# Improved management of patients with fibromyalgia: Implementation and evaluation of an integrated care model

Submission date	Recruitment status	[X] Prospectively registered		
12/07/2016	No longer recruiting	[X] Protocol		
Registration date	Overall study status	Statistical analysis plan		
12/07/2016	Completed	[X] Results		
Last Edited	Condition category	Individual participant data		
10/01/2025	Musculoskeletal Diseases			

#### Plain English summary of protocol

Background and study aims

Fibromyalgia (FM) is a common long-term condition, which causes widespread muscle and joint pain all over the body. The exact cause of FM is unknown, but it is thought that a variety of physical, mental and emotional factors are responsible. Current treatments for FM typically involve a combination of pain killers, talking therapies and lifestyle changes. In addition, exercise has also been found to be an effective treatment, including helping to reduce pain. The aim of this study is to find out whether a multi-component rehabilitation programme can help to improve FM patients overall wellbeing, reduce their symptoms of pain, fatigue and sleep disturbances, and increase their physical activity and work ability.

#### Who can participate?

Adults aged between 20 and 50 who have fibromyalgia.

#### What does the study involve?

Participants are randomly allocated to one of two groups. Those in the first group take part in a rehabilitation program in their community. This involves a 10 sessions of a mindfulness training programme called the Vitality Training Programme, VTP (which helps people to become more aware and accepting of their feelings and bodily sensations) over four months, followed by eight weeks of individually tailored physical activity counselling provided by a physiotherapist at a Healthy Living Centre. Those in the second group continue to receive treatment as usual for the duration of the study, but are given the chance to take part in the rehabilitation programme once the study is over. At the start of the study, after the VTP is complete (four months) and then after 12 months, participants in both groups complete a range of questionnaires in order to find out if their overall wellbeing, pain symptoms, sleep and ability to work and take part in physical activity have improved.

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

Participants who take part in the rehabilitation programme may benefit from improvements to their overall wellbeing, pain symptoms, sleep and ability to work and take part in physical activity. There are no notable risks involved with participating.

Where is the study run from?

The study is run by the National Advisory Unit on Rehabilitation in Rheumatology and takes place in two districts in the City of Oslo and six other municipalities in South-Eastern Norway (Norway)

When is the study starting and how long is it expected to run for? March 2016 to May 2020

Who is funding the study? South-Eastern Norway Regional Health Authority (Norway)

Who is the main contact? Dr Heidi A. Zangi heidi.zangi@diakonsyk.no

# Contact information

#### Type(s)

Scientific

#### Contact name

Dr Heidi A. Zangi

#### **ORCID ID**

http://orcid.org/0000-0001-6882-221X

#### Contact details

National Advisory Unit on Rehabilitation in Rheumatology PO Box 23 Vinderen Oslo Norway 0319 +47 (0)93054517 heidi.zangi@diakonsyk.no

# Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers 2016015

# Study information

Scientific Title

Evaluation of a multicomponent rehabilitation program for patients with fibromyalgia in primary health care compared to treatment as usual combined with a short patient education program: Effects on patient global impression of change, disease related symptoms, physical activity and work ability

#### Study objectives

The integrated care model will improve fibromyalgia patients' overall wellbeing, pain, fatigue, sleep disturbances, physical activity and work ability at one-year follow-up compared to patients receiving 'treatment as usual'.

# Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Regional Committees for Medical and Health Research Ethics, 04/02/2016, ref: 2015/2447

#### Study design

Multi-centre randomised controlled trial

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

#### Study setting(s)

Hospital

#### Study type(s)

Quality of life

#### Participant information sheet

Not available in web format, only available in Norwegian

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

Fibromyalgia/widespread musculoskeletal pain

#### Interventions

Participants will be randomised one of two groups:

Intervention group: Participants take part in a multicomponent rehabilitation programme in their home municipality. The programme comprises a 10-session mindfulness-based Vitality Training Programme (VTP) followed by 8 weeks tailored physical exercise supervised by a physiotherapist at a Healthy Life Center.

Control group: Participants will receive treatment as usual in primary care, i.e. GP consultations and any physical activity as usual. They will be offered the VTP after completion of the last data collection, i.e. one year after inclusion.

Participants in both groups are followed up at 4 months (end of VTP) and 12 months post-randomisation.

