

# Emotion-focused cost-effective cognitive behavioral intervention for multiple sclerosis

<b>Submission date</b> 04/08/2019	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 07/11/2019	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 20/02/2020	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Multiple sclerosis (MS) is a potentially disabling disease of the brain and spinal cord (central nervous system). In MS, the immune system attacks the protective sheath (myelin) that covers nerve fibers and causes communication problems between your brain and the rest of your body. Eventually, the disease can cause permanent damage or deterioration of the nerves. Signs and symptoms of MS vary widely and depend on the amount of nerve damage and which nerves are affected. Some people with severe MS may lose the ability to walk independently or at all, while others may experience long periods of remission without any new symptoms.

In addition to physical impairment, a broad range of mental and emotional problems are typical in this condition. Unfortunately, some patients focus only on physical symptoms, and they do not pay attention to psychological consequences. We call it MS focus. Emotional problems are more widespread in people with MS.

This study aims to investigate the effect of psychological therapy on mental health problems related to MS.

### Who can participate?

All MS patients over 18 years old

### What does the study involve?

All participants will first take part in an interview with the psychologist to learn about their current mental health and coping strategies. Participants will then be randomly assigned to receive either a psychological group intervention for coping with MS, or will receive treatment as usual. The therapy consists of 14 weekly 2-hour sessions with a 15-min break after 60 min. After 14-weeks, and again three months later, all participants will have another interview with the psychologist.

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

Benefits: The therapy may contribute to an improvement in mental health.

Risks: None

### Where is the study run from?

Farshchian Hospital, Hamedan, Iran

When is the study starting and how long is it expected to run for?  
November 2019 to January 2020 (updated 08/11/2019, previously: August 2019 to September 2019)

Who is funding the study?  
National Institute for Medical Research Development, Iran (updated 08/11/2019, previously: Islamic Azad University of Hamedan, Iran)

Who is the main contact?  
Mr Nabi Nazari  
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## Contact information

**Type(s)**  
Scientific

**Contact name**  
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## Additional identifiers

**Clinical Trials Information System (CTIS)**  
Nil known

**Protocol serial number**  
Nil known

## Study information

**Scientific Title**  
Efficacy of unified protocol on difficulties with emotional regulation in people with multiple sclerosis and depression or anxiety disorder

**Study objectives**

Current hypothesis as of 08/11/2019:

1. The group format of the UP can improve emotion regulation
2. The web-based format of the UP can reduce emotion regulation

Previous hypothesis:

1. Unified Protocol (UP) is effective in emotion regulation in females with MS with comorbid anxiety and depressive disorders
2. UP for anxiety disorders can improve the symptom of depression symptoms in the participants
3. The group format of the UP can reduce depression and anxiety symptoms
4. The web-based format of the UP can reduce depression and anxiety symptoms

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Approved 28/10/2019, National Institute for Medical Research Development (Hamedan, Iran), ref: IR.NIMAD.REC.1398.259

### **Study design**

Single-blind randomized controlled trial

### **Primary study design**

Interventional

### **Study type(s)**

Treatment

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

Anxiety and depression in patients with multiple sclerosis

### **Interventions**

The study comparing a psychological group intervention, based on transdiagnostic therapy principles developed by Barlow et al. (the Unified Protocol), with a control group. Group therapy consists of 14 weekly 2-h sessions with a 15-min break after 60 min.

Participants were randomly assigned to the treatment or control groups using a computerised method ([www.randomizer.org](http://www.randomizer.org)).

The intervention comprised the following modules:

1. Module 1 (session 1): Unified model of psychopathology, motivation enhancement strategies, treatment goal setting, decisional balance exercise, changing versus staying
2. Module 2 (session 2): Psychoeducation on the adaptive function of emotions, three-component model of emotional experiences, describing the sequence of events around emotions, anchoring in the present
3. Module 3 (sessions 3 and 4): Reviewing primary emotions, natural course of emotions and role of avoidance, present-focused, non-judgmental emotion awareness, recognising the interaction between thoughts, feelings and behaviours during an emotional experience
4. Module 4 (sessions 5 and 6): Flexible thinking, automatic appraisals, thinking traps, distress tolerance skills, familiarizing with various emotional avoidance strategies and their impact on emotional experience, knowledge of the contradictory effects of avoiding emotions
5. Module 5 (session 7): Examining emotion-driven behaviours (EDBs), knowledge and

identification of their effects on emotional experiences, identifying maladaptive EDBs, and creating alternatives for acting through behaviours

6. Module 6 (session 8): Increasing patients' awareness and tolerance of somatic sensations, knowledge and tolerance of physical senses, increasing awareness of the role of emotional feelings in emotional experiences, practicing exercises or visceral confrontation in order to be aware of physical sensations and increase tolerance of these symptoms

7. Module 7 (sessions 9-13): Emphasising the practice of treatment concepts through in-session and out-of-session exposures to emotional experiences, focusing on provoking the emotion, replacing interpretations about the dangerousness of situations with more adaptive appraisals, extinguishing anxious reactions to intense emotional experiences, modifying EDBs, visceral confrontation, providing the opportunity for skills rehearsal and consolidation in the context of a strong emotion

8. Module 8 (session 14): Overview of significant treatment concepts and the patient's progress is reviewed. Specific strategies for preserving and extending treatment gains are discussed. Prevention of recurrence, an overview of treatment concepts and discussion about patient's healing and progress and plans for future practices.

The control group followed an online version of the therapy for 14-weeks (updated 08/11/2019, previously: The control group remained on the waiting list for treatment)

## **Intervention Type**

Behavioural

## **Primary outcome(s)**

At baseline, post-treatment (14-weeks), and three months:

1. Psychological or psychiatric diagnosis assessed using SCID-DSM-IV: The Structured Clinical Interview for DSM-IV (SCID)
2. Tendency, intensity and excessiveness of worry assessed using the Penn State Worry Questionnaire (PSWQ)
3. Anxiety symptoms assessed using the Hospital Anxiety and Depression Scale (HADS) anxiety subscale
4. Depression symptoms assessed using the Hospital Anxiety and Depression Scale (HADS) depression subscale

## **Key secondary outcome(s)**

Current secondary outcome measures as of 08/11/2019:

1. Mindfulness (mindful observation, non-aversion, non-judgment, and letting go) assessed using the Southampton Mindfulness Questionnaire (SMQ)
2. Emotionality assessed using the Emotional style Questionnaire (2019) ESQ
3. Depression symptoms assessed using the Beck Depression Inventory
4. Emotional dysregulation assessed using the Difficulties in Emotion Regulation Scale (DERS)
5. Tendency, intensity and excessiveness of worry assessed using the Penn State Worry Questionnaire (PSWQ)

Previous secondary outcome measures:

At baseline, post-treatment (14-weeks), and three months:

1. Psychological or psychiatric diagnosis assessed using SCID-DSM-IV: The Structured Clinical Interview for DSM-IV (SCID)
2. Anxiety-related symptom severity and impairment assessed using the Overall Anxiety Severity and Impairment Scale (OASIS)
3. Tendency, intensity and excessiveness of worry assessed using the Penn State Worry

Questionnaire (PSWQ)

5. Emotional regulation assessed using the Emotion Regulation Questionnaire (ERQ-R)

6. Positive and negative affect assessed using the Positive and Negative Affect Schedule (PANAS)

7. Mindfulness (mindful observation, non-aversion, non-judgment, and letting go) assessed using the Southampton Mindfulness Questionnaire (SMQ)

8. Emotional dysregulation assessed using the Difficulties in Emotion Regulation Scale (DERS)

9. Anxiety symptoms assessed using the Hospital Anxiety and Depression Scale (HADS) anxiety subscale

10. Depression symptoms assessed using the Hospital Anxiety and Depression Scale (HADS) depression

### **Completion date**

08/01/2020

## **Eligibility**

### **Key inclusion criteria**

Current inclusion criteria as of 08/11/2019:

1. Valid MS diagnosis
2. No suicidal ideation or threatening behaviors, no history span attempted suicide
3. Valid diagnosis of depression or anxiety disorder
4. Internet availability

Previous inclusion criteria:

1. Diagnosis of MS for 3 years or more
2. Fluent in Persian
3. At least 18 years of age
4. Received at least one current diagnostic of a valid depression disorder and an anxiety disorder on Structural Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders, fourth Edition Axis I Disorders
5. Received at least one self-report score, without the cut-off range, specified for each of screening domains:
  - 5.1 Anxiety screening measures included the Penn State Worry Questionnaire (PSWQ), Anxiety Severity and Impairment Scale (OASIS). HADS-A
  - 5.2 Depression screening measures include Anxiety Severity and Impairment Scale ODSIS HADS-D.
  - 5.3 Emotional screening measures include Difficulties in Emotion Regulation Scale (DERS), the Positive and Negative Affect Schedule (PANAS), the Southampton Mindfulness Questionnaire (SMQ), and Emotion Regulation Questionnaire (ERQ-R).
6. Willing to participate in the research
7. Fill and sign consent
8. Medical agreement for participation.

### **Participant type(s)**

Mixed

### **Healthy volunteers allowed**

No

### **Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Total final enrolment**

70

**Key exclusion criteria**

1. Initial diagnosis of current or past schizophrenia, psychosis, or organic mental disorder, bipolar disorder, or organic mental disorder
2. Other Chronic physical illnesses (such as insulin-dependent diabetes and chemotherapy for cancer)
3. Pregnancy or lactation
4. Drug abuse history or drug dependence except for nicotine
5. Absenteeism for more than three sessions
6. Receiving psychological interventions during previous year
7. Presence of another comorbid neurological disorder such as Alzheimer's disease, Parkinson's disease or dementia

**Date of first enrolment**

08/11/2019

**Date of final enrolment**

08/01/2020

## **Locations**

**Countries of recruitment**

Iran

**Study participating centre**

**Farshchian Hospital**  
Mirzade Eshqi Street  
Hamedan  
Iran  
6517839131

## **Sponsor information**

**Organisation**

Islamic Azad University of Hamedan

ROR

<https://ror.org/007zpd132>

## Funder(s)

### Funder type

Government

### Funder Name

National Institute for Medical Research Development

### Alternative Name(s)

NIMAD

### Funding Body Type

Government organisation

### Funding Body Subtype

Local government

### Location

Iran

## 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 on reasonable request

### IPD sharing plan summary

Available on request

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes