A PAIN MANAGEMENT PROGRAMME FOR LANCASTER: A REPORT OF A PILOT STUDY

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INTRODUCTION

The response to a postgraduate evening meeting in January 1997 was encouraging: about 70 people turned up to hear a series of presentations on chronic pain, one of which was about the management of the complications of chronic pain by a technique of cognitive behavioural therapy and physiotherapy aimed at improving overall quality of life and mobility.

Two things happened directly as a result of that meeting. Jacqui Dixon (JD), Superintendent Physiotherapist in Mental Health and Tim Norton (TN), Clinical Nurse Specialist in Cognitive Behavioural Psychotherapy, introduced themselves and expressed an interest in providing a pain management programme. A few weeks later an unsolicited offer of funding was received from the Stoneleigh practice in Milnthorpe to set up a pilot scheme to see whether such a programme was viable in Lancaster.

At first sight the project had almost unlimited potential. There were many patients currently attending the pain clinic who could theoretically benefit from such an approach. There was also an unspecified number attending rheumatology clinics who were beginning to be referred to the pain clinic. And there was the realisation that in such a programme was a solution to the 'revolving door' approach to the management of back pain via the usual outpatient referral system: if a pain management programme could bring a reduction in the number of requests for passive physiotherapy treatments then it was potentially self-financing.

Our discussions defined the type of patient we would accept for the programme: for the pilot scheme a small number and uniformity of symptoms were required. The back pain sufferer was the obvious candidate. An ability to relate to others and to be prepared to work in a group were essential. So was an understanding of the purpose of the group. We had to make it clear that we were not likely to make an impact on the degree of discomfort but that we were interested in increasing functional ability and social wellbeing. There were many potential candidates for the group currently attending the pain clinic but more detailed assessment was required prior to the formation of a group.

ASSESSMENT PROCESS

The assessment was broadly based on the model described by Booker (1994)11.

Physiotherapy assessment confirmed whether or not the client would be able to cope with the physical aspects of the programme and included measurements of

- neck retraction (tragus to wall)
- trunk rotation
- chest expansion
- timed step test

Psychological assessment looked for symptoms of behavioural and emotional disorder in respect of the impact of chronic pain as shown in Fig 1.

Clients were accepted onto the programme if they exhibited two or more criteria in each of these groups.

The assessment process enquired specifically about the following features of the illness:

History of pain and illness
- onset
- previous interventions and efficacy
- changes over time

Current pain
- frequency, intensity, duration, location
- type of pain and daily fluctuations (good and bad days)
- alleviating and exacerbating factors
- impact on mood

Pain behaviour and lifestyle
- drugs - prescribed/non-prescribed
- substance intake - alcohol, tea, coffee, smoking

<table>
<thead>
<tr>
<th>Behavioural features</th>
<th>Emotional features</th>
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<tbody>
<tr>
<td>magnified illness presentation</td>
<td>major interference with personal relationships, due to pain</td>
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<tr>
<td>major interference, due to pain, of activities of daily living (work, home duties, social life, hobbies, leisure pursuits)</td>
<td>maladaptive pain, related to feelings of anger, hostility or anxiety</td>
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<td>long periods of resting or lying down during day</td>
<td>negative outlook with low mood</td>
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<tr>
<td>over-activity/under-activity cycles</td>
<td>disturbed sleep due to pain</td>
</tr>
<tr>
<td>inappropriate consumption of analgesics or other medication</td>
<td>other signs of maladaptive coping (eg dishevelled appearance)</td>
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Figure 1
For the purposes of the pilot we also intended to include only those who appeared positive about the programme. Although in its future development we might take on ‘all comers’, we were keen to select those with a good chance of improvement. Partly for this reason we worked from the Garnett clinic but did not offer any assistance with transport, believing that by doing so we would select the better-motivated clients.

In addition to a structured interview we used standard questionnaires and a self-assessment sheet on the pain experience, as illustrated. We customised this with the help of Tony Lamb (Manager, Adult Mental Health Services), intending to use this as a global measure of achievement. In using questionnaires we were aware of the difficulty that many workers have experienced in using results of these to show a global improvement in function and wellbeing.

As a result of the preliminary screening process, ten clients were identified, of whom eight took up the offer of a place on the programme. The group was of mixed age and sex and a range of disability. All but two had ceased to be considered for active medical intervention: of these, one was suffering from a flare-up of colitis at the time of the programme and was taking steroids. Another had had an epidural injection at the pain clinic the previous week for relapsing sciatica. Prior to detailed assessment several had been unhappy about the implications of being asked to join the group: one patient’s husband was so dismayed by an offer of a programme involving psychological skills that he escorted her back to the clinic to vent his anger.

