REDUCING OPIOID AND GABAPENTINOID PRESCRIPTIONS IN CHRONIC PAIN PATIENTS, EAST LOTHIAN, SCOTLAND; A PRELIMINARY STUDY USING COGNITIVE FUNCTIONAL THERAPY

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Abstract

Background – Chronic pain affects a significant proportion of the population in Scotland and has traditionally been treated with prescription opioids, and more recently gabapentinoids. Latest Scottish guidelines promote the reduction of these medications due to their harmful effects in long term use. GPs working in primary care settings trying to reduce analgesia prescription rates in chronic pain sufferers have the need to offer alternative treatment in a local setting for chronic pain sufferers. A primary GP care setting in East Lothian applied for a grant from NHS Pharmacy to try to reduce prescription rates. The doctors contracted a CFT trained physiotherapist to treat patients as an alternative to medication with the aim of reducing medications.

Methods – 19 patients with diverse chronic pain conditions attended treatment with a CFT trained physiotherapist. The physiotherapist was to see participants individually, offering personally tailored treatment with the intention of following up with group sessions. However due to Covid 19, group consultations were not feasible. The project was adapted and all subsequent treatment was carried out individually, some by telephone and video. The average number of treatment sessions was 3.6 for the group (range 2-5 sessions). Data was gathered through Orebro short form questionnaire (modified), Patient Specific Functional Goals and prescription medication usage. Patients were followed up 3 months after treatment.

Results – CFT reduced pain, disability and prescription pain medication in over 50% of participants (10 of the original 19). 6 participants were lost to the study due to lack of telephone or videos, interruption due to covid 19 or co-morbidities. A further 3 did not respond to messages. 3 participants chose not to continue with treatment due to personal reasons.

Conclusion – CFT was found to reduce medication usage and improve pain and disability in half of the participants. Further research is needed to confirm the use of CFT in primary care settings, comparing it with other forms of treatment and assessing its use long term.

Background

Opioids and gabapentinoids are commonly prescribed by primary care physicians in the treatment of chronic pain[1]. As many as 6m people were prescribed opioids in England and Wales in 2019. Most of these for chronic pain and over half a million people have been taking them for more than 3 years (Moseley January 2020). In Britain as a whole, more than 28m people are known to suffer from chronic pain. Opioid prescription rates have progressively increased over the last 20 years despite a lack of evidence for their long term safety and effectiveness (Kesten et al 2020).

[1] Chronic pain is defined as "pain which has persisted beyond normal tissue healing time", generally taken to be three months (READ code 1M52)

In Scotland, prescriptions for pain medications decreased slightly between 2012 and 2016. However rates for strong opioids (fentanyl, morphine and oxycodone) increased significantly during this period (Harrison and Cormack 2018). It has been found that these stronger opioids are more likely to be prescribed to people living in deprived areas (Ruscitto et al 2015). During 2016, the cost of pain medications to NHS Scotland was £128m of which £25.2m was spent on strong opioids and £46m on gabapentenoids (Harrison and Cormack 2018).

There is no evidence for the long term use of opioids in the treatment of chronic pain (Smith et al 2016), but there is evidence of severe adverse effects in long term use. These include opioid analgesic dependence, addiction and opioid related deaths (Kesten et al 2020) and opioid induced hyperalgesia in some when taken in the long term (Lee et al 2011). In light of this evidence as well as escalating costs, treatment recommendations for primary care physicians, developed by NHS Scotland and the Scottish Government have been updated in recent years (Foster et al 2018, SIGN 136 (2019), Read code 1M52(2016)).

In general terms, treatment for chronic pain now focuses on

- improving pain sufferer's understanding of chronic pain
- collaborating with individuals to establish goals
- seeking non-pharmacological options.

It is thought this is likely to have a better achievement of patient goals and will cause less harm than medications alone (Health Improvement Scotland SIGN 136, 2019, READ code 1M52).

Within the briefing paper, particular mention is made of

- supported self-management
- the prescription of certain medications (where opioids are only recommended for short term pain management)
- psychological based therapies (though they make mention of the fact that these are difficult to access from primary care settings)
- physical activity
- physical therapies
- other complementary therapies.

Within the new guidelines, typically the patient who presents with pain in Scotland will visit their GP. They will be educated as to the cause of their pain, advised to become more active and exercise, and be offered any necessary medications. A proportion of patients may be referred for manual therapy, acupuncture or exercise therapy (through conventional physiotherapy though this may vary). All patients are encouraged to self-management and are directed to various on line resources that are now available as a part of this treatment (see Appendix 2). If it's considered that the patient is at risk of a poor outcome, they will be given a more comprehensive biopsychosocial assessment, looking at biomedical, psychological and social factors and a management plan agreed accordingly. Unfortunately short consultation times limit this process. The patient may be referred for early referral to specialist secondary services if the pain is severe or if the patients' pain becomes

persistent. Specialist services are available to a small minority (Appendix 2 Read 1m52). The general focus of all interventions is to improve quality of life, reduce disability, improve the patient's ability to cope with pain and encourage the patient to become more active.

The evidence now confirms the advantages of the biopsychosocial approach to treatment of chronic pain patients. This approach can also prevent patients presenting with early pain symptoms from developing chronic pain (Friction et al 2017).

With recent changes in guidelines for care in the primary care setting in Scotland, Advanced Practice Physiotherapists (APPs) can now be employed as the first point of contact for patients presenting with musculoskeletal pain. Although APPs are required to be highly qualified, specific clinical skills vary within this group (Physiopedia 2020). Appropriately trained APPs working in primary care settings, specifically trained in a biopsychosocial care approach would allow patients to be treated by specialists at the outset, providing an optimal, cost effective solution.

The evidence suggests that if a physiotherapist is the first point of contact for musculoskeletal patients in primary care settings:

- The majority of patients are managed with self-care advice only with no onward referrals or investigations requested
- There is a reduced number of investigations (for imaging and blood tests), prescriptions and referrals to physiotherapy than usually requested in primary care
- Fewer orthopaedic referrals are made

(CSP Scotland 2018)

Re-examining goals of treatment - Improving pain through modifying cognition

Chronic pain is complex and multifactorial. It is influenced by factors including genetics, pathology, cognitions, emotional, social, physical and lifestyle factors. There is growing evidence that the predictors of poor outcomes for chronic pain are related to negative cognitions, emotions and behavioural responses to pain that set up a vicious cycle of pain and disability (O'Sullivan 2018). Treatment should focus on reducing pain rather than teaching patients to cope with pain. The aim of treatment should be to improve the pain itself (Moseley & Butler 2015).

