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Testing the feasibility and acceptability of a novel therapeutic for depression: the CURED trial

Submission date
07/05/2025

Recruitment status
Recruiting

Registration date
16/06/2025

Overall study status
Ongoing

Last Edited
28/11/2025

Condition category
Mental and Behavioural Disorders

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

Plain English summary of protocol

Background and study aims
Depression is acknowledged as one of the leading causes of disability, affecting approximately 322 million people with a nearly 5% prevalence rate worldwide and is estimated to become a more prominent disabling factor in the near future. At an individual level, depression can impair social functioning, affect employment status, reduce the quality of life, and increase suicidality. At a societal level, the yearly economic cost of depression, stemming from medical costs and lost employment, was up to £9.2 billion in the UK and up to $210.5 billion in the US when suicide-related and efficiency and workplace-related costs are included. When its high prevalence and severely impairing and economically burdening costs are combined, depression emerges as an important global health problem. While this is the case, the efficacy and accessibility of current treatments for depression have been pointed out as limited. Even cognitive behavioural therapy, recommended first-line treatment for depression, is only accessible to a few, mostly because of the limited number of trained clinicians and financial barriers. Interpretation bias modification (also known as cognitive bias modification for interpretation; CBM-I) therapeutics were proposed as a possible solution to this bottleneck in the health system. Though they produced promising results, the previous trials could not achieve significant improvements in depressive symptoms. The main limitations proposed are that these interventions do not have specialised enough items for depression, and do not have enough sessions to create a significant change. To overcome these limitations, a novel interpretation bias modification therapy for depression was developed, namely CURED (Cognitive Modification Utilised to Rectify Cognitive Errors for Depression). This study aims to test the feasibility, acceptance and effects of CURED, which consists of 6 weekly sessions.

Who can participate?
Adult patients (aged 18 or over) who meet the diagnostic criteria for major depressive disorder.

What does the study involve?
Participants will be randomly allocated to receive the intervention or control procedure. Both groups will complete 6 weekly sessions, each of which will be followed by a short online questionnaire. There will be 4 main assessments (baseline, post-treatment, 1-month follow-up,

and 3-months follow-up) and 6 weekly assessments (after each session is administered). Its effects on depressive and anxious symptoms, interpretation bias, and other cognitive measures will be assessed to provide variance estimates for future full-scale clinical trials. The feasibility and acceptability of the therapeutic will also be assessed. With those wanting to participate from the intervention (CURED) condition, a follow-up qualitative individual interview will take place to inform the acceptability of and possible improvements for the therapeutic.

What are the possible benefits and risks of participating?
Any of the procedures may have some benefit for symptoms of depression and anxiety. This study uses neutral items as its control condition, for which there are no expected risks. Nevertheless, we will assume the therapy might still evoke stress and will address this by routinely assessing the participant's mood using visual analogue scales and follow-up contact with a clinical psychologist will be offered, if needed.

Where is the study run from?
Institute of Psychiatry, Psychology & Neuroscience (IoPPN), King's College London (UK)

When is the study starting and how long is it expected to run for?
March 2025 to November 2026

Who is funding the study?
1. Ministry of Education of Turkey
2. MRC Impact Acceleration Award to King's College London

Who is the main contact?
Prof Jenny Yiend
jenny.yiend@kcl.ac.uk

Contact information

Type(s)
Scientific, Principal investigator

Contact name
Mrs Jenny Yiend

ORCID ID
https://orcid.org/0000-0002-1967-6292

Contact details
King's College London
Institute of Psychiatry, Psychology & Neuroscience
De Crespigny Park
Denmark Hill
London
United Kingdom
SE5 8AF
+44 (0)7977 978655
jenny.yiend@kcl.ac.uk

Type(s)

Public

Contact name
Mr Kaan Karamanli

ORCID ID
https://orcid.org/0000-0001-9883-7017

Contact details
King's College London
Institute of Psychiatry, Psychology & Neuroscience
De Crespigny Park
Denmark Hill
London
United Kingdom
SE5 8AF
+44 (0)7445 094708
kaan.karamanli@kcl.ac.uk

Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

Integrated Research Application System (IRAS)
336376

ClinicalTrials.gov (NCT)
Nil known

Protocol serial number
MR/X502923/1

Study information

Scientific Title
Cognitive bias modification utilized to rectify errors for depression (CURED): a randomised double-blind feasibility trial

Acronym
CURED feasibility trial

Study objectives
The main aim of this feasibility study will be to provide variance estimates for a subsequent fully powered trial, decide on the best primary outcome measure and demonstrate other feasibility parameters such as adequate recruitment rates and acceptability to users of the intervention and randomisation procedures. For this reason, formal hypothesis testing is not appropriate. Nevertheless, descriptive data on the direction of group means for outcome measures will be

presented and can give a useful indication of likely efficacy in a fully powered trial. The hypotheses below therefore reflect the anticipated direction of effects, not statistical or clinical significance.

