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A feasibility trial to examine the use of guided self-help for Huntington's disease gene expansion carriers with anxiety

Submission date
30/08/2022

Recruitment status
No longer recruiting

Registration date
28/09/2022

Overall study status
Completed

Last Edited
02/10/2023

Condition category
Mental and Behavioural Disorders

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

Plain English summary of protocol

Background and study aims
Huntington's disease (HD) is an adult-onset genetic neurodegenerative condition, involving cognitive decline, motor impairments and emotional difficulties. Anxiety affects up to 71% of HD gene expansion carriers and damages quality of life, worsens other HD symptoms and increases suicide risk. Therefore, helping people with their anxiety is a priority. Despite the evidence base for low-cost talking therapies for anxiety, such as guided self-help, this has not been specifically applied to HD gene expansion carriers. Guided self-help has shown promise in other neurodegenerative diseases (e.g. Parkinson's disease). Therefore, a similar approach may benefit HD gene expansion carriers.
The aim of this study is to determine whether it is feasible to undertake a randomised controlled trial to assess the use of guided self-help aimed at decreasing anxiety among Huntington's disease gene expansion carriers, compared to treatment as usual.

Who can participate?
Huntington's disease gene expansion carriers aged 18 years and above, and their carers.

What does the study involve?
The proposed study is an exploratory randomised controlled feasibility trial of a psychological intervention for anxiety. This study will compare guided self-help (GSH) with Treatment as usual (TAU), with 15 HD gene expansion carriers in each group. HD participants can have a carer/family member to support them with the intervention, but this is not a requirement of the study. Participants will be recruited across the East Midlands region. Data gathered will be used to assess whether the current intervention and study design meet pre-determined criteria that would indicate progression to a larger randomised controlled trial. The 10-week intervention is based on cognitive behavioural models of anxiety and is adapted to meet the specific needs of an HD population. HD participants and carers will be invited for interview within 1 month post-intervention and this data will be analysed qualitatively.

What are the possible benefits and risks of participating?
This study uses evidence-based psychological approaches but is adapted to the needs of the

Huntington’s disease population. Not every participant will receive the guided self-help. Those receiving the guided self-help might find it beneficial, but there can be discomfort in undertaking both psychological assessments and interventions. The assessments will take time and could be inconvenient for people and potentially raise emotional issues for the participants. To help participants with this, the research team have organised that participants will be able to express their preference over what method some of the assessments will take place (e.g. electronically, telephone) and how the intervention will be delivered. People will be offered the chance to have a family member/carer involved to support them with the intervention. The study is being run by clinical psychologists and mental health professionals who are skilled in supporting people who experience distress

Where is the study run from?
Leicestershire Partnership NHS Trust (UK)

When is the study starting and how long is it expected to run for?
January 2022 to June 2024

Who is funding the study?
Jacques and Gloria Gossweiler Foundation (Switzerland)

Who is the main contact?
Maria Dale, maria.dale6@nhs.net (UK)

Contact information

Type(s)
Scientific

Contact name
Dr Maria Dale

Contact details
Leicestershire Partnership NHS Trust
Mill Lodge
The Rise
Narborough
United Kingdom
-LE2 5DJ
+44 (0)116 295 1615
maria.dale6@nhs.net

Type(s)
Scientific

Contact name
Dr Jane Simpson

Contact details
Health Innovation One
Sir John Fisher Drive
Lancaster University

Lancaster
United Kingdom
LA1 4AT
+44 (0)1524 592858
j.simpson2@lancaster.ac.uk

Type(s)
Scientific

Contact name
Dr Fiona Eccles

Contact details
Health Innovation One
Sir John Fisher Drive
Lancaster University
Lancaster
United Kingdom
LA1 4AT
+44 (0)1524 592807
f.eccles@lancaster.ac.uk

Additional identifiers

EudraCT/CTIS number
Nil known

IRAS number
304674

ClinicalTrials.gov number
Nil known

Secondary identifying numbers
CPMS 52743, IRAS 304674

Study information

Scientific Title
Guided self-help for anxiety among Huntington’s disease gene expansion carriers compared to treatment as usual: a randomised controlled feasibility trial (GUIDE-HD)

Acronym
GUIDE-HD v.1.0

Study objectives
To determine whether it is feasible to undertake a randomised controlled trial to assess the use of guided self-help aimed at decreasing anxiety among Huntington's disease gene expansion carriers, compared to treatment as usual.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 12/07/2022, Leicestershire South REC (Equinox House, City Link, NG2 4LA, UK; +44 (0) 207 104 8115, +44 (0)207 104 8177; leicestersouth.rec@hra.nhs.uk), ref: 22/EM/0092

Study design
Interventional randomized controlled trial

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
Community

Study type(s)
Treatment

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

Health condition(s) or problem(s) studied
Anxiety among Huntington's disease gene expansion carriers

Interventions
The proposed study will collect both quantitative and qualitative data. The design is an exploratory randomised controlled feasibility trial of a psychological intervention for anxiety. This study will compare guided self-help with Treatment as usual (TAU), with an allocation ratio of 1:1.

