and a software programmer to identify the most prevalent and important phrases used during dental care. A Minimum Viable Product App including draft videos in SL were developed and evaluated by external teams through in-office simulations and surveys. Evaluation by Deaf people and dentists was carried out using the Dental Visit Satisfaction Scale and System Usability Scale, respectively. Improvements were made in each cycle, until reaching agreement for a final (release) version. Results: Thirteen ChSL videos were recorded and incorporated in the App Odontoseñas. The overall usability of the software scored 96 points over 100. The overall satisfaction of Deaf people without the software was 21, and with the software was 29 over 30. Conclusions: Odontoseñas gives relevant information about dental care, facilitating diagnosis, treatment and improving oral health care experience for the Deaf patient. © 2018, Springer-Verlag GmbH Germany, part of Springer Nature.

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