

Understanding barriers to increasing physical activity in chronic pain

Submission date 02/10/2020	Recruitment status No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
Registration date 05/10/2020	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 27/11/2024	Condition category Musculoskeletal Diseases	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Chronic or persistent pain is pain that carries on for longer than 12 weeks despite medication or treatment. Most people get back to normal after pain following an injury or operation. But sometimes the pain carries on for longer or comes on without any history of an injury or operation.

Evidence shows that increasing physical activity can be one of the best things to help manage chronic pain. However, people who suffer from chronic pain are often very inactive. The reasons for this may be quite different from one person to the next. We would like to find out what stops people in pain from being active and what we could do to support them to do more. Eventually, we would like to develop a plan that can be tailored to individual people who are suffering from pain, to help them stay active

Who can participate?

Adults over the age of 18 years referred by the NHS Tayside pain service. Must have experienced pain for at least 6 months

What does the study involve?

Participants are asked to join this study after being referred to the pain service and consenting to take part in the research. Participants must be assessed by the pain service as having moderate to severe pain. Participants will be asked to attend two appointments about a week apart, due to social distancing rules this is most likely to take place remotely, for example, via video call. The first appointment will include fitting an activity monitor, filling in a questionnaire and a semi-structured interview. At the 2nd appointment, participants will fill in a second questionnaire and remove the activity monitor. In between the two appointments the activity monitor will track participants' activity.

What are the possible benefits and risks of participating?

Taking part in the study may not immediately benefit those taking part. However, we hope that the results of the trial will help us manage activity in people who suffer from pain in the future. We anticipate no major disadvantages of taking part. There is a very low risk that participants

may develop a skin reaction to the waterproof dressing used to attach the activity monitor to their thigh. If this should happen we would ask participants to remove the tracker and contact the research team.

Where is the study run from?
The University of Dundee (UK)

When is the study starting and how long is it expected to run for?
January 2020 to November 2021

Who is funding the study?
Chief Scientist Office (part of the Scottish Government Health Directorate) (UK)

Who is the main contact?
1. Prof Lesley Colvin
l.a.colvin@dundee.ac.uk
2. Dr Ian-Ju Liang
iliang001@dundee.ac.uk

Contact information

Type(s)
Scientific

Contact name
Prof Lesley Colvin

ORCID ID
<https://orcid.org/0000-0002-1563-8600>

Contact details
Mackenzie Building
University of Dundee
Dundee
United Kingdom
DD2 4RB
01382381880
l.a.colvin@dundee.ac.uk

Type(s)
Public

Contact name
Dr Ian-Ju Liang

ORCID ID
<https://orcid.org/0000-0003-0085-2038>

Contact details
School of Medicine
University of Dundee

Ninewells Medical School
Level 7 (204) corridor E
Ninewells Hospital
Dundee
United Kingdom
DD2 9SY
-
iliang001@dundee.ac.uk

Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

Integrated Research Application System (IRAS)

271891

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

IRAS 271891

Study information

Scientific Title

Understanding barriers to increasing physical activity in chronic pain: an exploratory study to develop the SUsustainable Self Effective Exercise Development (SUSSED) intervention

Acronym

SUSSED

Study objectives

Using a systematic approach, to understand barriers and facilitators to physical activity in patients with moderate-severe chronic pain

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 28/01/2020, London-Chelsea Research Ethics Committee (Research Ethics Committee London Centre, Skipton House, 80 London Road, London, SE1 6LH, UK; +44 (0)207 104 8356; chelsea.rec@hra.nhs.uk), ref: 19/LO/2012

Study design

Mixed methods observational study

Primary study design

Observational

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Increasing physical activity and exercise in chronic pain patients

Interventions

Up to 45 people referred to the Tayside pain service will be invited to take part in the study, aiming for a total of 40 completing the first study visit. They will take part in a semi-structured interview designed to assess their perceptions of the barriers and facilitators to their participation in PA. In addition, participants will be asked to complete 7 validated self-report questionnaires to collect information about their pain severity, and its impact, as well as attitudes to physical activity. Demographic and basic clinical information including age, gender, height and weight will be collected together with underlying diagnosis, other co-morbidities, and postcode to enable Scottish index of multiple deprivation to be recorded. Participants will then be provided with an activPAL4™ activity monitor (<http://www.palt.com/pals/>) and asked to wear this for 1 week. 20 participants who consent to wearing a Fitbit monitor will be asked to wear a Fitbit Charge 3 (<https://www.fitbit.com/uk/charge3>) monitor in addition to the activPAL monitor. Both the activPAL and FitBit trackers are CE marked. Participants will be contacted after 1 week and will then be asked to complete the 7 questionnaires as before as well as acceptability and feasibility questions on the activity monitors