THE PROGRAMME ITSELF

The group met for the first time in October 1997 and thereafter for ten sessions over a five-week period for the clients from Morecambe. The distance and lack of transport did not prove a major handicap and though some people were unable to attend occasionally, most managed most sessions.

The first task was to ask the group what understanding each had about a diagnosis of pain. The terms ‘arthritis’ and ‘degeneration’ were mentioned frequently, being terms used by doctors. One man had taken particularly unkindly to the term ‘degeneration’, concluding that his condition was one of ‘disintegration’ and, being a surveyor, had been convinced of a serious pathology in his spine in need of urgent restoration. The idea that pain was imaginary or ‘in the mind’ was another example of inappropriate information common to most members of the group. The damaging psychological consequences of going through the ‘revolving door’ of hospital outpatient diagnostic procedures and treatment were also apparent in the lives of several members of the group. Depression and social isolation featured as common symptoms.

As an introduction to the way mood and beliefs alter the nature of pain, one author (AS), recounted his own experience. As a teenager he had been a keen mountaineer but found that cold hands were particularly distressing, in fact disabling. As a child he had read a harrowing account of a man with frostbite who cut off his gangrenous fingers with a penknife. Cold fingers became synonymous with frostbite. As a pain specialist finding himself in a blizzard one March morning, he had challenged his own thoughts on the significance of the pain with immediate and striking effect – and the pain and the appearance of his hands changed dramatically.
Clinical Focus: Pain Management

A second author (TN) used a cognitive therapy approach within the group to describe the frustration caused by disability due to pain, as follows: a client became distressed by being unable to paint the gutters on his bungalow because he could not climb ladders. He regarded himself as useless and no longer worthy of peoples’ time, as his son-in-law was easily able to complete the task. Having written a clear account of his thoughts at the time, he became able to replace unhelpful, black and white views of his worthlessness with thoughts like “I may not be able to climb and paint myself but I can share the pleasure of seeing the job completed” and “I’m not totally happy at having to just make the tea but I know the job will be done reasonably well by my son-in-law.”

The third author’s (JD) introduction was on the flexed posture and its relationship to injury. She had recently injured her hand and demonstrated the protective response of flexion of the palm. She then challenged members of the group to consider the posture and the effect of back pain, explaining that the flexed position is the natural response to acute injury, but that its persistence in a chronic pain state needs intervention.

The exercises introduced — backward rotation of the arms being one — were designed to counteract the flexed posture and adaptive soft tissue shortening. Importance was also placed on the teaching of lateral costal breathing (a type of breathing involving expansion of the rib cage), with an end expiratory pause to reduce the tendency to hyperventilate. Specific physiotherapy techniques of active relaxation were used to enable the client to identify good joint position. Thereafter the range of activity undertaken was varied according to the client’s ability, with goals identified and stated and progress recorded weekly. The inevitable increase in pain as a consequence of unaccustomed exercise was explained as being due to tissue damage or inflammation, and this message was reinforced as often as necessary, both individually and to the group as a whole.

TN encouraged the group to accept that goal-setting for modestly achievable activity was a useful way of counteracting disability. He described the positive results of finishing a task, even when that was far less than had been achievable in health. He contrasted the euphoria of the winning side in a football match with the fatigue of the losing side, even though each side had put the same physical effort into the game.

An emphasis on relaxation skills and deep breathing techniques was made at the beginning of the programme and skill training in this took place at intervals throughout the five-week period. The specific components of the training in cognitive behavioural methods included the following, drawing on examples from the clients’ own experiences:
- goal setting
- stress management
- relaxation, guided imagery, visualisation
- cognitive restructuring, adapted for use with symptoms of fear, anxiety, depression, anger
- challenging of pain behaviour eg use of aids, grimacing, avoidance
- relationship with partner, sexuality
- methods of improving sleep-patterns
- coping with flare-ups and setbacks

These topics were repeated through the five-week course, together with opportunities for discussions on such topics as medication use and the role of medical intervention in the treatment of back symptoms.

PROGRESS

The results, even in the first two weeks, were encouraging. The social isolation was a common topic of conversation, and the companionship offered by fellow sufferers had an obvious effect on group morale. One or two offered lifts to the programme or the promise to keep in touch by phone.