Cognitive Functional Therapy (CFT), a bridge between psychologically and physically based interventions

CFT has developed as a flexible, integrated behavioural approach that individualises patient care in the treatment of chronic low back pain. It has evolved from the integration of behavioural psychology and neuroscience within physiotherapy practice. It uses a multidimensional 'clinical reasoning framework' to identify key modifiable targets for the management of pain. This is achieved by carefully listening to the individual's story and examining the individual's behavioural responses to pain. CFT examines pain in its widest possible context, looking at an individual's history, pathoanatomical factors, pain characteristics, psychological factors (both cognitive and emotional) and social factors (O'Sullivan et al 2018).

Broadly speaking, the approach targets the pain and promotes coping strategies. It helps patients to reconceptualise their pain from a biopsychosocial perspective and at the same time dispels damaging beliefs. As part of the approach, helpful cognitive and behavioural responses to pain are identified. Patients are helped to build confidence to engage in functional activities that are related to their goals through functional movement training. They are also encouraged to adopt a healthy lifestyle by targeting activity avoidance, poor sleep habits, stress management and dietary advice. (O'Sullivan et al 2018, Kent et al 2019).

Evidence for the efficacy of CFT

A randomised controlled study (RCT) was conducted in Norway in 2012, with a group of 121 chronic back pain patients. They were randomised to two groups and followed up over a 12 month period. The study found that compared to manual therapy and exercise (traditional, evidence based physiotherapy), the CFT group displayed significantly better outcomes. They experienced reductions in disability, pain intensity and pain related fear as well as depression and anxiety which was maintained at 1 year follow up. (Fersum et al 2013). The significant effects for reductions in pain intensity initially observed at 1 year in the CFT group were not observed at 3 years. However CFT had enduring effects in reductions for disability as well as changes in pain-related beliefs and emotions over this time. The results for this study are promising. However individuals received minimal intervention, having been seen on 7 or 8 occasions within the initial 3 month period of the study by a single physiotherapist with no follow up care. The authors suggest that had this group received ongoing intervention, the early improvements found in pain levels may have been maintained at the 3 year follow up (Fersum et al 2019).

One further RCT compared the effectiveness of CFT to group based exercise and education for chronic back pain patients. It found that CFT reduced disability but not pain at 6 and 12 month follow ups. Like the Norwegian trial however, treatment in this study was conducted at the start of the trial without follow up intervention. (O'Keefe et al 2019).

An RCT trial in Denmark examined the feasibility of a short course of CFT in patients with persistent low back pain who had not responded to usual treatment. 3, 6 and 12 month outcomes were examined, compared with a matched group of similar patients at 6 and 12 months. They found that at 6 months, the CFT group showed significant improvement in pain, fear, anxiety and catastrophizing. At 12 months the disability difference was no longer statistically significant but pain intensity and fear remained improved. This group suggested that booster sessions for the CFT group may provide lasting effects (Ussing et al 2020).

A further study of chronic low back pain patients in Denmark compared the use of CFT in 34 patients with a match controlled group of 99 patients who received multidisciplinary intervention. The intervention for the 99 was individually tailored and combined medical treatment with a specialist pain consultant with two or more of either

- Individual consultations with a psychologist
- Social worker with CBT training

- Participation in a group session with relaxation or mindfulness (in line with the usual pathway at the centre in which the study was conducted.

Results from the study found that CFT had significantly larger reductions in disability and pain intensity and improved quality of life. The CFT was provided at lower cost and a higher proportion of patients withdrew from opioids - 27.8% as compared to 18.2% in the control group (Vaetger et al 2019).

A larger RCT of 492 patients is currently being implemented in Australia, comparing the effectiveness and economic efficiency of three treatment groups

- individualised CFT delivered with movement sensor feedback
- individualised CFT delivered without movement sensor biofeedback
- treated with 'usual care'

The study is looking at reductions in disability, pain intensity and pain related fear as well as depression. As part of the analysis, this study is also evaluating medication usage (Kent et al 2019).

One further RCT is being conducted in the UK comparing CFT with usual care for 60 patients with persistent back pain. This group of researchers is also exploring qualitative data to evaluate CFT as an intervention from the perspectives of patients and the physiotherapists involved (Newton 2019).

Aside from RCT's, qualitative research has identified that people who respond positively to CFT report a change in their pain beliefs towards a biopsychosocial understanding of their pain. They learn enhanced pain control strategies and self-efficacy to achieve independence in engaging in valued activities. A successful outcome after CFT seems dependent on instilling biopsychosocial pain beliefs and developing independence among participants. (Bunzli et al 2016).

Group treatment sessions

There is compelling evidence in the benefits of group consultations in terms of health outcomes, patient and practitioner experience and cost effectiveness for the treatment of chronic conditions (Edelman et al 2015, Clarke et al 2019, Lawson 2020, O'Keeffe et al 2017). There is evidence that groups improve attendance rates, encourage peer learning and motivation and allows connections between patients (Coates J, 2016). Most studies of group consultations have focused on chronic conditions such as cardiovascular illness, diabetes and hypertension.

Group consultations have been shown to provide benefits by:

- improving patient's confidence to take control and self-manage conditions
- improve learning and the gaining of reassurance about treatment and medications
- patients feel they have more consultation time and are better supported
- patients have a sense of improved continuity of care
- patients are reassured of ongoing review of the condition

- groups provide connection with peers who live with similar conditions
- overall improved care experience

(Brady 2017).

There is also evidence that group interventions compare favourably to traditional individual physiotherapy sessions in terms of reducing pain and disability levels in MSK pain conditions (O'Keeffe et al 2017).

As well as being a cost-effective way of reaching large groups of patients, group work has been found to improve pain, psychological outcomes, self-efficacy, self-care and quality of life (Jackson et al 2019, O'Keeffe et al 2019).

Given what is understood about the mechanism and care needs of the chronic pain patient, group consultations may benefit chronic pain sufferers though no specific studies were found to support this hypothesis. For the isolated individual, group consultations may provide the following benefits:

- a social environment
- it would encourage peer support
- the sense that others are living with similar issues
- allow a sharing of stories and coping strategies
- allow patients to learn from each other's experiences and questions.

From a clinician's perspective group consultations would allow continuity of care, the opportunity to provide a multi-disciplinary approach and an opportunity to provide care for a greater number of patients over a longer period of time, allowing adequate follow up.

