

# Emotional contagion: The effect of group dynamics on chronic pain

<b>Submission date</b> 17/10/2013	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 04/12/2013	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 20/01/2017	<b>Condition category</b> Signs and Symptoms	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Chronic pain is a widespread problem affecting around 13% of the UK population. Chronic pain severely impairs patients functioning in everyday life, and many sufferers seek help from pain management services and support groups. As these usually take place within group settings there is a need to investigate how group dynamics influence pain. This study will examine emotional contagion, a tendency to feel, express and be affected by emotions experienced within a group. Groups in pain clinics may be reinforcing pain in patients, rather than resolving it, as patients become competitive in exaggerating their pain when meeting other sufferers. By investigating potential group risks factors, pain management services may be improved to increase the positive outcomes for patients.

### Who can participate?

Participants will be recruited from Milton Keynes Hospital Pain Management Services and support group if they report suffering from chronic pain for 3 month or longer. All participants will be over the age of 18 with no upper age limit. Both males and females will be asked to take part in this study.

### What does the study involve?

All participants will be informed about this study 3 weeks in advance and will then be asked to sign an informed written consent form if they are interested in taking part. Participants will be asked to complete questionnaires before their pain management service, and then their session will be audio-visually recorded. At the end of their session they will be asked to complete questionnaires again. If participants are interested in contributing to further research they can take part in additional focus groups. The questionnaires aim to detect anxiety, depression and pain but also measure affect and emotional contagion. All recorded material will be analysed by using conversation analysis to capture group dynamics and explore how individuals within pain management services influence each other and possibly positively or negatively reinforce pain. All data will be treated confidentially and anonymously and participants will not be identifiable at any time as names and dates will be changed. All information will be stored securely and will be deleted after completion of the study.

Where is the study run from?

The study has been set up by The University of Buckingham, in collaboration with Health Services of Milton Keynes Hospital (UK).

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

Data collection is expected to start in October 2013 and to end in July 2014.

What are the possible benefits or risks to participants?

There will be no interventions on participants. This research will only identify processes of group dynamics through questionnaires and conversation analysis. There will be no risk of any physical or mental harm to participants. However, they may experience discomfort while being recorded or answering questionnaires on chronic pain. All participants are explicitly informed that they may withdraw at any time and their data will not be used any further. Participants can refuse to answer any questionnaires if it makes them feel uncomfortable at any time. Participants can request that their contributions to the session is removed from the recordings. It is possible, however, that talking about the experience of pain may distress some participants. The researcher will be aware and will monitor the effect of the questionnaires and discussions on the participant and inform the health psychologist when necessary. Participants will be able to have a friend or family member present during the seminars should they wish to do so. They will be allowed to take a break or halt the discussions at any time.

The study has been designed to maximise useful information obtained whilst minimising burdens to participants. As this study will help improve the quality of pain management services, participants will benefit in the long term. They will contribute to scientific knowledge and help to improve the quality of pain management services and the general outpatient care for those suffering from chronic pain.

Who is funding the study?

This research is funded by an MSc scholarship from The University of Buckingham (UK).

Who is the main contact?

Alena Meister is the Principal Investigator.

Katherine Finlay, lecturer in psychology at The University of Buckingham and Chartered Psychologist, is acting as the Chief Investigator. [katherine.finlay@buckingham.ac.uk](mailto:katherine.finlay@buckingham.ac.uk)

## Contact information

### Type(s)

Scientific

### Contact name

Dr Katherine Finlay

### Contact details

The Psychology Department  
The University of Buckingham  
Hunter Street  
Buckingham  
United Kingdom  
MK18 1EG

# Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

## Study information

### Scientific Title

Emotional contagion: Investigating the effect of conversations and group dynamics on chronic pain in pain management services

### Study objectives

As 13% of the UK population suffer from chronic pain and a large amount of those affected with chronic pain turn to pain management services, there is a great need to investigate the structure and quality of these services (Breiveik et al., 2006). Also, individuals within groups can exert great influence on each other (Turner, 1991). It is therefore possible that pain management clinics potentially may actually be positively or negatively reinforcing pain in patients. For example patients may become competitive in exaggerating their pain when meeting other sufferers. Therefore it is suggested that emotional contagion in pain management groups may affect the overall quality of pain services and increasing positive emotional contagion could help patients suffering from chronic pain to support each other. Therefore group dynamics within this field will be analysed to examine if patients may reinforce each others pain. This study also aims to provide preliminary evidence on the role of group dynamics and emotional contagion on chronic pain as well as detect any kind of competition that may take place in pain management services.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

