

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

| | | |
|--------------------------|----------------------------------|--|
| Submission date | Recruitment status | <input type="checkbox"/> Prospectively registered |
| 01/10/2019 | No longer recruiting | <input type="checkbox"/> Protocol |
| Registration date | Overall study status | <input type="checkbox"/> Statistical analysis plan |
| 04/10/2019 | Completed | <input type="checkbox"/> Results |
| Last Edited | Condition category | <input type="checkbox"/> Individual participant data |
| 02/10/2019 | Mental and Behavioural Disorders | <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?

Math Janssen

math.janssen@han.nl

Dr Yvonne Heerkens

yvonne.heerkens@han.nl

Contact information

Type(s)

Scientific

Contact name

Mr Math Janssen

Contact details

6503 GL

Nijmegen

Netherlands

Box 6960

+31 (0)6 578 85 136

math.janssen@han.nl

Type(s)

Scientific

Contact name

Dr Yvonne Heerkens

Contact details

6503 GL

Nijmegen

Netherlands

Box 6960

+31 (0)6 121 83 621

yvonne.heerkens@han.nl

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
6503 GL Nijmegen
Nijmegen
Netherlands
BOX 6960

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? |
|---|-------------------------------|--------------|------------|----------------|-----------------|
| Participant information sheet | Participant information sheet | 11/11/2025 | 11/11/2025 | No | Yes |