Project and setting

A GP surgery in East Lothian was awarded a small cash sum from East Lothian HSCP pharmacy to decrease opioid and gabapentinoid prescriptions. The doctors had autonomy to design and implement the project as they saw fit. These GP's had been trying to reduce prescription rates for chronic pain sufferers. Alternative treatments to pain medications were not readily available - there is a significant waiting list for physiotherapy which is available in a different town and offers traditional physiotherapy services rather than CFT. Many of the patients seen by the GP's do not have their own transport and cannot attend the remote clinic (public transport is limited). The specialist pain clinic is also based in a city centre location which is hard to access, has a long waiting list and is available to a small percentage of patients. The GP's were finding themselves withdrawing medications but unable to offer alternative treatment, a situation that they were finding increasingly difficult and stressful.

Doctors at this surgery had already implemented successful group consultations for patients suffering from cardiovascular disease and favoured a similar approach in treating the chronic pain patients. The doctors approached a local physiotherapist to lead the project, a person working in private practice but experienced in treating chronic pain sufferers and trained in CFT.

Due to the importance of the individualised approach as highlighted in CFT practice, it was decided that participants in the study would first be seen individually by the physiotherapist. Each patient was seen individually once but some were invited for more consultations if deemed necessary by the physiotherapist over a period of 8 weeks. Subsequent care would be delivered through group sessions (due to financial constraints this was to be limited to two sessions spaced 3 weeks apart).

Unfortunately this project was interrupted by the Covid 19 pandemic. Only one group session took place and the project design was altered. The physiotherapist offered video-consultations or telephone conversations to participants in order to maintain continuity of treatment and to ensure the 3 month follow up. As a result of the pandemic, group consultations were not implemented.

Patient Selection

Adult patients (over 18 years old) suffering from long term, chronic pain who had repeat prescriptions for gabapentin, pregabalin or slow release opiates were recruited to this study by referring GP's at the practice in East Lothian. They were required to be independently mobile in order to attend the consultations and meetings and to speak and understand english well enough to be able to complete questionnaires independently.

Patients suffering from true radicular pain (those suffering from spinal stenosis, nerve root compression or disc prolapse), progressive neurological disease (such as Parkinsons, Multiple sclerosis, MND), and other red flag disorders were excluded from the study.

In total, 20 patients were invited for treatment. 1 failed to attend the initial consultation and did not participate in the study, leaving a total of 19 patients. Of these, 15 complained of back and leg pain and out of this group, 4 also reported feeling global pain. One patient in the group of 15 was awaiting surgery for fusion to the left ankle. Another experienced pain in the foot thought to be caused by Morton's neuroma. One patient had had a total hip replacement two months prior to the initial consultation in one hip and was awaiting surgery to the contralateral side. In addition this patient was suffering from ulcerative colitis which was giving abdominal pain. Two of the group of 19 complained of primary headaches and neck pain. One patient was experiencing phantom limb pain following above knee amputation.

Methods

Prior to the initial consultation, patients completed the short Orebro questionnaire (Linton et al 2011). Two questions from the shortened version of the questionnaire were substituted with two from the long version. This was because many participants had not worked for some years either due to disability or because they had reached retirement age and it was felt that the original questions were irrelevant. [2]

[2] Question 8 "In your estimation, what are the chances you will be working your normal duties in 3 months" was substituted for "Physical activity makes my pain worse" and question 10 "I should not do my normal work with my present pain" was substituted for "Based on all the things you do to cope, or deal with your pain, on an average day, how much are you able to decrease it?"

During the initial consultation participants were asked to identify functional goals, identifying activities that had been impeded by their pain (see Appendix 7, Westaway et al 1998).

Consent

Written consent was obtained at the outset for attendance of group sessions (see Appendix 4). Additional consent was obtained for the use of the outcome data (see Appendix 5).

Treatment

Participants were seen individually for one hour by the physiotherapist[3] and were given a comprehensive one to one interview and physical examination. The examination followed a systematic process but was individually tailored for each patient. Following the CFT approach, the three key components of this initial intervention, were to

- understand the individual's pain making sense of it in a multidimensional framework while reducing the threat of structural damage and correcting unhelpful beliefs
- gradually expose the patient to painful, feared or avoided activities using body relaxation techniques and eliminating protective behaviours
- offer a strategy to incorporate lifestyle changes where patients were encouraged to exercise aerobically daily, to improve sleep and to practice relaxation techniques to control pain

Fersum et al 2013, O'Sullivan et al 2019, Vaegter et al 2019).

In making sense of their pain, participants were guided through using the individual's own 'story' and experience. This enabled them to develop a proper understanding of the mechanism of their pain and to reflect their own beliefs and experience. In this way they were helped to develop a relevant understanding of their pain, and to reflect upon their own beliefs and thereby rationalising the cause of the pain and dispelling unhelpful beliefs regarding its cause. Helpful cognitive and behavioural responses were identified that were linked to relevant personal goals which were set during the initial consultation (Patient Specific Functional Scale (Stratford et al 1995)). During this phase of the interview, participants were guided to explain the history of their pain, the area and nature of the pain, pain intensity and pain behaviour (aggravating and easing movements and activities), their primary functional impairments, disability levels, activity levels and sleep patterns. The level of fear of pain, pain coping strategies, stress response and relationship to pain and pain beliefs were also assessed. Co-morbidities including history of anxiety and depression were noted along with their beliefs and goals regarding management of their disorder. The information from the interview was examined alongside data from the Orebro questionnaire. With this information gathered, and within the context of fear, avoidance and physical activity and specific pain, movement patterns were assessed. (Fersum et al 2013, O'Sullivan et al 2019).

[3] The physiotherapist a CFT practitioner trained in the CFT approach having attended several Peter O'Sullivan courses.

During the physical examination, each subject's primary functional impairments, pain provocative postures, movements and functional tasks that had been reported during the interview were assessed as well as postures that eased the discomfort. These commonly included sitting, standing, bending, sit to stand, single-leg standing, turning in bed, spinal movements and lifting. Sympathetic nervous system responses (such as rapid upper thoracic breathing, body tension) were noted along with safety seeking behaviours such as movement avoidance, body guarding and breath holding (Fersum et al 2019, O'Sullivan et al 2019, Fersum et al 2013).

At the end of the initial consultation, a strategy for controlling symptoms was identified in collaboration with the patient. Patients were taught to

- practice relaxation techniques using diaphragm breathing and focussed body relaxation
- lessen pain provoking reactions
- avoid hypervigilance in posture and movement
- normalise movement patterns.

Where specific musculoskeletal issues were identified (such as weakness in lower extremities), exercises were given. Each individual was advised in some form of aerobic exercise tailored according to the individual's level of activity to ensure that it was achievable and acceptable to the patient. Participants were given a summary booklet with online resources attached (see Appendix 3).

Following the initial consultation certain patients were invited for further treatment where the physiotherapist felt they would benefit from further individual input. The number of treatments during the 3 month period ranged from 2 – 5 sessions.

The intention had been for patients to attend group consultations following the initial individual consultations. Only one such session was implemented as further sessions were curtailed by the Covid 19 outbreak. Rather than abandon the study and care of the patients, video consultations were conducted individually by the physiotherapist (where patients had access to technology) or by telephone until face to face consultations were permitted with the easing of lockdown.

All patients were followed up after 3 months from the initial evaluation.

Results

The treating physiotherapist obtained all data at baseline and following intervention.

1) 52% of participants improved through this treatment
2) 37% of the starting group improved dramatically with treatment
3) Of these, 72% stopped taking their medications altogether
4) The remaining patients in this group reduced their medications significantly
5) If this improvement is maintained for the year, a saving of £2260 will be made in prescription drugs alone for this study group

Of the 19 participants the detailed results were as follows:

- 7 participants responded rapidly to treatment (group 1). The average number of consultations was 3.6, range 2-5
- 2 participants were suffering from co-morbidities which affected treatment (orthopaedic issues, diabetes, depression). Although their pain improved to some degree, their overall pain picture was clouded by these comorbidities (group 2). Each person in this group received 2 consultations
- 1 participant reduced the amount of medication taken but reported pain and activity levels to be unaltered. The participant's belief system did not alter (group 3) but patient specific goals did improve. This person attended 3 consultations in total.
- 1 participant attended the initial evaluation and was eager to continue but was unable to do so due to co-morbidities (group 4). As there is no follow up data results have not been reported.
- 3 participants were seen on more than one occasion and improved at the start of the project. However due to coronavirus, contact was lost with these people (they did not have access to computers or telephones for remote consultations) and they have not been included in the results as there is no follow up data (group 5).
- 2 participants seemed to improve at the initial consultation but did not respond to follow up contact and therefore are not included in the results analysis as there is no follow up data (group 6).
- 3 participants opted to discontinue the treatment, preferring to continue taking pain medications (group 7).

Groups 4, 5, 6 and 7 are not included in the results below.

So the results are based on data for 11 participants. Calculations of outcomes are as follows:

Mean changes	Orebro score*	PSFS **	Pain level (from Orebro)	Coping level (from Orebro)	Activity level (from Orebro)
GROUP 1 n=7	37.29	6.82	3.71	4.14	6.57
GROUP 2 n=3	37	3.79	3.5	1	3.5
GROUP 3 N=1	0 (unchanged)	3.4	1	0 (unchanged)	+2 (worsened)

TABLE 1

*Orebro - The maximum score indicating the highest levels of pain and disability is 100. Anyone scoring above 50 is thought to be at risk of long term disability (Linton et al 2011). Figures above show the average change in score after intervention. 10 questions were asked where 10 is the maximum score for each question, the higher the score, the worse the participant felt in each category (see appendix 6).

**PSFS – participants identified functional goals at the initial consultation, activities that had been limited by pain. Scoring out of 10 points where 10 was their ability to perform the activity normally and 0, unable to perform due to pain. Each participant chose a minimum of 3 activities, scored them

before and after intervention and the changes in scores were averaged for analysis. The higher the score, the more able the participant to achieve the activity (maximum score being 10). Any change above 2 is statistically significant (Westaway et al 1998).

1 GROUP 1 – Rapid Improvers

1.1 Medication Usage

5 of the 7 participants stopped taking all pain medications after 3 months. 1 patient stopped all amitriptiline and co-codamol and reduced gabapentin by 66% (taking one dose per day rather than 3). One participant has cut diclofenac by two thirds, pregabalin by two thirds and co-codamol to one third and is aiming to continue to reduce these medications. The cost saving for these patients to date is £2078.85 if maintained over 12 months.

1.2 Orebro score

Orebro questionnaires completed before and after intervention have been used to track changes in perceptions following CFT (See appendix 6).

Prior to the intervention, all participants in Group 1 scored above 50 (mean score 71.4). The mean score after intervention was 37 suggesting that prior to intervention they were at risk of long term disability and that they were no longer at risk following CFT.

All respondents in this group reported that they had suffered their pain for more than 1 year scoring 10 on the questionnaire before and after intervention.

Pain levels reduced by an average of 3.71 and each of the 7 reported their pain had changed from being constant to intermittent after intervention (this was obtained from qualitative data collected during consultations).

The participant's perception that their pain would persist improved from an average of 10 to 2.1 following CFT.

Prior to intervention, when asked whether the pain would be worsened due to physical activity, participants scored an average of 8.6. This reduced to 2 following CFT.

The ability of participants in this group to ease their symptoms was 7.1 prior to intervention and 2.1 after CFT.

Sleep improved for 6 of the 7 respondents, changing from 7.1 to 3.8 following intervention.

1.3 PSFS

Patient-specific functional goals were identified and scored according to the protocol. These improved on average by 6.82 points (where 2 point change is significant (Westaway et al 1998).

1.4 Qualitative data

PARTICIPANT	QUALITATIVE COMMENTS FOLLOWING INTERVENTION - GROUP 1
1	I'm still awakening with pain but can ease this with breathing exercises. Since coming off medications, my thinking is clearer - it's been like coming out of a fog, even the neighbours have noticed a difference in me, I have better memory and focus and am less irritable. Overall 50 - 60% better.
2	I'm now doing all housework and my 'house is gleaming'. I no longer use a stair lift, but run it twice a week to exercise it! I'm not sleeping well because of hip pain and am waiting for this to be replaced. I no longer take oxycodone and less gabapentin.
3	I'm much better. My sleep is back to normal, I only have occasional pain. I wish this had been available years ago.
4	Back is overall much better, I no longer panic if I feel sore and I'm not frightened that I have damage in the back. The leg pain has gone completely – I'm not afraid of damaging my back or body and don't avoid anything.
5	I've been fine. I've had not low back pain but still have some leg pain when gardening. I haven't had any pain medications or patches (lidocaine and co-codamol) and am overall 90% better.
6	I'm exercising daily for 30 minutes and am feeling so much better. I feel great and am really thankful for this treatment. Now I understand that there's nothing wrong with my body I am not afraid of doing anything. I wish I'd had this treatment earlier. It's a life changer.
7	I've been 70% better overall and feel that my belief about the cause of pain has changed. I'm still struggling to sleep but have significant stress at the moment. The pain is now intermittent and I can control it by relaxing.

See appendix 8 – statement sent from one of the participants from group 1 – since writing the statement this person has further reduced medications.

2. GROUP 2 – improvers with co-morbidities affecting treatment

2.1 Medication usage

Following intervention, one of these participants came off all pain medications but continues to take duloxetine. The second continued to take the same level of medication following intervention. This person was resistant to reducing medications, believing that they prevented escalations in mental health issues. The cost savings for this group to date is £135.28 if maintained for one year.

2.2 Orebro scores

Prior to the intervention, both participants in Group 2 scored above 50 (mean score 88). The mean score after intervention was 57 with one participant scoring 67 (still at risk of long term disability) and the second participant's score was reduced to 49. Both had therefore improved in terms of this index and one was below the critical level of 50 following intervention.

Both respondents in this group reported that they had suffered their pain for more than 1 year scoring 10 on the questionnaire before and after intervention.

Pain levels reduced by an average of 3.5 for these two participants. Both of these people had severe foot pain (one was awaiting surgery to the ankle and the other had been diagnosed with Morton's neuroma which he felt was causing pain with walking). One of these reported feeling very much better in terms of low back pain, mentioning that the pain had changed from being constant and severe in the low back to an occasional twinge after CFT. This person's biggest challenge following CFT was foot pain. The second participant reported little change in pain following intervention but had started to use an exercise bike several times daily and noted that the relaxation exercises gave temporary pain relief.

These participants' perception that their pain would persist improved from 10 to an average of 7.5 following CFT. The participant who had come off pain medications altogether had improved by 4 points whereas the second by 2 points.

When asked whether the pain would be worsened due to physical activity, participants scored an average of 10 prior to intervention which reduced to 6.5 following CFT.

The ability of participants in this group to ease their symptoms did not change significantly.

Sleep improved by an average of 2 for these participants.

2.3 PSFS

Patient-specific functional goals improved on average by 3.79 (where 2 point change is significant (Westaway et al 1998).

2.4 Qualitative data

PARTICIPANT	QUALITATIVE COMMENTS FROM GROUP 2
1	I've been just the same, no change in pain, the low back pain remains constant, breathing and relaxing helps a bit and the exercise bike too. I still have to change position every two minutes. I think the ankle is the real issue and I'm still waiting for surgery. I'm using exercise bike 4 times per day.
2	The low back pain is improved. The main pain is now in foot from Morton's neuroma causing pain with walking. I can stand for longer. The pain is still worse early morning. I have twinges but no longer have the severe spasm. I have pain turning in bed and have no idea of what's causing it. My sleep is poor – I watch tv until the early hours of morning. I did manage to decorate my house which would have been impossible before this treatment.

3. GROUP 3 – modest improvement

3.1 Medication usage

This patient reduced co-codamol usage by 40% cutting costs annually by £46.72.

3.2 Orebro score

There was no significant change in the overall Orebro score in this participant following intervention.

This respondent had suffered pain for more than 1 year scoring 10 on the questionnaire before and after intervention.

Reported pain level did not reduce significantly following intervention although pain medication usage reduced.

There was some improvement in the participant's perception that their pain would persist. Their score reduced from 10 to 6.

There was no change in the patient's perception as to whether physical activity worsened symptoms.

There was no change in this participant's view as to ability to ease symptoms following intervention.

Sleep worsened by 6 points for this patient following intervention.

3.3 PSFS

Patient-specific functional goals improved by 3.4 (where 2 point change is significant (Westaway et al 1998).

3.4 Qualitative Data

PARTICIPANT	QUALITATIVE DATA – GROUP 3
	I think my pain is due to bending and lifting but I don't think it's damaging my back. I don't feel it will change and I won't get rid of the pain as it's caused by my job. It's the muscles that are sore. Everyone at work knows that this job causes back pain.

One phantom limb sufferer attended one treatment session. Unfortunately he did not follow up with the project and outcome data is unavailable however during this treatment session, he reported that the pain eased.

Discussion

This is the first Scottish study to examine the effects of Cognitive Functional Therapy (CFT) on prescription opioid and gabapentinoid medication usage in patients with chronic pain. As well as looking at medication usage, attitudes to pain, disability and pain measures were analysed along with patient specific goals. In spite of the limited intervention (the study was interrupted by the Covid 19 pandemic), the results showed significant improvements in over half of the participants.

Key results

In this study, after CFT:

- 50% of participants took fewer prescription opioids
- there were significant reductions in pain and disability levels
- there were significant improvements in functional goals

confirming CFT to be an effective treatment option.

The role of belief systems

We now understand that effective treatment for chronic pain must focus on changing an individual's negative pain beliefs and cognitions. The patients who responded well to treatment in this study showed changes in their attitudes following intervention. On the whole, they no longer believed themselves to be at risk of pain in the long term and no longer believed that activity would worsen their symptoms.

Following treatment, most of these patients managed to achieve the functional goals that they themselves had set. Many of their goals related to taking more exercise and becoming more active and these participants reported feeling better as a result of this. This study has demonstrated that CFT addresses the vital issues of changing pain beliefs and encouraging exercise, as highlighted in the latest Scottish guidelines (Sign 136).

Co-morbidities in the study group

Of the patients that showed significant signs of improvement (group 1), 3 of the 7 had suffered from fibromyalgia for many years. They each reported significant improvements in fibromyalgia symptoms following CFT and whilst it's not possible to extrapolate from such a small population of patients, the effect of treatment in these participants is encouraging.

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Social Factors

Most studies examining the efficacy of CFT examine its effects for low back pain. However in this project, a diverse group of pain sufferers with varied comorbidities were invited to join the study. These people were chosen because their GPs needed to find alternative treatment for them. Certain co-morbidities such as depression and orthopaedic conditions have affected the results of this study. However patients with other conditions such as headaches and fibromyalgia were found to benefit from CFT.

This project was conducted in an area of social deprivation. The GPs at this clinic are trying hard to follow the latest national guidelines and to reduce opioid medication prescription rates for chronic pain patients. Having the physiotherapist available within this surgery has allowed the GPs to offer an alternative to medications which has proven to be successful in terms of treatment outcomes and has been helpful to the GPs.

Implications for the NHS

Having a practitioner working in the primary care setting would save the cost of tests, procedures and consultations and would reduce the strain on specialist services. In addition, early intervention

by a physiotherapist could prevent the acute pain patient from developing chronic pain if seen early by a suitably qualified physiotherapist with CFT skills in the primary care setting.

CFT is an affordable and effective treatment. As the latest Scottish guidelines allow for physiotherapists to work in primary care settings, it could become an accessible therapy. However there are few practitioners trained in CFT and providing training for more therapists may present a challenge.

Limitations

The participants in this study were complaining of diverse medical conditions. Certain co-morbidities, particularly orthopaedic conditions and depression were found to affect outcomes.

Results from this study should be treated with caution due to the small patient population and the lack of control group.

This project was interrupted by Covid 19. The project design had to be altered with the onset of the pandemic when group and face to face consultations were not possible. Lack of technology for many participants prevented ongoing treatment and several participants were lost to the study.

Due to financial limitations, this study was conducted over a short period of time, long term follow up would be useful to confirm outcomes.

The treating physiotherapist collated all data and wrote the paper and the paper is therefore subject to bias.

Data for changes in medication usage has been gathered from participants. Data for prescription rates will not be available for some months.

Future research

A properly conducted, randomised control trial with an adequate sample population, comparing CFT to other available treatments should be conducted over a longer period of time within primary care settings. Such studies should look at people from different geographical areas and examine the impact of CFT in the long term, assessing the impact on long term care seeking and work absenteeism. Wider economic effects should be examined including the cost of long term disability and social care. Costs and frequency of GP consultations and other healthcare costs such as MRI's and other tests as well as the cost of prescription medications should be examined.

Future studies of CFT should include booster sessions in order to reinforce helpful perceptions and behavioural responses to pain in the long term.

Further research comparing the effects of CFT to other treatment techniques such as Cognitive Behavioural Therapy and other behavioural techniques, alternative physiotherapy approaches and other treatments currently recommended in SIGN 136 would help to determine effective treatment approaches and could be used to guide future care.

Research to examine the costs of treatment, comparing CFT with other available treatment strategies should be undertaken.

Research into the effect of CFT for the treatment of fibromyalgia and phantom limb pain would be worthwhile. Several fibromyalgia patients participating in this study showed improved pain and disability levels with treatment and phantom limb pain which is due to sensitisation of the CNS may respond well to this form of treatment.

Chronic pain sufferers generally present with wide-ranging co-morbidities. This study has shown that CFT can be used effectively in people presenting with multiple issues and it could therefore be used in treating similar patients.

Conclusion

This is a small scale project, carried out in a GP practice. It is the first Scottish study to examine the effect of CFT on rates of prescription opioids use in chronic pain patients. For just over half of the 19 participants, CFT improved pain and disability levels and reduced the use of prescription opioid, gabapentinoid and other pain medications. This study suggests that an approach such as CFT which gives an individually tailored treatment approach that focuses on combining psycho-social and physical factors can improve pain and disability levels in patients with diverse chronic pain conditions.

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APPENDIX 1, CURRENT SIGN RECOMMENDATIONS FOR TREATMENT OF CHRONIC PAIN

- Pharmaceutical recommendations
- Psychological based interventions
- Pain Management Programs
- Unidisciplinary education (Brief Education)
- Progressive relaxation
- CBT
- Manual therapy (for short term pain relief for low back pain)
- Manual therapy with exercise therapy for chronic neck pain
- Exercise therapies
- Electrotherapy (TENS, Low level laser therapy)
- Acupuncture

(SIGN 136, 2019).

APPENDIX 2

SELF HELP GROUPS/ONLINE RESOURCES

There's lots of self-help advice available from a variety of organisations supporting people living with long-term pain, such as:

A Way With Pain
Action on Pain
British Pain Society
Pain Concern
PainSupport (taken from nhs uk web site)

Paintoolkit.org
Painassociationscotland.org
https://www.nhsinform.scot/illnesses-and-conditions/mental-health/mental-health-self-help-guides/chronic-pain-self-help-guide
chronicpainscotland.org

Resources suggested in Read 1m52 - www.painassociation.co.uk, www.Moodjuice.nhs.scot.uk, www.paintoolkit.org, www.chronicpainscotland.org

Appendix 3

CHRONIC OR RECURRENT PAIN

PATIENT INFORMATION

What is Chronic pain?

- Pain that is present for more than 3 months or 12 weeks.

What is Recurrent pain?

- Pain that occurs for no particular reason (there's no real cause of injury) and occurs repeatedly (two or more times).

Is Chronic or Recurrent pain caused by damage to a tissue or physical structure? (eg muscle, ligament, bone, tendon, cartilage, joint etc)

- No, the body heals in a way that you can predict. If you imagine going over on your ankle, you know that within a few days, the body is well on the way to healing and it will be better soon. The only time that pain recurs is if you re-injure your ankle. The back and the rest of your body is no different – if you damage it, it will heal. The original pain never comes back without re-injury nor will it persist beyond a few days for no reason.

So what causes Chronic or Recurrent pain?

- The latest evidence shows that when a pain persists or recurs for no reason, it is due to changes in the way that the brain perceives the problem. As a result of this, the brain pays too much attention to the problem and causes us to over protect and to focus too much on the painful issue. This leads to more pain and excessive muscle tension.

Is it all in my head? Psychosomatic pain?

- No. This is a physiological process and the pain you feel is very real. It's just that the pain is not coming from a structure in your body. It's due to changes in the brain which can be treated effectively.

How should we treat Chronic or Recurrent pain?

- **AVOID EXCESSIVE GUARDING**
  Your therapist will have told you to avoid holding yourself in a tense way. If you're feeling discomfort, look at how you are holding yourself and relax (drop your shoulders, slouch)

- **BREATHE AND RELAX**
  Your therapist will have shown you how to relax the tense muscles (it's the tension in the muscles that leads to pain). The muscles tense up because your subconscious mind is protecting you. By

practising the breathing techniques that your therapist has taught you, you are taking conscious control of this tension, it's a bit like re-writing a computer program. You are re-programming your brain.

- **EXERCISE**
  When your brain is overly protective, it produces certain chemicals that need to be burnt off and the only way of doing this is by getting out of breath. Exercise is the best way of doing this. Your therapist will have talked to you about this – choose something that you enjoy, perhaps a brisk walk or running. Even running up and down the stairs at home is exercise. At any time you could do some squats or sit to stand quickly from a chair, star jumps etc and this will help to ease the discomfort.

  Exercise has been found to be hugely beneficial to the body in general – it's good for the heart and lungs, good if you suffer from pain and it's very good if you tend to feel anxious, depressed or just downhearted.

Does it take long to re-program the brain?

- No, because the brain will change with a different input (this is known as neural plasticity), as long as you practice the breathing regularly (3 or 4 times per day or when you are in pain), the brain will quickly change.

COMMON MYTHS

"POOR POSTURE CAUSES PAIN"
This is simply not true. Allow yourself to sit or stand in a relaxed way, do not try to keep your shoulders back or your back straight.

"**STRENGTHENING MY CORE WILL IMPROVE MY PAIN"**
This is also not true. There is no proven relationship between strengthening the core as a way of improving this type of back pain. If however the only exercise you do involves core exercises then do keep them going – this is better than not exercising at all.

"I NEED TO KEEP MY BACK STRAIGHT TO PROTECT IT WHEN I'M BENDING"
Again this is not true. Backs like to move normally, allow it to relax as you bend.

"BACKS WEAR OUT AS YOU GET OLDER"
There is no evidence that this is the case.

"I HAVE NURSES/FIREFIGHTER'S ETC BACK"
There is no reason that because someone has had a physical job, they will likely develop pain as they get older.

"RUNNING CAN CAUSE BACK ISSUES"

Again, this is simply not true, studies have shown that running actually strengthens the back.

"I SHOULDN'T EXERCISE THROUGH PAIN"

Studies show that you will do no harm if you exercise and it's painful.

USEFUL LINKS

Tame the Beast

https://www.youtube.com/watch?v=ikUzvSph7Z4

23 and a half hours

https://www.youtube.com/watch?v=aUaInS6HIGo

Chronic Pain Website

www.pain-ed.com

Peter O'Sullivan interviews

https://www.youtube.com/watch?v=dlSQLUE4brQ

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APPENDIX 4

GROUP CONSULTATIONS CONFIDENTIALTY FORM

Name:

Home Address:

Date of Birth:

Daytime phone number:

Introduction to this Confidentiality Agreement

As a participant in group consultations, both you and the other patients who are sharing the appointment will discuss medical information in the presence of other patients, and also staff. Your clinician (doctor or nurses) and the group consultations healthcare team will be doing likewise and are bound by their employment contracts and professional codes of ethics to respect patients' confidentiality. Please read the statement below, and if you agree with it, please sign the form where indicated.

Statement of confidentiality

By signing this agreement, I undertake to respect the confidentiality of the other members of the group consultation by not revealing any medical, personal or other identifying information about others in attendance, after the session is over. My own information however, belongs to me, and I understand that I am encouraged to discuss my own details with my carer or theIr family member, as appropriate.

I understand that if I have health concerns that are of a a very sensitive nature, Imay of course, ask to iscuss them with the relevant staff member in a private treatment room or to schedule an individual practice appointment.

I understand that I am under no obligation to share personal information with other patients, or healthcare staff, unless I choose to do so. By signing this confidentiality form however, I am agreeing to share any relevant test results within my group

Signed Date

Signed (carer/support person if applicable Date

I CONSENT AS ABOVE IN ALL OF MY GROUP CONSULATION SESSIONS AT…… PRACTICE

APPENDIX 5 – Consent for to participate in study

Informed Consent form for Prestonpans Health Centre, pain project

http://www.prestonpanshealthcentre.scot.nhs.uk/practice-policies,56760.htm

This Informed Consent Form is for people who have been treated for their pain by a physiotherapist at Prestonpans Health Centre.

General Information

The doctors at the surgery in Prestonpans, along with East Lothian NHS Pharmacy, have been looking to find an alternative way of easing pain in people who have had pain for more than 3 months.

As part of this you have been treated by a physiotherapist who has gathered information from you (from the questionnaires that you have answered at the consultations and from some of the comments that you have made directly to her about the treatment that you have received).

We are trying to analyse the effectiveness of the treatment and are requesting your permission to use the information that we have obtained from these questionnaires and from your comments. We are interested in analyzing any changes in the amount of medications that you have been taking as a result of the treatment. This information will be used in a general report that may be shared. All information will be used anonymously (your name or personal details will not be available or written in any report).

If you feel you would like to talk to us about this or wish this to be explained further, please contact Dr Beedel at the health centre (01875 810736) or contact Liz Noar directly (telephone number 01620 894495).

PART I: Information Sheet

We are researching the effect of Cognitive Functional Therapy ((CFT) the type of physiotherapy that you have experienced when working with the physiotherapist) on long term pain. Whether it is beneficial in terms of quality of life (including pain levels), levels of disability and whether it reduces the need for pain medications.

Many people suffer from long term (chronic) pain and find themselves needing to take pain medications for many years. There is recent evidence that these medications are unhealthy if taken for too long. CFT that is used to change a person's understanding of the cause of their pain, has been found to improve pain and disability levels.

People who have been asked to see the physiotherapist are those who have suffered pain for a long time and who have been taking strong pain medications.

Voluntary Participation

It is your choice as to whether or not you allow us to use the information gathered and there will be no repercussions should you prefer it NOT to be used.

At the first consultation with the physiotherapist, you completed questionnaires which will be used as a comparison to the completed questionnaires after treatment, along with the amount of medications that you were taking before and after treatment. In this way we will be able to work out how effective the treatment has been for you. We now wish to use this information to write a report about the effectiveness of CFT. Some of the comments that you have made may also be quoted in the report (terms such as 'I feel no difference', 'This has completely changed my life'. **Your personal information and data will not be used in any way in the written report and it will not be possible to identify you.**

We are writing this paper as we are constantly trying to improve the care that we provide. The findings from our study offer good information which may be helpful for developing treatment protocols in the wider population outside of Prestonpans.

Duration

The treatment has taken place over 3 months although the physiotherapist is available to talk to you beyond this.

Benefits

From having participated in CFT, we are hoping that your quality of life and pain levels will have improved and hope that you will be requiring less pain medication.

Confidentiality

Your name and personal information will not be used in any way to identify you individually. However the data that you have offered will be mentioned in the report.

Sharing the Results

We intend to share this report with doctors within Scotland and it is possible that this report may be published in a medical journal.

Right to Refuse

You are not obliged to give your consent to our using your information and this will not in any way be detrimental to you or your future care. You have the right to withdraw your consent at any time.

Who to Contact

If you have any questions regarding this, please contact Liz Noar (telephone number 01620 894495 or Dr Beedel (01875 810736).

PART II: Certificate of Consent

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate as a participant in this research.

Print Name of Participant_____

Signature of Participant _____

Date _____

Day/month/year

Statement by the researcher/person taking consent

This form has been sent to the named participant. To the best of my ability I have made sure that the participant understands that:

1. Information gathered from consultations will be used anonymously in a written report

I confirm that the participant was given an opportunity to ask questions about the use of this information and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Print Name of Researcher/person taking the consent_____

Signature of Researcher /person taking the consent_____

Date _____

Day/month/year

APPENDIX 6 – Short form Orebro (modified version)

Orebro Musculoskeletal Pain Screening Questionnaire (Short)

Name: _____Date of Birth:_____

Are you: ❑ Male

❑ Female

1. **How long have you had your current pain problem? Tick (4) one.**
   ❑ 0-1 weeks [1] ❑ 1-2 weeks [2] ❑ 3-4 weeks [3] ❑4-5 weeks [4] 0 6-8 weeks [5] ❑ 9-11 weeks [6] ❑ 3-6 months [7] ❑ 6-9 months [8] ❑ 9-12 months [9] ❑ over 1 year [10] ☐
2. **How would you rate the pain that you have had during the past week? Circle one.** ☐
   O 1 2 3 4 5 6 7 8 9 10
   No pain *Pain as bad as it could be*

   Please circle the one number which best describes your current ability to participate in each of these activities.
3. **I can do light work for an hour.**
   O 1 2 3 4 5 6 7 8 9 10 10-x ☐
   Can't do it because of the pain problem *Can do it without pain being a problem*
4. **1 can sleep at night.**
   O 1 2 3 4 5 6 7 8 9 10 10-x ☐
   Completely disagree *Completely agree*
5. **How tense or anxious have you felt in the past week? Circle one.** ☐
   O 1 2 3 4 5 6 7 8 9 10
   Absolutely calm and relaxed *As tense and anxious as I've ever felt*
6. **How much have you been bothered by feeling depressed in the past week? Circle one.** ☐
   0 1 2 3 4 5 6 7 8 9 10
   Not at all *Extremely*
7. **In your view, how large is the risk that your current pain may become persistent?** ☐
   0 1 2 3 4 5 6 7 8 9 10
   No risk *Very large risk*
8. **Physical activity makes my pain worse.**
   0 1 2 3 4 5 6 7 8 9 10 ☐
   Completely Disagree *Completely Agree*
9. **An increase in pain is an indication that I should stop what I'm doing until the pain decreases.**
   O 1 2 3 4 5 6 7 8 9 10 ☐
   Completely disagree *Completely agree*
10. **Based on all the things you do to cope, or deal with your pain, on an average day, how much are you able to decrease it? Circle one?**
    O 1 2 3 4 5 6 7 8 9 10 10-x ☐

Can't decrease it at all *Can decrease it fully*

SUM: ☐

Scoring the short version of the Orebro Musculoskeletal Pain Screening Questionnaire (OMPSQ)

The short version of the OMPSQ includes 10 items selected from the full version (see Linton, Nicholas & MacDonald, 2011). These items are scored 0-10, where 0 refers to absence of impairment and 10 to severe impairment. However, three items need to be reversed in order for all the questions to be oriented in the same direction.

The scoring method has been built into the questionnaire and scoring boxes are provided to the right of each item;

- Item 1, on pain duration, the categories 1-10 represent periods of time ranging from "0-1 week" (first box on the left) to "over 1 year" (last box to the right). Thus, "6-8 weeks", for example, would be scored "5";
- Items 2,5,6,7,9, and 10 the score is the number circled;
- Items 3,4, and 8 the score is 10 minus the number circled. These items are marked with "10-x" above the scoring box;
- Write the score for each item in the shaded scoring box;
- Add all the scores to obtain the total score and write it in the last shaded box.

The total score will range between 1 and 100, with a score >50 indicating higher estimated risk for future work disability (Linton, Nicholas & MacDonald, 2011).

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APPENDIX 7, Patient Specific Functional Scale

Initial Assessment:

I am going to ask you to identify up to three important activities that you are unable to do or are having difficulty with as a result of your_____ problem. Today, are there any activities that you are unable to do or having difficulty with because of your _____ problem? (Clinician show scale to patient to have the patient rate each activity).

Folllow-up Assessments:

When I assessed you on (state previous assessment date), you told me that you had difficulty with (read all activities from list at a time). Today, do you still have difficulty with (read and have patient score each item in the list)?

Patient-s;ecific activity scoring scheme (point to one number):

0 1 2 3 4 5 6 7 8 9 10

Unable
To perform activity

able to perform
activity at same
level as before
injury or problem

Activity	Initial					
1						
2						
3						
4						
5						
Additional						

Total score = sum of the activity scores/number of activities

Minium detectable change (90%CI) average score = 2 points

Minimum detectable change (90% CI) for single activity score = 3 points

APPENDIX 8 – patient from group 1 qualitative statement

I have had chronic pain for about 3 years plus. This doesn't sound like a long time but when suffering it can feel like forever. Along with pain comes lack of sleep, which has a knock on effect of stress and anxiety and an inability to relax.

As a staff nurse myself there is a long held belief that the very nature of our job equals pain in joints. People automatically say "you are a nurse you will have a bad back". I will admit to buying into this belief and that long term things would deteriorate further.

To rewind a little before my chronic pain was diagnosed as fibromyalgia I had been at the gym for a good 18 months doing cardio and weight resistance training. I would attend between 3 and 5 times a week and really enjoy it. As well as feeling and looking good. Mentally I was feeling so positive.

Then I started getting small injuries which seemed to be getting worse, then my back started to play up and as I had sciatica in the past I believed I needed to rest. It took about 6 months for me to completely stop the gym during which time sleeping was difficult, work was suffering, my sick time increasing and so was my pain.

My pain levels became so great that I believed that I had a serious illness and was tested for many things which were done by both physical exams and blood work. Thereafter a vicious circle began of pain, depression, anxiety and chronic fatigue.

I ended up on nearly 20 tablets a day and very low. I was called for a medication review, I was slightly late, very tired from working my shift the night before and had a lot of pain, to be honest I was very tearful and at the end of my tether.

My GP observed that I was not coping and as a fairly young woman with quite a few working years left. I was gaining weight which was aggravating other medical conditions and I was reliant on several strong potentially addictive painkillers.

The GP then explained about a chronic pain specialist that had put together a programme to help people in my position, would I like to be included. Not feeling particularly hopeful but desperate for something to change I agreed.

I was given an initial questionnaire which would be used as an assessment tool for my baseline measurements of pain, and the effects on my daily life. I met with Liz who in fact was a physio with many years experience, I had an hour to tell my story so she could build a picture of my difficulties and how she could help.

Within one hour I felt more positive than I had for a very long time. The perspective of pain and the psychological explanations that Liz provided made so much sense. I even realised that I used the same principles in my every day practice on a lesser scale but had never made the link to myself.

Changing my mental attitude has been really key to this working. Negativity is a real barrier to change. Presently I have halved the amount of tablets I take and the amount of pain! I have managed to take my dog out for walks which helps me mentally. I find it easier to not panic when I feel pain starting and use the relaxation technique that Liz showed me. Work has become easier and I have managed more social occasions too. This is working for me, I'm not back at the gym yet but that is the ultimate goal, watch this space.

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