Lower negative interpretation bias, depression, anxiety, negative imagery, and negative self-related cognitions ratings and higher positive imagery and positive self-related cognitions ratings are expected in participants in the intervention condition compared to those in the control condition at the post-treatment, when any baseline differences are taken into account.

Ethics approval required
Ethics approval required

Ethics approval(s)
approved 13/03/2025, London-Fulham Research Ethics Committee (2 Redman Place, Stratford, London, E20 1JQ, United Kingdom; +44 (0)20 7104 8084; fulham.rec@hra.nhs.uk), ref: 24/LO/0855

Study design
Interventional double-blind randomized feasibility trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Clinical depression

Interventions
This study aims to test the feasibility and efficacy of CURED, a self-administered procedure that has been developed by combining research on biases in depression with tried and tested techniques that can change these biases.

The study will randomise 60 participants who meet the diagnostic criteria for Major Depressive Disorder (MDD) to one of two study arms. The randomisation process will be undertaken and overseen by an independent researcher. Stratified block randomisation with double-blinding will be used to randomly allocate the participants to either the intervention or control arm.

Those in the intervention arm will receive 6 weekly sessions of CURED. In the sessions, participants will be presented with 40 scenarios consisting of 3 sentences each, describing a daily ambiguous event. After reading each scenario, participants will complete a missing word task and answer a comprehension question about that scenario. Since it has been shown to increase the effectiveness of the training, participants will be instructed to generate prospective imagery related to the passage for 8 seconds after the comprehension question. The sessions will be delivered in a self-administered format using paper booklets. After completing each session, participants will also be asked to complete a short online questionnaire. Each session should take approximately 45 minutes and the weekly questionnaires should take an additional 15 minutes to complete.

The control condition will be delivered with the same procedural components (i.e., 6 weekly sessions, paper-based format, the same number of items with matched item lengths, with the same imagery instructions). The only difference will be in the content of the items, which will be on non-emotional, mundane activities and factual information.

Follow-up assessments, comprising primary and all secondary outcomes, will be completed online at 6 and 12 weeks post-randomisation.

Intervention Type
Procedure/Surgery

Primary outcome(s)
Depressive Symptoms will be measured using the Beck Depression Inventory-II (BDI-II) at 12 weeks post-randomisation follow-up (T2)

Key secondary outcome(s))
1. Feasibility and acceptability indicators: recruitment, drop-out, follow-up and randomisation rates, protocol length, the integrity of the double-blind procedure, and perceived harms, safety, and benefits will be measured using data collection during the study. In addition, feasibility will be measured using the Credibility and Expectancy Questionnaire (CEQ) at baseline (T0) and 6 weeks post-randomisation (T1).
2. Target mechanism (interpretation bias) will be measured using the Scrambled Sentences Task (SST) and Similarity Rating Test (SRT) at baseline (T0), 6 (T1) and 12 weeks (T2) post-randomisation
3. Depressive and anxious symptoms will be measured using the Beck Depression Inventory-II (BDI-II), Depression Anxiety Stress Scales – Short Form (DASS-21), Patient Health Questionnaire-9 (PHQ-9), and Generalized Anxiety Disorder-7 (GAD-7) at baseline (T0), 6 (T1) and 12 weeks (T2) post-randomisation
4. The following cognitive and psychosocial functioning measures will also be used at baseline (T0), 6 (T1) and 12 weeks (T2) post-randomisation:
4.1. Prospective Imagery Task (PIT)
4.2. Automatic Thoughts Questionnaire – Revised (ATQ-R)
4.3. Cognitive Distortions Scale (CDS)
4.4. Repetitive Thinking Questionnaire (RTQ-10)
4.5. Interpretation Inflexibility Task (IIT) (not measured at T2)
4.6. Recovery of Quality of Life-20 (ReQoL-20)
5. The dose–response relationship, target mechanism (interpretation bias) and depressive symptoms will be measured weekly after each weekly training session between the baseline (T0) and 6 weeks (T1):
5.1. Scrambled Sentences Task (SST)
5.2. Patient Health Questionnaire-9 (PHQ-9)
5.3. Visual Analogue Scale (VAS) for Mood