Procedure/Intervention:
Participants will be recruited across counties in the East Midlands (Leicestershire, Nottinghamshire, Lincolnshire, Northamptonshire and Derbyshire) via either local NHS trusts or UK HD charities, in particular, the Huntington's Disease Association advisors who cover the East Midlands region. In addition to the service provided to HD families across Leicestershire, Leicestershire Partnership NHS Trust (LPT) also provides an advisory service to Northamptonshire, so this geographical area will also be recruited from through the Leicestershire NHS HD team.

For recruitment through the NHS, clinical staff from the LPT HD service and University Hospital Derby and Burton NHS Foundation Trust will be given eligibility criteria and will identify any potential participants who appear to meet the inclusion criteria. For any interested parties, clinical staff will give a letter of introduction, a participant's information sheet and a 'consent to contact' form with a stamped addressed envelope. Alternatively, potential participants will be given the option to contact the research team directly themselves or will give verbal consent for the clinical staff member to pass on their contact details to the research team.

For participants recruited via charities, the research will be advertised through websites and social media announcements. On this information, contact details for the research team will be given. HD Association advisors have also agreed to mention the study to those who appear to meet the criteria, and direct them to the advertising materials if they express an interest. In the event of being overwhelmed with potential participants, people found to be eligible will be recruited to the study on a first-come-first-served basis.

On contact with the research team, potential participants will be telephoned by the research associate to explain the study, answer any questions and arrange an appointment. Written consent will be taken in person, and basic eligibility criteria will be confirmed. If a person meets those basic criteria, then full eligibility criteria will be checked via a clinical diagnostic interview with a clinical psychologist. This will be undertaken at a time convenient for the participants, to ascertain whether they meet DSM-V criteria for an anxiety disorder. This is outlined in the participant information sheet (PIS). Clinically relevant information gained from this interview will also form part of the treatment formulation plan for those who end up in the intervention arm of the study. At this assessment point, if the threshold for an anxiety disorder is reached, then cognitive functioning will also be assessed using a brief measure: Montreal Cognitive Assessment (MOCA). The purpose of this measure is to both characterise the sample and enable therapists to understand any difficulties so the intervention can be tailored appropriately. The clinical psychologist will also make a judgement, based on both the cognitive assessment and the interview, as to whether the potential participant fits the eligibility for cognitive and communication abilities necessary to proceed with the intervention.

Participants with HD will be asked whether they have a friend/carer/family member who they would like to be involved to support them with the intervention. They will be asked for the identified person to contact the research team to confirm if they wish to be involved. Having a carer involved is not a requirement for eligibility for the study.

The Senior Research Associate will then either meet with the participants or, depending on COVID-19 regulations and participants' preferences, via videoconferencing to collect brief demographic and clinical data (questionnaire included) to characterise the sample and baseline data using outcome measures for anxiety, depression, irritability, quality of life, functional capacity, HD related concerns, psychological flexibility and coping. If participants would prefer to complete the majority of the measures themselves (except the HAM-A, which is clinician-administered), they will have the option to either complete the forms online or these will be posted to them and they will be given a stamped addressed envelope to return the forms.

Lancaster University staff (co-applicants) will then undertake a stratified randomisation process using an automated online randomisation system, with participants allocated to either the intervention arm or treatment as usual (TAU). The stratification for this randomisation is to ensure that premanifest and manifest HD participants are distributed equally across both groups.

Participants in the intervention arm will receive guided self-help in addition to their usual care. The intervention is based on content and process-based cognitive behavioural models of anxiety and will be adapted to meet the specific needs of an HD population. An HD-specific facilitator therapy manual with accompanying participant booklets is currently being co-produced (with an HD user/carer steering committee). For each of the 10 modules/sessions, a participant booklet will be sent to the participant the week before, for the participant to complete at their leisure. This booklet will either be in a printed form or sent electronically, depending on participant preference. Participants will have the choice to receive the information as documents with

narration over them if they find it easier to listen, rather than sit and read. For the “relaxation” module, audio recordings of the material will also be offered.

The booklets contain psychological techniques that are known to help reduce anxiety and are designed specifically for HD. Based on individual preferences ascertained at the beginning of therapy, participants will receive either weekly 1 hour duration telephone, video call or email guided psychological support across 10 weeks. Adaptations to standard guided self-help will be made to compensate for mild cognitive impairments, including the use of external memory aids and behavioural routines. Where applicable, carers/partners will be offered copies of the toolkits to support the participant and will be offered a maximum of 3 individual sessions with the facilitators across the intervention period. The purpose of the sessions would be to help a carer/partner to be able to discuss/problem-solve or ask questions of the intervention facilitator in their role of supporting the person with HD to complete the guided self-help. That is, these sessions are not individual therapy sessions for the carers.

The intervention will be provided by a team of 3 or 4 mental health practitioners (e.g. nurse or assistant/trainee psychologists). They will receive weekly supervision and 3 days training in the intervention by a clinical psychologist. The team will also receive monthly supervision by the Lead Applicant (a senior clinical psychologist with expertise in HD). Participants will be asked to complete the questionnaires used at baseline once the intervention has been completed - 2 weeks after the end of the intervention, and at 3-month and 6-month follow-ups. They will also be asked to undertake Likert rating scales to report their acceptability of the intervention and outcome measures. These will be given at 2 weeks post-intervention to rate the intervention and 6 months to rate the outcome measures.

Participants:
As this is a feasibility study, a formal power calculation is not appropriate. It is commonly assumed that 12 participants per group will be sufficient to determine reliable primary feasibility outcomes (2). The recruitment target is set at 30 HD participants to allow for expected attrition rates.

Measures:
As a feasibility study, the primary measures relate to feasibility outcomes:
- recruitment rate (% eligible participants who consent) (objective 1)
- retention of participants in both arms of the trial (% who remain in the study at 3- and 6-month follow-up) (objective 1)
- acceptability of the intervention (Likert ratings 0-5 on dimensions of readability, clarity, effort, enjoyment, concentration, helpfulness, progress regarding therapy materials, overall acceptability) (2 weeks post-intervention) and qualitative interviews within 1-month post-intervention (objective 2)
- acceptability and suitability of outcome measures (Likert scale at 6 months, qualitative interviews and % willing to complete the measures (objective 2)
- adherence to the intervention (% of activities accomplished) (objective 2)

Health Outcome Measures:
The following validated measures will be used (baseline, within 2 weeks after the intervention, 3-month and 6-month follow-ups) to assess the acceptability of measures: anxiety as measured by the Hospital Anxiety and Depression Scale (HADS)- Anxiety subscale, and Hamilton Anxiety Rating Scale (HAM-A)(4), depression (HADS-D), irritability (Snaith Irritability Scale), quality of life (HD-QoL), functional ability (UHDRS TFC). CBT process/mechanism measures: HD Concerns Questionnaire, Brief COPE, Acceptance and Action Questionnaire-II.

Data analysis
Quantitative analysis: As a feasibility trial, the main analyses will be descriptive, in order to inform the design of a future definitive study. Descriptive statistics will be used for feasibility measures of recruitment rate, retention, acceptability, and adherence as described above. In addition, the descriptive analysis will include participant characteristics (for example age, gender, and ethnicity). This feasibility trial will also assess the performance of potential outcome measures for a definitive trial. We will ascertain the data completeness of the instruments and any potential bias in the completion of follow-up data to inform the choice of instruments in a future trial.

Outcome data will be presented in simple descriptive tables for each arm of the study. In terms of exploring potential effectiveness (objective 2), if the data are suitable, then some simple group comparisons may be conducted (e.g. comparing final outcomes using non-parametric approaches such as the Mann-Whitney U test).

Qualitative analysis:
All participants and carers will be offered an interview within 1-month post-intervention. This will be to gain information regarding experiences of the intervention across the known key parameters of intervention delivery. Participants will be interviewed individually. Data will be digitally recorded, anonymised and transcribed. Framework analysis (11) will be used as it offers an efficient, time-limited approach involving specific questions, a predesigned sample, and a priori issues (12). Computer Assisted Qualitative Data Analysis Software (e.g. NVivo) may be used to categorise the data.

Intervention Type
Behavioural

Primary outcome measure
Feasibility assessed using:
1. Recruitment rate (% eligible participants who consent) by the end of the study
2. Retention of participants in both arms of the trial (% who remain in the study at 3- and 6-month follow-up)

Secondary outcome measures
Further feasibility outcomes:
1. Acceptability of the intervention assessed with Likert ratings 0-5 on dimensions of readability, clarity, effort, enjoyment, concentration, helpfulness, and progress regarding therapy materials at 2 weeks post-intervention, and qualitative interviews within 1 month post-intervention
2. Acceptability and suitability of outcome measures assessed with a Likert scale at 6 months, qualitative interviews and % willing to complete the measures at each timepoint (ie. baseline, within 2 weeks after the intervention, 3- and 6-month follow-ups)
3. Adherence to the intervention (% of activities accomplished) by the end of the study.

The following measures will be used at baseline, within 2 weeks after the intervention, 3- and 6-month follow-ups to assess the acceptability of the measures:
1. Anxiety measured by Hospital Anxiety and Depression Scale (HADS)- Anxiety subscale and Hamilton Anxiety Rating Scale (HAM-A)
2. Depression measured using the depression subscale of the Hospital Anxiety and Depression Scale (HADS-D)
3. Irritability measured using the Snaith Irritability Scale
4. Quality of life measured using Huntington's Disease health-related Quality of Life

questionnaire (HDQoL)
5. Functional ability measured using Unified Huntington's Disease Rating Scale Total Functional Capacity scale (UHDRS TFC)
6. Therapy process/mechanism measures: HD Concerns Questionnaire, Brief COPE, Acceptance and Action Questionnaire-II

Overall study start date
01/01/2022

Completion date
30/09/2024

Eligibility

Key inclusion criteria
Huntington's Disease Participants
1. Confirmed genetic test for HD (CAG >=36)
2. Diagnosed with clinical anxiety using Structured Clinical Interview for DSM-5 (SCID-5)
3. Premanifest or manifest HD
4. For those who are manifest HD, will be early-stage HD as defined as those with a United Huntington’s Disease Rating Scale (UHDRS) Total Functional Capacity (TFC) score of 9-13
4. If taking a medication known to impact on anxiety, must be stabilised for 4 weeks
5. Able to read/understand English
6. Aged >=18 years
7. Able and willing to give informed consent

HD Carers
1. Aged >=18 years
2. Had some involvement in the intervention
3. Able to give informed consent

Participant type(s)
Mixed

Age group
Adult

Lower age limit
18 Years

Sex
Both

Target number of participants
Planned Sample Size: 36; UK Sample Size: 36

Key exclusion criteria
HD Participants
1. Current suicidal intent
2. Significant cognitive or communication impairment as determined by MOCA and clinical

psychologist opinion
3. Unstable medical conditions
4. Currently receiving another psychological intervention aimed at reducing anxiety
5. Acute psychosis or other acute psychiatric presentation requiring intense/urgent input from mental health professionals

Date of first enrolment
29/09/2022

Date of final enrolment
31/12/2023

Locations

Countries of recruitment
England

United Kingdom

Study participating centre
Huntington's Disease Service
Mill Lodge
The Rise
Narborough
United Kingdom
LE19 4LN

Study participating centre
Birmingham and Solihull Mental Health NHS Foundation Trust
Unit 1
50 Summer Hill Road
Birmingham
United Kingdom
B1 3RB

Sponsor information

Organisation
Leicestershire Partnership NHS Trust

Sponsor details
Swithland House
352 London Road

Leicester
England
United Kingdom
LE2 2PL
+44 (0)116 225 5626
dave.clarke6@nhs.net

Sponsor type
Hospital/treatment centre

Website
https://www.leicspart.nhs.uk

ROR
https://ror.org/045wcpc71

Funder(s)

Funder type
Charity

Funder Name
Jacques und Gloria Gossweiler-Stiftung

Alternative Name(s)
Jacques and Gloria Gossweiler Foundation, Fondation Jacques und Gloria Gossweiler, Jacques & Gloria Gossweiler Foundation, Jacques und Gloria Gossweiler Stiftung, JGGF

Funding Body Type
Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
Switzerland

Results and Publications

Publication and dissemination plan
Results will be published and presented at international conferences. Information will also be distributed more widely to the HD community.

Intention to publish date
31/01/2025

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available due to the following reasons: HD is a relatively rare disease and the researchers are using just a small sample size in a defined geographical area. Although the data, if shared, would be de-identified there could still be the chance that individual people with HD, or their family members (due to the genetic basis of the disease), could be identified. This would especially be the case for the qualitative data. Both the quantitative and qualitative data are only being used to assess feasibility for a larger study, not examining whether this intervention "works". The feasibility data will be reported in the study write-ups. If this small study progresses to a larger randomised trial across a wider geography, then data gained at that point could be shared with other researchers.

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
HRA research summary			28/06/2023	No	No
Protocol article		12/09/2023	14/09/2023	Yes	No