#### Intervention Type

**Behavioural** 

#### Primary outcome measure

Patient global impression of change (PGIC) measured by a 7-point self-reported Likert scale ranging from 1 ("I feel very much worse") through 4 ("no change") to 7 ("I feel very much better") one year after inclusion. Scores of 6 and 7 are considered clinically relevant improvement. The primary outcome will be measured after completion of the VTP (4 months) and at 12 months follow-up.

#### Secondary outcome measures

All outcomes will be measured at baseline (before randomisation), at 4 months and 12 months:

- 1. Pain measured by Numeric Rating Scale (NRS, 0-10)
- 2. Fatigue measured by Numeric Rating Scale (NRS, 0-10)
- 3. Sleep quality measured by Numeric Rating Scale (NRS, 0-10)
- 4. Psychological distress measured by General Health Questionnaire-12 (GHQ-12)
- 5. Physical activity measured by 4 questions from the Norwegian HUNT-study
- 6. Work ability measured by the Work Productivity and Activity Impairment Questionnaire (WPAI)

#### Added 04/05/2021:

- 7. Tendency to be mindful measured using the Five Facet Mindfulness Questionnaire (FFMQ) at baseline (before randomisation), at 4 months and 12 months
- 8. Motivation and barriers to physical activity measured using the Exercise Beliefs and Exercise Habits questionnaire at baseline (before randomisation), at 4 months and 12 months
- 9. Health-related quality of life measured using the EuroQol (EQ-5D-5L) at baseline (before randomisation), at 4 months and 12 months

#### Overall study start date

01/03/2016

#### Completion date

31/05/2020

# **Eligibility**

#### Key inclusion criteria

- 1. Rheumatologist confirmed diagnosis of fibromyalgia according to the American College of Rheumatology 2011 criteria
- 2. Aged between 20 and 50

## Participant type(s)

Patient

#### Age group

Adult

Sex

#### Both

#### Target number of participants

140

#### Total final enrolment

170

#### Key exclusion criteria

- 1. Comorbid inflammatory rheumatic disease
- 2. Serious psychiatric disorder
- 3. Other disease impeding physical activity
- 4. Not at all been working during the last two years because of disease
- 5. Not able to understand and speak Norwegian

#### Date of first enrolment

01/11/2016

#### Date of final enrolment

31/08/2018

# Locations

#### Countries of recruitment

Norway

## Study participating centre

#### National Advisory Unit on Rehabilitation in Rheumatology

Dept. of Rheumatology Diakonhjemmet Hospital PO Box 23 Vinderen Oslo Norway 0319

# Study participating centre Eidsvoll Municipality

Rådhusgata 1 Eidsvoll Norway 2080

#### Study participating centre Hurdal Municipality Minneåsvegen 3

Hurdal Norway 2090

# Study participating centre Gjerdrum Municipality

Gjerivegen 1 Gjerdrum Norway 2022

## Study participating centre Nannestad Municipality

Teiealleen 31 Nannestad Norway 2030

# Study participating centre Nes Municipality

Rådhusgata 2 Årnes Norway 2150

# Study participating centre Ullensaker Municipality

Furusethgt. 12 Jessheim Norway 2050

# Study participating centre Frogner District

Sommerrogata 1 Oslo Norway 0201

# Study participating centre Ullern District

Hoffsveien 48 0377 Norway 0377

# Sponsor information

#### Organisation

National Advisory Unit on Rehabilitation in Rheumatology

#### Sponsor details

PO Box 23 Vinderen Oslo Norway 0319 +47 (0)22451500 postmottak@diakonsyk.no

#### Sponsor type

Hospital/treatment centre

#### Website

http://diakonhjemmetsykehus.no

#### **ROR**

https://ror.org/02jvh3a15

# Funder(s)

#### Funder type

Government

#### **Funder Name**

South-Eastern Norway Regional Health Authority

# **Results and Publications**

## Publication and dissemination plan

The results from the study will be published in a high-impact peer reviewed journal.

#### Intention to publish date

31/12/2021

# Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Dr Heidi A. Zangi (heidi.zangi@diakonsyk.no).

#### IPD sharing plan summary

Available on request

#### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Protocol article</u>	protocol	04/06/2018		Yes	No
Results article		29/06/2021	01/07/2021	Yes	No
Results article		07/01/2025	10/01/2025	Yes	No