

Attitude of dental students toward role of virtual reality in dental education

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Dear Editor,

Over the past few years virtual reality (VR) technology has been included in medical and dental students' education prior to their clinical interaction with patients.¹ There is a recent rise in research related to the application of VR-based technologies in dental preclinical training.^{2,3} However, there is not much data available regarding the attitude of the student towards VR technologies, especially in dental education. The aim of this survey was to explore dental students' attitudes towards virtual reality (VR) in dental education. The study also evaluated the change in attitude of the survey respondents following exposure to information regarding VR in dental education.

A double questionnaire-based study was conducted over a period of 18 months, involving 135 dental students, interns, and postgraduates from three medical universities in United Arab Emirates (UAE). At first a pre-validated questionnaire with 11 questions was used for the study.⁴ Out of 135 respondents, 122 indicated familiarity with VR technology. Among the 122 respondents 33.42% (n=42) recognized that VR was being used in the field of dental education. A video link made by

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Mahidol Bremen informatics research unit, Mahidol University, Thailand showing the application of VR in dental preclinical training was sent to all the respondents who participated in the survey.⁵ Among the 135 respondents 21 viewed the video. A second survey with three questions from the first questionnaire was sent to them after they viewed the video.

The results of the survey revealed that the dental students were familiar with the concept of VR. However, only one third of them were aware of its application in dental education. There was a significant change in the attitude of the students after watching the video about the application of VR in dental education. There was no significant difference between pre- and post-video responses regarding cost-effectiveness of VR technologies among the respondents. A significantly higher number of the respondents who watched the video felt that VR technologies would be used by dental colleges in the country within the next five years.

In conclusion, dental students require greater awareness of VR technologies in dental education. A better awareness of VR technologies leads to a better outlook and attitude among students.

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