

# Effects of mindfulness-based stress reduction training on healthcare professionals' mental health

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		<input type="checkbox"/> Protocol
<b>Registration date</b> 04/10/2019	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 02/10/2019	<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

Working in healthcare is particularly stressful, which is reflected in the fact that 61% of European healthcare professionals experience work-related stress. In comparison with other categories of workers, healthcare professionals are more likely to indicate that workload /working hours (77%), unacceptable behavior such as mobbing and coercion (64%), and lack of support from colleagues or superiors to fulfill their role (61%) are causes of work-related stress.

The purpose of this study is to examine the effects of MBSR training on both positive and negative symptom-focused mental health outcomes among a small group of healthcare professionals (N = 30) at a specialized hospital

### Who can participate?

Healthcare professionals working in the trial participating centre

### What does the study involve?

Mindfulness-based stress reduction (MBSR) training: eight 2.5-hour weekly sessions and one 7-hour day of silence

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

MBSR can benefit the mental health of different groups of healthcare professionals in various ways (e.g., decreasing stress levels, burnout and anxiety, increasing personal well-being and self-compassion, enhancing presence when relating to others, compassion, and a sense of shared humanity).

There is little evidence about the potential harmful effects of MBSR. But caution is needed for example with (sexual) trauma or psychotic symptoms!

### Where is the study run from?

Occupation & Health Research Group, HAN University of Applied Sciences, Netherlands

When is the study starting and how long is it expected to run for?  
September 2011 to November 2011

Who is funding the study?  
Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO; Dutch Organization for Scientific Research)

Who is the main contact?  
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## Contact information

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## Additional identifiers

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

**ClinicalTrials.gov (NCT)**  
Nil known

**Protocol serial number**

023.007.051

## **Study information**

**Scientific Title**

An empirical study on short-term effects of mindfulness training on mental health and work-related perceptions of healthcare professionals in a specialized hospital: a pilot study

**Study objectives**

What are short-term effects of mindfulness training on the mental health and work-related perceptions of healthcare professionals in a specialized hospital?

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved 09/12/2015, The Ethical Advisory Committee for Applied research of the HAN University of Applied Sciences (Campus Nijmegen, Kapittelweg 33, 6525 EN Nijmegen, The Netherlands; +31 (0)6 55 43 42 84; commissiemensgebondenonderzoek@radboudumc.nl), ref: ACPO 07.12/15

**Study design**

Non-randomized pre-post intervention study

**Primary study design**

Interventional

**Study type(s)**

Treatment

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

Mental health

**Interventions**

Mindfulness-based stress reduction (MBSR) training: eight 2.5-hour weekly sessions and one 7-hour day of silence

The MBSR training took place in the hospital.

Two experienced mindfulness trainers delivered the MBSR program. Both trainers meet the advanced criteria of the Center for Mindfulness of the University of Massachusetts Medical School (<https://www.umassmed.edu/cfm/>) and maintain regular personal meditation practices. The MBSR training used is primarily based on the MBSR program developed by Jon Kabat-Zinn. The program consists of eight 2.5-hour weekly group sessions and one 7-hour day of silence. A very important part of the training is the homework: 45 minutes of daily practice at home, six days per week, with the support of guided CDs and a customized workbook. MBSR is structured and includes:

- guided instruction in mindfulness meditation practices (body scan, sitting meditation)
- simple movement exercises
- a short group discussion

- informal meditation exercises: paying full attention to daily activities (e.g., brushing one's teeth, eating)

### **Intervention Type**

Other

### **Primary outcome(s)**

Mindfulness skills measured using the Dutch version of the Five Facet Mindfulness Questionnaire (FFMQ-NL) at one week prior to the start of the intervention and immediately after the eight-week MBSR intervention period

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

Measured one week prior to the start of the intervention and immediately after the eight-week MBSR intervention period:

1. Burnout is measured by the Dutch version of the Maslach Burnout Inventory - General Survey (MBI-GS), the Utrechtse BurnOut Schaal-Algemeen (UBOS-A; Utrecht Burnout Scale - General)
2. Stress is assessed with the 14-item stress scale of the Dutch 42-item Depression, Anxiety, Stress Scales (DASS)
3. Quality of sleep is measured using the Dutch sleep quality subscale (14 items) of the Questionnaire Perception and Assessment of Labor (VBBA: Vragenlijst Beleving en Beoordeling van de Arbeid)
4. Positive and negative emotions at work are assessed by the 12-item Dutch version of the Job-related Affective Well-being Scale (JAWS)
5. Self-efficacy is assessed using the Dutch General Self-Efficacy Scale, a translated 10-item version of the original German instrument
6. Work engagement is measured using the nine-item Dutch version of the shortened Utrecht Work Engagement Scale (UWES), the UBES-9
7. Worrying is measured using the Dutch four-item VBBA worrying subscale

### **Completion date**

25/04/2012

## **Eligibility**

### **Key inclusion criteria**

1. Healthcare professional in this specialized hospital
2. Having worked there for at least two years, three days per week

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

Health professional

### **Healthy volunteers allowed**

No

### **Age group**

Adult

### **Sex**

All

**Key exclusion criteria**

1. Attended mindfulness training over the past two years
2. Followed a stress reduction course, such as relaxation training or cognitive behavioral therapy, over the past two years

**Date of first enrolment**

15/09/2011

**Date of final enrolment**

20/11/2011

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

Netherlands

**Study participating centre**

Occupation & Health Research Group, HAN University of Applied Sciences

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**Sponsor information****Organisation**

Occupation & Health Research Group, HAN University of Applied Sciences

**ROR**

<https://ror.org/0500gea42>

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

Not defined

**Funder Name**

Nederlandse Organisatie voor Wetenschappelijk Onderzoek

**Alternative Name(s)**

Netherlands Organisation for Scientific Research, Dutch National Scientific Foundation, Dutch National Science Foundation, Dutch Research Council (Nederlandse Organisatie voor

Wetenschappelijk Onderzoek), NWO:Nederlandse Organisatie voor Wetenschappelijk Onderzoek, Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO), Dutch Research Council, The Dutch Research Council (NWO), Dutch Research Council, Netherlands, NWO

### **Funding Body Type**

Government organisation

### **Funding Body Subtype**

National government

### **Location**

Netherlands

## **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. Data cannot be shared publicly because the population size is less than 100, the data (for example by age or gender) are possibly traceable to concrete individuals, and the respondents gave no formal consent to share the data publicly.

Data are available from the Occupation & Health Research Group, HAN University of Applied Sciences Nijmegen (contact via Math Janssen and Yvonne Heerkens) for researchers who meet the criteria for access to confidential data.

The dataset consists of SPSS data file, SPSS syntax, codebook and questionnaire in Dutch.

### **IPD sharing plan summary**

Available on request

### **Study outputs**

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