NHS Ethics Committee of the West Midlands, Black Country (NRES Committee West Midlands Black Country); 26/06/2013; ref:13/WM/0214

### Study design

Single centred observational study using a mixed method within subjects design, identifying processes of group dynamics through questionnaires and conversation analysis

### Primary study design

Observational

### Secondary study design

Single-centre

### Study setting(s)

Not specified

## **Study type(s)**

Treatment

## **Participant information sheet**

Not available in web format, please use the contact details below to request a patient information sheet

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

Chronic pain, Pain, General Healthcare

## **Interventions**

Participants will be recruited from Milton Keynes Pain Management Services, which provides pain management programs, seminars and support groups. Participants will receive an information sheet regarding the study up to four weeks before attending their pain management services. Anyone interested will be given written information regarding the study and the opportunity to ask further questions on the day of their pain management programme. After this participants can voluntarily decide if they want to take part in this research study and will be asked to give informed written consent. Participants will be asked to fill out questionnaires on pain, emotional contagion, mood, anxiety and depression as well as give ratings (NRS-numerical rating scales) of their groups before and after their pain management service. Their service will be audio-visually recorded if participants agree to this. Following the usual pain management service, participants are invited to join a further discussion group if they are interested in additional research. This focus group will consist of 5-8 participants that will discuss group dynamics and influences of individuals in pain management services. There will also be an expert focus group, consisting of 5-8 pain experts (psychologists, pain nurses & doctors). All recordings (qualitative data) will be analysed through conversation analysis, which will examine the social interactions and investigate how people act in groups, this include verbal and non verbal conduct. This analysed data will be double checked by a second researcher to overcome potential bias. The quantitative data will be analysed through a statistical computer program (SPSS), using descriptive analysis tools as well as analysis of variance (ANOVA). Further the internal consistency of questionnaires will be analysed (Alpha Chronbach) and where necessary other statistical test will be conducted to investigate the data in more detail.

The main study will take around 3 hours, however this includes the usual pain management session, which will be analysed through conversation analysis. Participants who decide to take part in the focus group will spent an additional hour on discussing groups on pain management services. Filling out the questionnaires will take no longer than 10 minutes.

## **Intervention Type**

Other

## **Phase**

Not Specified

## **Primary outcome measure**

The primary outcome measure for this study will be established through conversation analysis and investigate group dynamics and competition in pain management services from the obtained recordings.

## **Secondary outcome measures**

1. Data obtained from validated questionnaires on emotional contagion
2. Empathy, pain, treatment satisfaction/expectation

Measured at baseline and after the usual pain management session:

3. Experts and participants ratings on groups within pain management services
4. Information obtained from the expert focus groups and the participants focus groups

## **Overall study start date**

21/10/2013

## **Completion date**

07/07/2014

# **Eligibility**

## **Key inclusion criteria**

1. All participants must be aged over 18 with no upper age limit
2. Suffering from chronic pain for at least 3 months or longer
3. Attending pain management services at Milton Keynes Hospital
4. Speaking English at an advanced level, due to questionnaires as well as all sessions being carried out in English

The expert participants will be health psychologists, doctors and nurses running the pain management services

## **Participant type(s)**

Patient

## **Age group**

Adult

## **Lower age limit**

18 Years

## **Sex**

Both

## **Target number of participants**

100

## **Key exclusion criteria**

1. Patients with insufficient understanding of English
2. Who are illiterate or have a significant learning disability that impairs their ability to complete questionnaires
3. Significant cognitive impairment, mental illness or head injury

## **Date of first enrolment**

21/10/2013

**Date of final enrolment**

07/07/2014

## **Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre****The Psychology Department**

The University of Buckingham

Hunter Street

Buckingham

United Kingdom

MK18 1EG

## **Sponsor information**

**Organisation**

The University of Buckingham (UK)

**Sponsor details**

The Psychology Department

Hunter Street

Buckingham

England

United Kingdom

MK18 1EG

+44 128 081 4080

alan.martin@buckingham.ac.uk

**Sponsor type**

University/education

**ROR**

<https://ror.org/03kd28f18>

## **Funder(s)**

**Funder type**

University/education

**Funder Name**

The University of Buckingham (UK)

## Results and Publications

**Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date****Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">HRA research summary</a>			28/06/2023	No	No