The idea that pain is a sign of ongoing tissue damage is difficult to challenge, and this concept needed to be addressed repeatedly. A diagnosis such as fibromyalgia may be one on which the sufferer will hang medical respectability, but the price to be paid is a belief that there is damaged muscle producing the pain. A minor breakthrough was achieved by one patient when he understood that if there was no ongoing inflammation, there was no need for anti-inflammatory drugs, and duly stopped them after years of ritual use. He reported to the group that his pain, to his delight, did not worsen.

Analgesics were universally taken 'as required', as 'pain killers' for use when the pain was bad. This practice was challenged: at the risk of encouraging the use of medication it was argued that analgesics should be taken on a regular basis as pain preventers rather than in anticipation of painful activity. One found the side-effects of this change of practice disconcerting. The group found it helpful to have an explanation for the use of antidepressants in chronic pain, since some members had been confused about the reason for the original prescription.

An offer was made to meet with spouses and partners but was not taken up. This was disappointing because of concern that what had been said and taught would be contradicted back home. An intensive ten-week course is not enough to overcome what might in some cases be years of misinformation, prejudice and disability being reinforced at home. What we intend to say to the partners of the next group is that goal-setting and pacing are activities that have to be practised at home. Allowing the pain sufferer respite from domestic chores or to stay in bed actually does harm.

Assessment tools were crude: a consistent difficulty with measuring the outcomes of interventions such as this is 'what do you measure?'. What was intended to be quantified was the increase in general wellbeing and understanding that the programme had achieved, both immediately and three months later. Five of the group charted progress 'up the tree' either immediately or three months after the programme, although two patients had relapsed at three months. As far as physical activity was concerned it was encouraging that several members sought to continue their physical fitness programme by attending the multigym under JD’s supervision. This was organised by the usual referral from general practitioners. This ongoing activity was particularly useful and commented upon at the three-month review.

The management of a chronic condition is characterised by a cycle of improvement and relapse. Part of the aim had been to replace the cycle of activity and inactivity so characteristic of chronic pain sufferers with a more consistent pattern of
planned targeted activity. The fact that after three months several members reported relapse is characteristic of the pattern of chronic pain.

Lancaster’s pilot pain management programme falls short of the complexity of that offered by other centres in several respects. It offers an ‘off the peg’ facility in which the scope for individual treatments and specific attention to individual clients is lacking. There were frequent requests for review of medication in the light of new understanding of the pain or as a consequence of the increased reported pain after unaccustomed exercise. There were requirements for individualised exercise plans from physiotherapy that could not be accommodated. Ability to understand and deal effectively with some of the complex illness behaviours of the more disabled is limited by time. Clients have to be sufficiently motivated and mobile to get to an out-of-town destination twice a week.

Nevertheless, with only one exception the clients felt that benefit had been gained. Progress was an individual matter, and had been made in different areas. The team had, it was told, performed well and had got its message across effectively.

THE FUTURE

The early assessment of back pain requires the clinician to look for ‘red flags’: important elements of the history that mandate formal investigation. Examples of such red flags are history of cancer, recent infection and morning stiffness. In the same way, elements of the psychosocial history can be sought at early interview which, if present, may have ominous import for prognosis and require specific therapy. These elements can be usefully referred to as ‘yellow flags’. Examples of yellow flags are beliefs that the pain has to be abolished before activity can be undertaken and that pain is a consequence of tissue damage, a passive approach to rehabilitation and the use of extended rest time.

The application of the cognitive behaviour model to back pain has great potential for the future. The warning signs of disabling beliefs and attitudes (the yellow flags) may be detectable within a short time of the initial presentation of acute back pain. Early intervention, using a cognitive behavioural model, may reduce the longterm disability of painful back sufferers. We believe therefore that there is a case for the development of a simple, short-term programme involving a small team of professionals to which easy access is possible. The recent success of randomised controlled trials of cognitive behavioural therapy in chronic back pain, irritable bowel syndrome and the chronic fatigue syndrome further strengthens the case for investment in this sort of approach, and in acknowledging the foresight and generosity of our colleagues at Stoneleigh surgery we look to the new purchasing authority for future support.

ACKNOWLEDGEMENT
Our figure was designed with the help of Tony Lamb (Manager, Adult Mental Health Services, Lancaster Priority Trust).

REFERENCES
1 Booker CK Rehabilitation of the chronic pain patient in Gibson HB (ed) Psychology, Pain and Anaesthesia, Chapman and Hall, 1994