Completion date
30/11/2026

Eligibility

Key inclusion criteria
Adults scoring 14 or above on the Beck Depression Inventory-II (BDI-II)

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
18 years

Upper age limit
100 years

Sex
All

Total final enrolment
0

Key exclusion criteria
1. Having a mental or physical condition that impedes the completion of the study tasks (e.g., cancer, heart disease, stroke, dementia)
2. Currently receiving psychotherapy or having received psychotherapy within the last 2 months before participating in the study
3. If on psychotropic medication, having changed medication within the 1 month prior to participating in the study or expected to change medication during the study (changing the dose, dropping the medication, or starting to a new type of medication)
4. Screening positive on the Modified MINI Screen for Psychosis, Bipolar or OCD, and scoring 2 and higher on CAGE Questions Adapted to Include Drug Use (CAGE-AID) for alcohol and substance use
5. A previous head injury resulted in a loss of consciousness
6. Reporting suicidal intent according to the CSSRS at eligibility screening
7. Taking part in an interventional study aiming to improve mental health or cognitive functions during the time of participation

Date of first enrolment
16/07/2025

Date of final enrolment
31/05/2026

Locations

Countries of recruitment
United Kingdom

England

Wales

Study participating centre
King's College London
Institute of Psychiatry, Psychology & Neuroscience
De Crespigny Park
London
England
SE5 8AF

Sponsor information

Organisation
King's College London

ROR
https://ror.org/0220mzb33

Funder(s)

Funder type
Government

Funder Name
Ministry of Education of Turkey

Funder Name
MRC Impact Acceleration Award to King’s College London

Results and Publications

Individual participant data (IPD) sharing plan
The quantitative data generated by this study will be deposited with the UK Data Archive via the ReShare process (see https://www.ukdataservice.ac.uk/deposit-data/how-to.aspx). The CI, who is very familiar with this system, has used it twice before for large grant-funded datasets. To enhance the awareness of the data and access to it, we will include links to the archive data deposit as follows: in this trial record, in all study publications and on the study website.

The data will be suitable for sharing after having been fully anonymised to reduce the possibility of re-identification. Participants will be assigned a unique ID within the datasets, and datasets will not include any direct or indirect identifiers. We have included a specific item in our informed consent procedures allowing participants to indicate whether they consent to anonymous data sharing via a national repository. The data deposit will be limited to those cases that give consent.

Type of data that will be shared
Quantitative data at baseline, 6- and 12-week post-randomisation. Weekly data collected at each intervention session. Data generated are from semi-structured clinical interviews, self-report questionnaires (mood, personality, symptom, recovery measures) and experimental tasks.

Within the UK Data Archive system, depositors can set an embargo on open access and restrict the type of users who can access the data. For this study, we will apply a 12-month embargo on access from the end of the trial to allow the main outputs of the study to be accepted in the peer-reviewed literature. Should the main findings be published sooner, the embargo period will be correspondingly shortened.

We will ensure that the criteria and process governing access are transparent by creating a data sharing policy. It will be made available on the study website and the UK Data Archive. Access will vary according to the lifecycle stage of the study (active trial recruitment phase, PI-led analysis, archiving stage). As we anticipate only occasional requests for data access, we will follow MRC's suggested Model 2 for access decisions. In this model, the PI is responsible for access decisions but draws on the study team and/ or an independent advisor. All decisions are documented, and the advisor periodically reviews these and approves the study's access policy and procedures.

We will set access permissions within UK Data Archive to allow for the implementation of the governance policy outlined above: i.e. new users would be asked to provide a written request for access with reference to MRC policy on research sharing which would then be considered according to the criteria and process outlined in the study policy on data access.

New users would be asked to provide a written request for access with reference to MRC policy on research sharing, which would then be considered according to the criteria and process outlined in the study policy on data access. We will ensure that a data sharing agreement is written and signed by both parties as outlined in MRC guidance section 7. It will cover all the items listed in that section, such as: new purpose for which the data will be used; conditions of use; appropriate acknowledgement of original funding source, etc.

IPD sharing plan summary
Stored in publicly available repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	version 1.2	13/02/2025	09/05/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes