The efficacy of using animated videos as an educational tool about root canal treatment

Submission date	Recruitment status No longer recruiting	Prospectively registered		
09/05/2023		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
15/05/2023	Completed	[X] Results		
Last Edited 30/07/2024	Condition category Oral Health	[] Individual participant data		
JU/U1/2U24	Oracricalli			

Plain English summary of protocol

Background and study aims

Most patients are unaware of the root canal treatment process; they fear it because they think or hear it is unpleasant. This ignorance may influence the patient's decision hence trying to avoid the treatment. Written pamphlets, films, face-to-face counselling, and web-based apps are all examples of educational tools that may be used to provide health information. The use of video as a teaching tool has several potential benefits. It can be less expensive, eliminate educator discrepancies, be delivered in various formats and reach a large audience via social media. However, it is unknown what is the best educational tool to use for increasing population awareness about root canal treatment. For this reason, a randomized controlled trial study aims to evaluate the patients' knowledge and awareness of endodontic therapy. As well as their worries and expectations by comparing two delivery methods: educational animation and leaflets.

Who can participate?

Adult patients recruited from Umm Al-Qura University (UQU) who can speak and read Arabic, live in Saudi Arabia, know how to use Whatsapp and approve to participate in the trial and did sign the consent form.

What does the study involve?

The participants' knowledge was assessed at the baseline then they were randomized into a study group (SG) and a control group (CG).

The SG received an educational animation followed by the assessment questionnaire, which evaluated the knowledge, attitude, perception, experience and challenges toward the endodontic treatment. The CG received a leaflet followed by the same assessment.

What are the possible benefits and risks of participating?

The main benefit is to improve the patient's knowledge about root canal treatment. No risk

Where is the study run from?

Umm Al-Qura University (UQU), Faculty of Dentistry, Makkah, Saudi Arabia, is where participants were recruited. After gaining their approval, an online questionnaire was sent via Whats app.

When is the study starting and how long is it expected to run for? December 2021 to March 2023

Who is funding the study? Investigator initiated and funded

Who is the main contact?
Dr Afnan Nassar, aanassar@uqu.edu.sa

Contact information

Type(s)

Scientific

Contact name

Dr Afnan Nassar

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Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

HAPO-02-K-012

Study information

Scientific Title

The effect of educational animation compared to leaflets on patient's knowledge and attitude regarding root canal treatment: a randomized control trial

Study objectives

Using educational animation improves patients' knowledge and awareness about root canal treatment compared to leaflets.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 04/01/2022, Umm Al-Qura University Institutional Review Board (Umm Al-Qura University, Makkah, 24352, Saudi Arabia; +966 (0)125270000; irb.uqudent@uqu.edu.sa), ref: HAPO-02-K-012

Study design

Single-blinded randomized controlled trial

Primary study design

Interventional

Study type(s)

Other

Health condition(s) or problem(s) studied

Knowledge about root canal treatment in dental patients

Interventions

Study group (SG):

In this group, the participants were selected from UQU Dental Clinics. They were contacted via WhatsApp (a social media platform) and given a demonstration video on how the dentist performs endodontic treatment and the benefits of this procedure. WhatsApp was used because of the end-to-end encryption, so it is highly secure and preserves patient confidentiality. Participants received a self-reported questionnaire to assess their knowledge, attitude, perception and challenges toward endodontic treatment and impression from the educational animation experience.

Control group (CG):

This group received the same information, except it was delivered in a leaflet.

Evaluation at different periods: (T1) before the intervention, (T2) immediately after the intervention and (T3) one month after the intervention, using a questionnaire.

Randomisation: Computer software was used (https://www.randomizer.org). Two Sets of 66 unique numbers per set ranging from 1 to 133 were generated.

Intervention Type

Behavioural

Primary outcome(s)

Evaluation at different periods: (T1) before the intervention, (T2) immediately after the intervention and (T3) one month after the intervention, using a questionnaire.

The questionnaire is composed of three sections.

Section one contains questions about demographic variables: including gender, educational level, age, occupation, and nationality.

Section two assessed the participant's knowledge of root canal treatment (RCT) and his previous experience with RCT.

The third section determined the participant's attitudes toward RCT.

Key secondary outcome(s))

There is no secondary outcome measure.

Completion date

23/03/2023

Eligibility

Key inclusion criteria

- 1. Adult (18 years and older).
- 2. Arabic speakers living in Saudi Arabia.
- 3. Able to read and use WhatsApp social media platform.

Participant type(s)

Other

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Total final enrolment

70

Key exclusion criteria

- 1. Did not complete the three questionnaires.
- 2. Did not approve to participate in the trial and did not sign the consent form.

Date of first enrolment

04/01/2022

Date of final enrolment

01/12/2022

Locations

Countries of recruitment

Saudi Arabia

Study participating centre

Online

Umm Al-Qura University Makkah Saudi Arabia 24382

Sponsor information

Organisation

Umm al-Qura University

ROR

https://ror.org/01xjqrm90

Funder(s)

Funder type

Other

Funder Name

Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

Dr. Afnan Nassar, Umm Al-Qura University, Faculty of Dentistry, Saudi Arabia. SPSS file (unidentified).

The data will be available upon request for two years.

Data can be accessed by the journal to which we will submit our article, any Saudi Governmental authority and researchers after careful consideration of their scientific intention to use. All data are anonymous, with no identification.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		29/07/2024	, ,		No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes