

# Feasibility of using Cognitive Behavioural Therapy on patients with chronic low back pain in Blantyre, Malawi

<b>Submission date</b> 23/10/2024	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered
<b>Registration date</b> 24/10/2024	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 24/10/2024	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Globally, low back pain has remained the top cause of disability since 1990. It restricts individuals from participating in social events or their day-to-day activities. Ninety percent of low back pain has no known specific cause; however, studies report psychosocial factors such as negative attitudes and beliefs, depression, and fear avoidance behaviour play a role in activity and participation restriction. In Malawi, 3.8% of people with disability believe that witchcraft is the cause of their disability, while others do not know the causes or any contributing factors. The lack of knowledge and negative beliefs about their condition might lead to adopting lifestyles that promote and prolong disability.

The purpose of the study is to assess the feasibility of conducting a future randomised trial on cognitive behavioural therapy for patients with chronic low back pain in Malawi.

### Who can participate?

Adults of 18 years and above who have low back pain of more than 3 months.

### What does the study involve?

Participants will be randomly allocated into one of two groups 1) Usual physiotherapy care (control), which will involve the use of infrared bulb, exercises and soft tissue manipulation or 2) CBT where participants will be involved in identifying unhelpful beliefs about their pain, pain education, cognitive restructuring exercise, general exercise and home exercise program. Both groups will be asked to attend in-person sessions once every two weeks for three months. This is six sessions in total. Both groups will be asked to complete three questionnaires before and after the three-month period. These questionnaires will look at your attitudes and beliefs of low back pain, disability level and quality of life. These will take approximately 15 minutes to complete. Participants allocated to the CBT intervention will be invited to attend an optional interview (face to face) at the end of the intervention. This interview will explore the feasibility, benefits and challenges of receiving the CBT.

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

Benefits: The study may help to improve the understanding of pain, reshape patients beliefs

about their pain and improve patient quality of life.

Risks: Participants will be required to share their fears and uncomfortable thoughts about their pain. As such, participants might be emotionally upset talking about their pain. Trained professionals are delivering the care within a hospital setting and are used to dealing with complex patients, as such, participants will be well taken care to avoid any emotional trauma.

Where is the study run from?

Queen Elizabeth Central Hospital in Blantyre, Malawi

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

June 2023 to February 2025

Who is funding the study?

Commonwealth scholarship

Who is the main contact?

Grace Mukoka-Bwezani, [grace.mukoka@napier.ac.uk](mailto:grace.mukoka@napier.ac.uk)

## Contact information

### Type(s)

Public, Scientific, Principal investigator

### Contact name

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## Additional identifiers

### Protocol serial number

P.08/23-0176

## Study information

### Scientific Title

Feasibility of using Cognitive Behavioural Therapy on patients with chronic low back pain in Blantyre, Malawi

### Study objectives

The main aim of the study is to assess the feasibility of Cognitive Behavioural Therapy (CBT) in managing chronic low back pain in Malawi.

Considering that CBT in management of chronic musculoskeletal pain is a concept developed in western countries, and still new in Malawi, it is crucial to explore implementation processes needed for future trial.

The following are the research questions:

1. What proportion of eligible patients participate (uptake) and engage (adherence) with the feasibility RCT?
2. What data quality and completion rates can be obtained?
3. What sample size is required in a full study?
4. Are Back-PAQ, ODI and SF-20 questionnaires feasible and acceptable methods of assessing self-reported outcomes.
5. What do participants think about the feasibility and acceptability of study and intervention.

### **Ethics approval required**

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### **Ethics approval(s)**

1. approved 27/09/2023, College of Medicine Research & Ethics Committee (COMREC) (Kamuzu University of Health Sciences, P.Bag 360, Blantyre, 360, Malawi; +265 996 141 000; comrecassadmin@kuhes.ac.mw), ref: P.08/23-0176

2. approved 23/07/2024, Edinburgh Napier University - School of Health and Social Care Integrity Committee (EH11 4BN, Edinburgh, EH11 4BN, United Kingdom; +44 (0)333 900 6040; ethics.shsc@napier.ac.uk), ref: SHSC3502561

### **Study design**

Single-center randomized controlled feasibility study

### **Primary study design**

Interventional

### **Study type(s)**

Treatment

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

Chronic low back pain

### **Interventions**

Participants will receive the intervention once every fortnight for a period of three months.

CBT will involve Identifying unhelpful and helpful thoughts and beliefs, provide information on the neurophysiology of pain, assist with identifying active coping strategies, teach general body exercises and encourage engagement with a home exercise programme.

Usual physiotherapy care (control) will involve the use of Manual therapy, Mackenzie, electrotherapy

The randomisation process will be done online using Dotmatics-graphpad application. With this online application, all participants will be automatically assigned to either an intervention group or control group.

## **Intervention Type**

Behavioural

## **Primary outcome(s)**

The following measures will be obtained during the recruitment and throughout data collection phase:

1. Recruitment and refusal rates (Frequencies and percentages)
2. Withdrawal rate and reason (Frequencies and percentages)
3. Adherence to the intervention (Frequencies and percentages)
4. Barriers and facilitators to CBT implementation

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

The following measures will be obtained at baseline and after 3 months (completion of the intervention):

1. Disability level will be measured using Oswestry Disability Index (ODI)
2. Quality of life using 20-item short form questionnaire
3. Attitudes and beliefs using Back Pain Attitudes Questionnaire (Back-PAQ)
4. Pain will be measured using Numerical Rating Scale (NRS)

## **Completion date**

01/02/2025

## **Eligibility**

### **Key inclusion criteria**

1. Adult patients age  $\geq 18$  years suffering from non-specific low back pain for more than 3 months
2. Those who are currently attending physiotherapy treatment at QECH, in Blantyre, Malawi
3. Those who are willing to provide informed consent to participate in the study

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

Patient

### **Healthy volunteers allowed**

No

### **Age group**

Adult

### **Lower age limit**

18 years

### **Upper age limit**

80 years

### **Sex**

All

### **Total final enrolment**

30

**Key exclusion criteria**

Those presenting with chronic low back pain for other reasons such as cancer, tuberculosis, or spinal surgery

**Date of first enrolment**

28/10/2024

**Date of final enrolment**

30/11/2024

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

Malawi

**Study participating centre**

Queen elizabeth central hospital

P.O.BOX 95

Blantyre

Malawi

P.O.BOX 95

**Sponsor information****Organisation**

Edinburgh Napier University

**ROR**

<https://ror.org/03zjvnn91>

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

Charity

**Funder Name**

Commonwealth Fund

**Alternative Name(s)**

The Commonwealth Fund, CF

**Funding Body Type**

Private sector organisation

### Funding Body Subtype

Trusts, charities, foundations (both public and private)

### Location

United States of America

## Results and Publications

### Individual participant data (IPD) sharing plan

The datasets generated during and analysed during the current study will be available upon request from Grace Mukoka-Bwezani; [grace.mukoka@napier.ac.uk](mailto:grace.mukoka@napier.ac.uk)

### 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>	version 3.0	10/06/2024	24/10/2024	No	Yes