# Assessing the effects of a nature-based group therapeutic intervention on well-being and distress

Submission date	Recruitment status	[X] Prospectively registered
07/10/2024	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
08/10/2024	Completed	Results
Last Edited	Condition category	Individual participant data
07/10/2024	Mental and Behavioural Disorders	Record updated in last year

#### Plain English summary of protocol

Background and study aims

The nature-based intervention evaluated in this study is structured around the approach and exercises of Acceptance and Commitment Therapy, proven to reduce psychological symptomatology and improve well-being. Nature-based interventions have received empirical support for their contribution to the psycho-physical health of participants. However, the studies tend to be impact-oriented, and there is a lack of evidence on evaluations of such interventions in Iraq. The first aim of the present study is to evaluate a nature-based therapeutic intervention in improving well-being and reducing distress. An additional aim is to test whether therapeutic changes depend on factors such as participants' characteristics, including gender, age, previous negative life experiences, severity of initial concern, experienced autonomy and initial level of connection with nature and loneliness. Furthermore, the study will examine whether changes in well-being and distress are mediated by increases in cognitive flexibility, attention to the natural environment, connection to nature, and group belonging.

#### Who can participate?

Mosul residents aged 18 years or older who gave informed consent to participate, had a depression score of less than 3 on the PHQ-2 and anxiety score of less than 3 on the GAD-2, and were free of acute suicidality and neurological impairment.

#### What does the study involve?

Participants are randomly assigned to either the nature-based intervention group or a wait-list control group. Participants in the nature-based intervention group receive the intervention, which consists of 6 weekly group sessions. There will be separate groups for men and women. Participants in the control group do not receive the nature-based therapeutic intervention, but can receive treatment as usual. Both the nature-based therapeutic intervention and control groups are required to complete pre- and post-therapy questionnaires.

What are the possible benefits and risks of participating?

It is expected that participants' well-being will benefit from participating in a nature-based therapeutic intervention. Answering survey questions may provide an opportunity for

participants to reflect and gain valuable insights into their improvements. In addition, the results of this study will provide practical and theoretical insights into the effectiveness of this intervention.

Answering questions during the interview may be distressing for participants. Participants will be informed and reminded that they can skip questions and withdraw from the study at any time with no consequences (including participation in the intervention). Participants will also be offered individual counselling if they are experiencing distressing thoughts/feelings related to their participation in the study. An additional risk of the trial concerns the control group and their waiting time for treatment. However, it is important to mention that the risks will be minimised by recruiting people with low scores for depression or anxiety and who are free of suicidality. Also, participants in the control group will not be discouraged from continuing with their usual treatment options and will be offered the opportunity to participate in the nature-based intervention in the next cycle following their participation in the trial.

Where is the study run from? Hudara gGmbH organisation, Berlin, Germany.

When is the study starting and how long is it expected to run for? February 2024 to February 2025.

Who is funding the study? Hudara gGmbH organisation, Berlin, Germany.

Who is the main contact?
Dr Lena Schmid, lschmid@hudara.org

# Contact information

#### Type(s)

Public, Scientific, Principal investigator

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### Additional identifiers

#### Clinical Trials Information System (CTIS)

Nil known

#### ClinicalTrials.gov (NCT)

Nil known

#### Protocol serial number

Nil known

# Study information

#### Scientific Title

Effectiveness of a nature-based group therapeutic intervention on well-being and distress in participants with low levels of depression and anxiety: A randomised controlled trial assessing post-therapy changes

#### Study objectives

Participation in the nature-based therapeutic intervention is expected to lead to a significant improvement in well-being scores and a reduction in distress scores measured after the intervention, compared to the control group.

#### Ethics approval required

Ethics approval required

#### Ethics approval(s)

approved 28/08/2024, Ministry of Health, Duhok Directorate General of Health (Duhok Directorate General of Health - Kurdistan Region of Iraq. Room 8, Floor 2, Dohuk, 42001, Iraq; +964 62 724 4601; info@duhokhealth.org), ref: #28082024-7-13

#### Study design

Single centre interventional two-arm randomised controlled study

#### Primary study design

Interventional

#### Study type(s)

#### Treatment

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

Well-being and distress

#### **Interventions**

The intervention group participates in the group nature-based intervention, which is delivered by 2 psychosocial workers who have participated in the training and are regularly supervised. The nature-based intervention is structured according to the Acceptance and Commitment exercises and consists of 6 weekly group sessions. Potential participants attend the first session and are assessed for eligibility. Those who meet the criteria are placed on the randomisation list, which is divided into male and female participants. Randomisation is carried out by the external person in the Excel file using the rand function and the participant codes. After randomisation, the control group is contacted to inform them that they have been randomly assigned to the control group. Participants in both the intervention and control groups complete pre- and post-therapy questionnaires.

#### Intervention Type

Behavioural

#### Primary outcome(s)

Well-being, measured by WHO-5 questionnaire at baseline (pre-therapy) and post-therapy (last session/6 weeks)

#### Key secondary outcome(s))

Distress, measured by Kessler 10 questionnaire at baseline (pre-therapy) and post-therapy (last session/6 weeks)

#### Completion date

15/02/2025

# **Eligibility**

#### Key inclusion criteria

- 1. 18 or more years old
- 2. Gave informed consent for participation

#### Participant type(s)

Resident, Population

## Healthy volunteers allowed

No

#### Age group

Adult

#### Lower age limit

18 years

#### Upper age limit

#### 100 years

#### Sex

All

#### Key exclusion criteria

- 1. Moderate to severe depression score (score of 3 or higher on PHQ-2)
- 2. Moderate or high anxiety score (score of 3 or higher on GAD-2)
- 3. Acute suicidality
- 4. Neurological impairments

#### Date of first enrolment

14/10/2024

#### Date of final enrolment

15/01/2025

#### Locations

#### Countries of recruitment

Iraq

# Study participating centre

Rawabet community center Yarmok al thaniya-west side of Mosul city Mosul city Iraq 41001

# Sponsor information

#### Organisation

Hudara gGmbH

# Funder(s)

#### Funder type

Research organisation

#### **Funder Name**

Hudara gGmbH

# **Results and Publications**

#### Individual participant data (IPD) sharing plan

It is not planned to make the datasets generated and/or analysed during the current study available, as this was not planned from the outset and is not part of the participants' informed consents.

#### IPD sharing plan summary

Not expected to be made available

#### **Study outputs**

Output type Date created Date added Peer reviewed? Patient-facing? Details Participant information sheet 11/11/2025 No

Participant information sheet Yes