

# Effectiveness of sophrology (a mind-body method) on patients with anxiety

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		<input type="checkbox"/> Protocol
<b>Registration date</b> 28/06/2022	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 29/06/2022	<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

According to the World Health Organisation (WHO), anxiety and mood disorders are the largest cause of human disability in the world and more than 260 million people suffer from an anxiety disorder. Anxiety and depression have a significant economic impact: it has been estimated that the cost in lost productivity on the global economy is about US\$ 1 trillion annually. In line with the proposal of the Committee of Permanent Representatives, the European Social Affairs Council calls for the adoption of a new EU strategic framework on health and safety at work for the period 2021-2027, amongst others, relating to psychosocial risks and stress at work, which are among the most difficult and most urgent problems mentioned in this document.

This study is in line with a previous study which assessed the effectiveness of the structured stress management program "sophrology and wellbeing" (SW) in reducing anxiety and depression symptoms in patients with a moderate or high level of anxiety. The aim of this second study is to investigate if a stress management sophrology training program based on two 1-hour sessions a week for 4 consecutive weeks is as effective at reducing anxiety and depression as the previous program based on three 1-hour sessions a week for 4 consecutive weeks.

### Who can participate?

Patients aged between 18 and 70 years with anxiety and depression symptoms

### What does the study involve?

Participants are randomly allocated to the sophrology and wellbeing program or a theory-based control program consisting of healthy habits recommendations. Anxiety and depression symptoms are measured before and after the interventions.

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

The possible benefits of participation in this study are the reduction of anxiety and depression symptoms.

### Where is the study run from?

Autonomous University of Barcelona (Spain)

When is the study starting and how long is it expected to run for?  
May 2015 to November 2017

Who is funding the study?  
Investigator initiated and funded

Who is the main contact?  
Dr Koen van Rangelrooij, koen@sofrocaay.com

## Contact information

**Type(s)**  
Scientific

**Contact name**  
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## Additional identifiers

**EudraCT/CTIS number**  
Nil known

**IRAS number**

**ClinicalTrials.gov number**  
Nil known

**Secondary identifying numbers**  
Nil known

## Study information

**Scientific Title**  
Effectiveness of Caycedian sophrology in patients with moderate and high anxiety levels: a second prospective randomized controlled study

**Study objectives**  
The stress management sophrology and wellbeing program based on two 1-hour sessions a week is less effective at reducing anxiety and depression symptomatology than the three 1-hour sessions a week program for 4 consecutive weeks.

**Ethics approval required**

Old ethics approval format

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

Approved 20/10/2015, Ethics Committee: "Investigación Clínica Parc de Salut MAR" (CEIm – Parc de Salut MAR, Dr. Aiguader, 88, 08003, Barcelona, Spain; +34 (0)93 316 06 77; ceic-psmar@imim.es ), ref: 2015/6141/I

### **Study design**

Prospective controlled randomized study

### **Primary study design**

Interventional

### **Secondary study design**

Randomised controlled trial

### **Study setting(s)**

GP practice

### **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**

Moderate and high anxiety levels

### **Interventions**

Patients are randomly assigned into two groups of 35 participants following simple randomization. Following the list of selected patients, every multiple of seven is called by telephone (patient 7,14, 21, etc) and alternately assigned to the intervention group or the control group until the number of 35 participants is reached for each group. The sample size is based on medical and statistical considerations.

The sophrology group receive the structured Sophrologie & wellbeing (SW) intervention for 4 consecutive weeks at a rate of two weekly sessions of 1 hour each (theory and practical). The first half of the program is dedicated to a theoretical part (50%) and the other half to practising sophrology techniques (50%), which consist of training in relaxation techniques, breathing exercises, as well as imaging and mental programming techniques (for the past, present, future and personal values). At the end of each session the group receive a summary of the theoretical part and a digital recording of the practised sophrology technique. They are motivated to train daily and to apply what they learn in everyday life and are instructed to know how to manage stress properly and develop a more serene and positive attitude.

The control group receive the exclusively theory-based Healthy Habit Program (HHP) intervention for 4 weeks, also with two 1-hour sessions per week. The program consists of a theoretical part similar to the SW program, and a more interactive part on promoting healthy habits in the face of stress. This interactive part consists of informative videos and/or specialized lectures on the topics covered in the theoretical part. At the beginning of the intervention,

participants are informed of the possibility to continue with the sophrology program once the HHP intervention ends.

The programs are administered in two different classrooms, at the same time and on the same days of the week at the primary health care centre facilities. The team of trainers, four health care professionals and Caycedian sophrologists duly train in the SW intervention and impart the interventions to both groups (sophrology and control).

Statistical analyses are performed using SPSS 27th version (IBM Corp.). Descriptive statistics including mean and standard deviation of the HADS and STAI scores for the sophrology and control group are used to describe the different variables used in this study. Repeated measures for the analysis of variance (ANOVA) are used to compare pre- and post-intervention scores for the sophrology and control group (between-groups and within-group intervention effect). The student (t) test is used to compare the basal scores for both groups and to detect possible initial differences between the two groups. The p-value under 0.05 is considered statistically significant for all data analyses. Pre-post Cohen's (d) effect sizes (ES) are used to measure the effect size in the sophrology and control groups.

### **Intervention Type**

Behavioural

### **Primary outcome measure**

1. Anxiety and depression symptoms measured using the Hospital Anxiety Depression Scale (HADS) at baseline and after 4 consecutive weeks
2. State and trait anxiety levels measured using the State-Trait Anxiety Inventory (STAI) at baseline and after 4 consecutive weeks

### **Secondary outcome measures**

There are no secondary outcome measures

### **Overall study start date**

05/05/2015

### **Completion date**

30/11/2017

## **Eligibility**

### **Key inclusion criteria**

1. Scored  $\geq 8$  points on the HAD-Anxiety subscale
2. Older than 18 years and younger than 70 years
3. Expressed a formal wish to take part in the research
4. Not presenting any of the exclusion criteria
5. Read and signed an informed consent document

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

Patient

### **Age group**

Adult

**Lower age limit**

18 Years

**Upper age limit**

70 Years

**Sex**

Both

**Target number of participants**

487

**Key exclusion criteria**

Patients were excluded from the study if they:

1. Started, changed or increased any pharmacological therapy during the program
2. Suffered from an acute state of severe mental illness (major depression, bipolar disorder and schizophrenia, etc)
3. Planned to participate in other therapies or similar programs such as yoga, meditation, acupuncture or similar during the study
4. Suffered, during the program, from important stressful life events, which could produce a bias in the assessments of the study
5. Were not able to participate because of linguistic, cultural or physical problems

**Date of first enrolment**

01/06/2017

**Date of final enrolment**

14/06/2017

**Locations****Countries of recruitment**

Spain

**Study participating centre**

**Serraparerria Primary Health Care Centre**

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**Sponsor information****Organisation**

Autonomous University of Barcelona

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**Sponsor type**

University/education

**Website**

<https://www.uab.cat>

**ROR**

<https://ror.org/052g8jq94>

**Funder(s)****Funder type**

Other

**Funder Name**

Investigator initiated and funded

**Results and Publications****Publication and dissemination plan**

Planned publication in a peer-reviewed journal

**Intention to publish date**

30/09/2022

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

The datasets generated and analysed during the current study will be available upon request from Koen van Rangelrooij (koen@sofroca.com).

**IPD sharing plan summary**

Available on request