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

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

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

EudraCT/CTIS number Nil known

IRAS number

ClinicalTrials.gov number Nil known

Secondary identifying numbers 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

Secondary study design Randomised controlled trial

Study setting(s) Community, Internet/virtual

Study type(s) Other

Participant information sheet Not available in web format, please use contact details to request participant information sheet.

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 measure

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.

Secondary outcome measures

There is no secondary outcome measure.

Overall study start date

02/12/2021

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

Age group Adult

Lower age limit 18 Years

Sex Both

Target number of participants 133

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

Sponsor details Al Abdeyah Makkah al Mukarramah Saudi Arabia 21955 +966 125501000 dentistry@uqu.edu.sa

Sponsor type University/education

Website https://uqu.edu.sa/english

ROR https://ror.org/01xjqrm90

Funder(s)

Funder type Other

Funder Name Investigator initiated and funded

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal

Intention to publish date

26/08/2023

Individual participant data (IPD) sharing plan

Details

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	
Results article	

Date created 29/07/2024
 Date added
 Personal

 30/07/2024
 Yes

Peer reviewed? Yes Patient-facing? No