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Evaluation of the effectiveness of eye movement desensitization and reprocessing (EMDR) in reducing anxiety among children in the dental clinic

Submission date
14/07/2026

Recruitment status
Recruiting

Registration date
19/07/2026

Overall study status
Ongoing

Last Edited
16/07/2026

Condition category
Oral Health

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[X] Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Public, Scientific, Principal investigator

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Study information

Scientific Title

Evaluation of the effectiveness of eye movement desensitization and reprocessing (EMDR) in reducing anxiety among children in the dental clinic: a randomized controlled trial

Study objectives
This randomized controlled trial aims to test the effectiveness of EMDR in a pediatric dental setting using standard scales to determine the feasibility of this technique in clinical practice for reducing Anxiety.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 03/03/2026, Research Ethics Committee, Syrian Private University (M5, Damascus, -, Syria; +963 116990221; info@spu.edu.sy), ref: DS-30032026-161

Primary study design
Interventional

Allocation
Randomized controlled trial

Masking
Blinded (masking used)

Control
Active

Assignment
Parallel

Purpose
Treatment

Study type(s)

Health condition(s) or problem(s) studied
Dental anxiety and fear among children during dental treatment

Interventions
Participants are randomly divided into two parallel groups in a 1:1 ratio using a computer-generated random sequence.. The control group receives traditional non-pharmacological behavioral techniques: tell-show-do and positive reinforcement. The experimental intervention group receives the same behavioral techniques used in the control group are used, in addition to Eye Movement Desensitization and Reprocessing (EMDR).

This is a single-session study. All assessments is completed within this single treatment session, and there is not subsequent follow-up periods or review visits.

Intervention Type
Behavioural

Primary outcome(s)
1. Behavioural response/cooperation during dental treatment measured using Frankl Scale at During anaesthesia, during tooth drilling

2. Dental fear and anxiety measured using Children's Fear Survey Schedule-Dental Subscale (CFSS-DS) at Five minutes after the patient has been seated in the dental chair, before anaesthesia

3. Subjective distress level measured using Subjective Units of Distress Scale (SUDS) at Control group: immediately upon patient admission, immediately after anaesthesia, end of the treatment session; Experimental (EMDR) group: immediately upon patient admission, during the EMDR session, after the EMDR session, immediately after anaesthesia, during short bilateral stimulation cycles, after short bilateral stimulation cycles, end of the treatment session

4. Validity of cognition measured using Validity of Cognition (VOC) Scale at Experimental (EMDR) group only: after the patient is seated in the dental chair (after CFSS-DS assessment and before anaesthesia), immediately after anaesthesia, end of the treatment session; Control group: not recorded

5. Pulse and oxygen saturation measured using pulse oximeter at before and after anesthesia, and at the end of the session.

Key secondary outcome(s)

Completion date
01/10/2026

Eligibility

Key inclusion criteria
1. The patient requires routine dental treatment, specifically a pulpotomy of primary molars (first or second upper molar, or first lower molar) on both the right and left sides, under local anesthesia only
2. The patient has a moderate to high anxiety level according to the CFSS-DS scale
3. Parental and child consent is required

Healthy volunteers allowed
No

Age group
Child

Lower age limit
5 Years

Upper age limit
8 Years

Sex
All

Total final enrolment
130

Key exclusion criteria
1. Children with severe mental or physical disabilities that prevent communication or cooperation
2. Children with a history of severe psychological or neurological disorders
3. Children currently taking sedatives, anxiolytics, or anti-anxiety medications
4. Children who have had previous severe traumatic dental experiences within the last 6 months
5. Parents or children who refuse to provide a signed informed consent

Date of first enrolment
01/04/2026

Date of final enrolment
01/09/2026

Locations

Countries of recruitment
Syria

Sponsor information

Organisation
Syrian Private University

ROR
https://ror.org/01h8c9041

Funder(s)

Funder type

Funder Name
Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not expected to be made available