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

Submission date
11/10/2023

Recruitment status
No longer recruiting

Registration date
27/10/2023

Overall study status
Completed

Last Edited
10/03/2025

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] 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

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Additional identifiers

Protocol serial number
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@uqu.edu.sa), ref: HAPO-02-K-012-2022-11-1337

Primary study design

Interventional

Study design
Parallel-group single-blind randomized controlled trial

Study type(s)
Efficacy

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(s)
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

Key secondary outcome(s)
There are no secondary outcome measures

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

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Upper age limit
65 Years

Sex
All

Total final enrolment
126

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

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 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