Half the participants will receive an Activpal only and the other arm will receive an Activpal and Fitbit, all participants will wear the activity monitors for one week between appointment 1 and 2. After appointment 2 when the activity monitors are removed there is no follow up. Allocation to receive a Fitbit is based on willingness to wear one and availability (i.e. not random).

Intervention Type

Behavioural

Primary outcome(s)

1. Framework analyses of semi-structured interviews with patients with moderate-severe chronic pain
2. Questionnaires at baseline and 1 week:
 - 2.1. Fear of movement measured using the Tampa Scale for Kinesiphobia
 - 2.2. Anxiety and stress measured using the Anxiety and Stress Scale 21
 - 2.3. Pain measured using the Brief pain inventory
 - 2.4. Pain catastrophising measured using the Pain Catastrophising Scale
 - 2.5. Self-efficacy measured using the Pain Self-efficacy Questionnaire
 - 2.6. Physical activity measured using the Physical Activity Stages of Change International Physical Activity Questionnaire (short)
3. Acceptability of activity monitors measured with questionnaire items at 1 week
4. Feasibility outcomes for activity monitors (self report at 1 week):
 - 4.1. Number of days worn
 - 4.2. Reported problems with wearing the monitor
 - 4.3. Reported pain or discomfort while wearing the monitor
 - 4.4. Reported duration and reasons for removing the monitor early (activPAL) or not wearing the monitor (FitBit)

Key secondary outcome(s))

1. Steps measured using ActivPal over 1 week
2. Steps measured using Fitbit (if applicable) over 1 week

Completion date

30/11/2021

Eligibility

Key inclusion criteria

Current participant inclusion criteria as of 02/11/2021:

Patients:

1. Referred to Tayside pain service
2. In pain for at least 6 months
3. Pain severity: moderate to severe as assessed by pain clinic questionnaires (NRS>3)
4. No clinical contraindications to wearing Fitbit
5. Consented to being contacted for research
6. Over 18

Stakeholders:

1. Member of stakeholder population, including healthcare professionals (e.g. General practitioners (GPs)/ Allied Health Professionals (AHP)s, Nurses, pharmacists); carers, 3rd sector organisations, leisure centre staff, and others identified through the Green Health Partnership
2. Over 18

Previous participant inclusion criteria:

1. Referred to Tayside pain service
2. In pain for at least 6 months
3. Pain severity: moderate to severe as assessed by pain clinic questionnaires (NRS>3)
4. No clinical contraindications to wearing Fitbit
5. Consented to being contacted for research
6. Over 18

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Total final enrolment

57

Key exclusion criteria

1. Receiving active treatment for cancer
2. Unable to provide informed consent

Date of first enrolment

09/10/2020

Date of final enrolment

05/10/2021

Locations**Countries of recruitment**

United Kingdom

Scotland

Study participating centre

NHS Tayside Pain Service

Pain Service Level 6

South Block Ninewells Hospital

Dundee

United Kingdom

DD1 9SY

Sponsor information**Organisation**

University of Dundee

ROR

<https://ror.org/03h2bxq36>

Funder(s)**Funder type**

Government

Funder Name

Chief Scientist Office, Scottish Government Health and Social Care Directorate

Alternative Name(s)

Chief Scientist Office, Scottish Government Health Directorate CSO, Chief Scientist Office, Scottish Government Health Directorates, Chief Scientist Office of the Scottish Government Health Directorates, Scottish Government Health and Social Care Directorate of the Chief Scientist Office, Scottish Government Health Directorate Chief Scientist Office, The Chief Scientist Office, CSO

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available due to confidentiality.

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
HRA research summary			28/06/2023	No	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Protocol file	version 3	31/08/2020	19/08/2022	No	No