

UNIVERSITI TEKNOLOGI MARA

**EFFECTIVENESS IN THE
DELIVERY OF DENTAL TRAUMA
KNOWLEDGE AMONG TRAINEE
TEACHERS USING MOOC AND
WEBINAR.**

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ABSTRACT

Introduction: Schoolteacher Traumatic dental injuries (TDI) knowledge is low reported within Malaysia and internationally. The purpose of the study is to investigate TDI knowledge level of students on faculty of education and to explore improvement of knowledge after delivering (TDI) course in MOOC and Webinar platforms and compare them. **Methodology:** 251 Students from Faculty of Education participated. 126 were assigned to MOOC and 125 to Webinar group. Questionnaires were given to both groups to determine pre-intervention knowledge. MOOC group were given the link while the webinar group were given lecture in Webinar form. One week after, another set of questionnaires was given to establish post-intervention knowledge. Then, four participants volunteered for MOOC focus group and 5 for Webinar focus groups and discussions were run in two separate sessions. **Results:** Quantitative analysis showed improvement in TDI knowledge between pre and post-intervention. Tooth identification question showed correct answers increased from 16.7% to 55.6% MOOC and 34.4% Webinar and most favourable transport medium question correct answer increased from 15.5% to 62.7% MOOC and 56.8% Webinar. Comparing pre and post-MOOC intervention, Tooth identification question showed permanent tooth choice increased from 17.5% to 55.6% and “Do not know” decreased from 18.3% to 4% and Tooth rinse question showed Tap water increased from 36.5% to 63.5% & and reduced in percentage of Antiseptic, alcohol and mouthrinse. Comparing pre and post post-Webinar intervention, re-implanting avulsed tooth increased from 12% to 35.2%. and choice of milk as storage medium increased from 12% to 25.6%. Thematic analysis identified six themes which are TDI Perception, Knowledge after TDI course, Long-term effect of the course, MOOC, Webinar and Recommendation to Public which suggests participants’ opinions about TDI course and delivery platform whether it is MOOC or Webinar. **Discussion:** The result showed improvement in knowledge of most scenario questions between pre and post-intervention questionnaire. The thematic analysis of focus group showed a positive reflection from participants about TDI course and their interest to attend it on a regular basis. They discussed the advantages and disadvantages of both platforms. **Conclusion:** The delivery of TDI course is essential to improve TDI knowledge of students of Faculty of Education specifically and schoolteachers in generally. The MOOC which is done by professional committee, provides flexibility in time and place of attendance and uniformity of delivery.

Keywords: TDI knowledge, MOOC, Webinar, schoolteachers

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