# Effect of storytelling on teledentistry awareness

Submission date	Recruitment status	[X] Prospectively registered		
08/11/2021  Registration date	No longer recruiting  Overall study status	☐ Protocol		
		Statistical analysis plan		
09/11/2021	Completed	[X] Results		
<b>Last Edited</b> 19/10/2023	Condition category Oral Health	Individual participant data		

### Plain English summary of protocol

Background and study aims

There is a global tendency towards improving oral health promotion. One of the methods to achieve that is storytelling. Storytelling encourages learners to create imaginative images and think creatively. Storytelling may lead to the storyteller and audience developing a sense of trust and comfort. On the other hand, teledentistry is an emerging field in dentistry and involves the use of information technology and telecommunications for dental care. However, there is a lack of knowledge regarding this emerging field among the public and dental professionals. The aim of this study is to assess the effect of storytelling on improving the awareness of teledentistry among adults in Saudi Arabia.

### Who can participate?

Dental patients and their relatives aged 18 years and over at Umm Al-Qura University Dental Hospital

#### What does the study involve?

Participants are randomly allocated into the study group or the control group. The study group receive a custom-made story and are then followed up by an assessment questionnaire to evaluate their knowledge of teledentistry, in addition to an experience assessment to evaluate their impression of experiencing teledentistry. The control group receive nothing other than the assessment questionnaire to evaluate their knowledge of teledentistry.

### What are the possible benefits and risks of participating?

The main benefit is increased awareness of teledentistry. As an incentive, the participants will also be entered into six separate random prize draws for 50 Saudi Riyal (USD 13.33) in the form of local bookstore gift cards given only to participants who complete all the questionnaires. There are no risks involved.

Where is the study run from? Umm Al-Qura University (UQU) (Saudi Arabia)

When is the study starting and how long is it expected to run for? November 2021 to November 2022 Who is funding the study? Investigator initiated and funded

Who is the main contact? Dr Khalid Aboalshamat ktaboalshsmat@uqu.edu.sa

### **Contact information**

### Type(s)

Scientific

### Contact name

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### Additional identifiers

### Clinical Trials Information System (CTIS)

Nil known

### ClinicalTrials.gov (NCT)

Nil known

### Protocol serial number

HAPO-02-K-012-2021-11-811

# Study information

#### Scientific Title

The effect of storytelling on improving the recognition of teledentistry among adults: a randomized controlled trial

### **Study objectives**

Is it valid to use a story about teledentistry to improve recognition compared to regular written flyers, and what is the level of knowledge, attitude, perceptions and challenges of using teledentistry among adults in Saudi Arabia?

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Approved 03/11/2021, 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-012-2021-11-811

### Study design

Parallel-group single-blind randomized controlled trial

### Primary study design

Interventional

#### Study type(s)

Other

### Health condition(s) or problem(s) studied

**Teledentistry** 

#### **Interventions**

Current intervention as of 01/03/2022:

Participants in the study group read a written educational story created by the research team. An email will be sent to the participants in the study group containing the consent form and T1 questionnaire in an online format. By the end of the questionnaire, there will be a link to download the story intervention as a PDF file, so, the participants will be able to read the story. At the end of the story there will be another link directing the participants to the T2 questionnaire online format. The time of answering the T1 and T2 questionnaires will be recorded. Participants who have a time difference between T1 and T2 of less than 5 minutes will be excluded from the study because it implies that the participants did not read the story in an effective manner. The T3 questionnaire will be sent to the participants in the study group after 1 month. The story was created to assess the knowledge of teledentistry.

The story describes a retired dentist and her journey to use teledentistry in an emotional script. Inside the story there is information about teledentistry that is designed to inform the participants about teledentistry. The story is 1523 words in the Arabic language, four pages that takes between 8 to 10 minutes to read. The story was sent as a 12-minutes video that has all the text with a story telling voice. Participants can speed up the storytelling, if wanted. The story can be requested from this study author. The story went through several phases to be validated in terms of understanding, grammar, syntax and structure via a small pilot of 12 participants.

The participants in the control group will receive the same protocol except that they will receive an educational flyer instead of the story intervention.

#### Randomization:

Randomization was conducted using computer-generated software to randomly divide the participants into the study and control groups.

#### Previous intervention:

Participants in the study group read a written educational story created by the research team. An email will be sent to the participants in the study group containing the consent form and T1 questionnaire in an online format. By the end of the questionnaire, there will be a link to download the story intervention as a PDF file, so, the participants will be able to read the story. At the end of the story there will be another link directing the participants to the T2 questionnaire online format. The time of answering the T1 and T2 questionnaires will be recorded. Participants who have a time difference between T1 and T2 of less than 5 minutes will be excluded from the study because it implies that the participants did not read the story in an effective manner. The T3 questionnaire will be sent to the participants in the study group after 1 month. The story was created to assess the knowledge of teledentistry.

The story describes a retired dentist and her journey to use teledentistry in an emotional script. Inside the story there is information about teledentistry that is designed to inform the participants about teledentistry. The story is 2564 words in the Arabic language, four pages that takes between 8 to 10 minutes to read. The story can be requested from this study author. The story went through several phases to be validated in terms of understanding, grammar, syntax and structure via a small pilot of 12 participants.

The participants in the control group will receive the same protocol except that they will receive an educational flyer instead of the story intervention.

#### Randomization:

Randomization was conducted using computer-generated software to randomly divide the participants into the study and control groups.

### Intervention Type

Other

### Primary outcome(s)

The knowledge and perceptions of using storytelling to improve teledentistry awareness measured using a questionnaire at baseline and follow-up visit (between 1-3 months)

### Key secondary outcome(s))

There are no secondary outcome measures

### Completion date

15/11/2022

## **Eligibility**

#### Key inclusion criteria

- 1. Adults over 18 years of age
- 2. Arabic speakers living in Saudi Arabia
- 3. Have a smartphone and social media apps (WhatsApp), with a valid contact number to use for communication during tele-dental consultations
- 4. Agree to participate in the intervention and answer all the questionnaires

### Participant type(s)

Healthy volunteer

### Healthy volunteers allowed

No

### Age group

Adult

### Lower age limit

18 years

#### Sex

All

#### Total final enrolment

89

### Key exclusion criteria

Did not agree to sign the consent form

### Date of first enrolment

20/11/2021

### Date of final enrolment

01/03/2022

### 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 from the corresponding author Dr Khalid Aboalshamat (ktaboalshamat@uqu.edu.sa) on reasonable request as an SPSS file (unidentified). The data will be available for 2 years and can be accessed by the journal to which the researchers will submit their 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		10/10/2023	19/10/2023	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes