Effectiveness of using video in delivering postoperative instructions compared to written and verbal form in patient's understanding and compliance following dental extraction

Submission date	Recruitment status No longer recruiting	Prospectively registered		
11/10/2023		Protocol		
Registration date	Overall study status	Statistical analysis plan		
27/10/2023	Completed	[X] Results		
Last Edited 10/03/2025	Condition category Other	[] Individual participant data		

Plain English summary of protocol

Background and study aims

Dental extractions are among the most commonly feared and uncomfortable dental procedures. Many post-operative complications can happen after dental extraction, including pain, swelling, infection, and discomfort. However, it is well documented that good communication with the patient and giving enough information regarding the procedure before, during surgery and after extraction will reduce the anxiety and the risk of complications. Video-based educational tools have become commonly used among medical professionals to deliver instructions to patients. However, based on our search no studies have assessed the compliance and understanding of post-operative instructions after extraction by providing the post-operative instructions in the form of a video. This study aims to assess the understanding and compliance of patients by delivering the post-operative instructions in the form of a video in comparison with the conventional method.

Who can participate?

Adult patients aged between 18 and 65 years old undergoing simple dental extraction

What does the study involve?

Participants will be randomly allocated to receive instructions following the dental extraction, either in a conventional method (written and verbal), or in video form sent via WhatsApp.

What are the possible benefits and risks of participating?

The expected benefits include helping the patients who had a language barrier or reading difficulties to better understand the post-operative instructions using the video and having a home reference to revisit. There are no additional risks expected from participation.

Where is the study run from? Umm Al-Qura University (Saudi Arabia) When is the study starting and how long is it expected to run for? November 2022 to June 2023

Who is funding the study? Investigator initiated and funded

Who is the main contact?
Amal Saeed AlQahtani, Amalsaeed.qa@gmail.com

Contact information

Type(s)

Public, Scientific, Principal Investigator

Contact name

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Contact details

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

HAPO-02-K-012-2022-11-1337

Study information

Scientific Title

Effectiveness of post-extraction instructions delivery methods on patients understanding and compliance: a randomized controlled trial

Study objectives

Using a video for delivering post-operative instructions will improve patient understanding and compliance more than written and verbal methods following dental extraction.

Ethics approval required

Ethics approval required

Ethics approval(s)

Approved 17/12/2022, Biomedical research ethics committee at Umm Al-Qura University (Umm Al-Qura University, Makkah, 24352, Saudi Arabia., Makkah, 24352, Saudi Arabia; +966 125280347; cscenter@ugu.edu.sa), ref: HAPO-02-K-012-2022-11-1337

Study design

Parallel-group single-blind randomized controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Dental clinic, Internet/virtual

Study type(s)

Efficacy

Participant information sheet

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

Health condition(s) or problem(s) studied

Efficiency of delivering post-operative instructions in patient's understanding and compliance

Interventions

The study will enrol patients who are seeking dental extraction over a 2-month period at the Oral and Maxillofacial Surgery Clinic, Faculty of Dentistry Umm Al-Qura University, Makkah, Saudi Arabia. The study will include patients of both genders who are scheduled to undergo simple dental extraction, who accepted to participate and who are aged 18 years old and over. Patients with uncontrolled systemic diseases or special needs patients will be excluded.

Patients will be randomly assigned by simple randomization, flipped coin (heads = conventional method, tails = video) into two groups according to how they will receive their post-operative instructions. The first group will be given the instructions in a conventional method (verbal and written), while the second group will be given an educational video identical to the written one. The extraction procedure is done under local anesthesia. All the extractions will be performed by 5th and 6th year dental students and dental interns, supervised by oral surgeons who are blinded to the study. Two investigators will be involved in the delivery of the instruction and data collection. After tooth extraction, the participants in the first group will receive the usual verbal and written instructions and the second group receive a video that visually explains all the post-operative extraction instructions sent via WhatsApp social platform immediately after extraction. The video presents the same information as the written instructions on paper.

Patients are asked to fill out a closed-ended questionnaire 2 days post-operative following extraction which is sent to them through a WhatsApp link to evaluate their understanding and compliance with the post-operative surgical instructions. The questionnaire will comprise three

parts. The first part is about demographic data (age, gender, educational level, and nationality), the second part measures patient understanding levels of post-operative instructions, and the third part measures the patient's compliance to post-operative instructions by close-ended questions [Yes - No questions].

Intervention Type

Behavioural

Primary outcome measure

The following primary outcomes are measured using questionnaires, self-reported, and administered 2 days after the intervention:

- 1. Demographic information
- 2. Understanding of instructions
- 3. Compliance with instructions

Secondary outcome measures

There are no secondary outcome measures

Overall study start date

13/11/2022

Completion date

06/06/2023

Eligibility

Key inclusion criteria

- 1. Patients who had undergone simple dental extraction of both gender
- 2. Age 18 years and older
- 3. Having no special needs or uncontrolled systemic diseases

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Upper age limit

65 Years

Sex

Both

Target number of participants

160

Total final enrolment

Key exclusion criteria

- 1. Special needs patients
- 2. Patients with uncontrolled systemic diseases

Date of first enrolment

20/12/2022

Date of final enrolment

08/05/2023

Locations

Countries of recruitment

Saudi Arabia

Study participating centre Umm Al-Qura University, Dental hospital

Taif Road Makkah Saudi Arabia 21955

Sponsor information

Organisation

Umm al-Qura University

Sponsor details

Taif Road Mecca Makkah Saudi Arabia 21955 +966 12 527 0000 dentistry@uqu.edu.sa

Sponsor type

University/education

Website

https://uqu.edu.sa/

ROR

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

15/11/2023

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are available on reasonable request from the corresponding author Amal Saeed AlQahtani, Amalsaeed.qa@gmail. com (Saudi Arabia). The data will be an SPSS file format (deidentified). 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, 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		09/03/2025	10/03/2025	Yes	No