

Case Study

Cycling Against Hip Pain (CHAIN) programme



Pedal power restores freedom and mobility for people with hip arthritis

Partners:

BH Live
Royal Bournemouth and
Christchurch Hospitals NHS
Foundation Trust (RBCHFT)
Dorset Clinical Commissioning
Group
Active Dorset
Bournemouth Borough Council
Bournemouth University

Website:

bhlive.org.uk/leisure

Base:

Bournemouth, Dorset

Industry:

Healthcare

Project:

Six-week exercise and
education programme for
people with hip arthritis

Results:

Less pain and improved
function, strength and walking
ability

Increased range of hip motion

Improved wellbeing and
exercise confidence

Finalist for ukactive and Matrix
Flame Awards 2014: Healthy
Partnership Project Award



A pioneering programme launched in Bournemouth shows how exercise can improve mobility, reduce pain and make life easier for people suffering from hip arthritis.

The challenge

Around a third of over 45s in the UK have sought treatment for osteoarthritis, over 2 million for hip osteoarthritis. The condition causes pain, stiffness, limits everyday activities and often leads to joint resurfacing or replacement surgery.

The NHS in England and Wales carries out 60,000 such operations

a year, at a cost of over £400 million. A further 25,000 procedures are carried out in independent hospitals.

A new approach

There is evidence that exercise (in addition to patient education) could reduce the need for hip surgery by up to 44 per cent, reduce pain and improve function in those awaiting surgery, and improve their recovery¹.

Recently published guidance from the National Institute for Health and Care Excellence (NICE) suggests that non-invasive treatments should be tried before

¹ [Annals of the Rheumatic Diseases](#), *The Eular Journal*, *BMJ*, January 2015

making a decision about whether or not surgery is appropriate.

Three core treatments are recommended: education and self-management, local muscle strengthening and general aerobic fitness, and, where relevant, interventions to achieve weight loss.

The Cycling Against Hip Pain programme was conceived by consultant orthopaedic surgeon Robert Middleton, and physiotherapist Tom Wainwright, as an effective way to implement NICE guidelines.

The six-week programme was set up jointly by BH Live, Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust (RBCHFT), Dorset Clinical Commissioning Group, Active Dorset, Bournemouth Borough Council and Bournemouth University.

The programme incorporated exercise for strength, mobility and pain relief, and expert advice to help people monitor, manage and improve their condition through exercise and changes in diet and lifestyle.

Each week, groups of up to 15 people attended a 30-minute education session with a physiotherapist, followed by a 30-minute exercise class on static bikes.

Each person was also given an exercise programme to do at

home, encouraged to cycle when they could and asked to keep a diary to keep them on track once they had completed the programme.

Participants were assessed before and after the programme in terms of pain, function and range of motion, and included tests on the Wattbike to assess power output and pedalling technique.

The results

The CHAIN programme ran between October 2013 and April 2015. Of the 119 people referred onto the programme, 96 went on to complete it.

The post-programme assessment showed a remarkable improvement for many who took part, with many reporting improved flexibility, less pain, less dependence on analgesics, improved sleep, feeling fitter and stronger, and better able to carry out activities of daily living.

They also grew in confidence and wellbeing, made important lifestyle changes and learned how to make exercise an enjoyable habit.

A case study published in the BMJ Case Reports in February 2015 describes how a 71-year old man, despite a complex range of medical conditions, took part in the CHAIN programme and reported an "amazing difference" in the strength and use of his right leg, and in his physiological welfare and fitness.

Six weeks after the programme he was cycling around town for at least 15 minutes a day and walking his dogs.

"The programme made me realise that exercise was the best way to improve my pain and the use of my leg," he says.

"It has made such a difference to me. I can now turn over in bed at night without having pain. I am determined to keep up with the exercise. Sometimes I don't want to go out and walk the dogs, but once I am halfway through my walk I realise that I am walking more easily.

"I think it is important that you stick with the programme and the exercise. It is tough the first couple of sessions, but you need to see it through to get the benefits, and to acquire the knowledge and advice that will help.

"It is also really positive that it is done in a local leisure centre. I never realised how much support was on offer at these places, and the enthusiasm for exercise at the centre was really infectious."

About BH Live

BH Live is the South Coast's leading operator of leisure and event venues – a social enterprise that designs and builds engaging experiences to inspire people and enrich lives.

bhlive.org.uk

Outcomes after six weeks

