

Low back pain management in primary care

Bronwyn Thompson MSc DipOT

Bronwyn is a Clinical Senior Lecturer for the Postgraduate Diploma in Musculoskeletal Medicine, Department of Orthopaedic Surgery and Musculoskeletal Medicine, Christchurch School of Medicine and Health Sciences, University of Otago. With occupational and psychology qualifications, Bronwyn developed her pain management interest in the late 1980s. Her major interests are in work disability, anxiety and fearfulness related to pain and primary and secondary prevention of disability associated with pain.

'I don't know how it happened, but my back just went out and now I can't move.' [I'm so scared, my back's probably damaged forever and I don't know how I'm going to work and look after my family.]

'It's my pain; I just can't mow the lawns, do the garden or any housework.' [There's no way I'm going to end up in as much pain as I did last month when I tried to mow the lawns, I'm going to make sure my back is completely fixed before I do that again!]

'She came in to see me about her back pain – I know there's nothing I can do for her, it's simple back pain, but she can't work, not in her condition. It's just a matter of time.' [I know the Guides say I should send her back to work, but when she tells me how bad it is, and how little she is doing I just don't think she would manage.]

People with back pain come to see their health care providers for many reasons. Pain intensity can and

does prompt people to see a medical practitioner, yet many people live with a degree of pain, and even quite substantial disability, without seeking medical assistance.¹ It has long been known that less than one-third of people with clinically significant symptoms seek medical treatment,² while from 30–50% of people who seek treatment in primary care do not have diagnosable disorders.³ Yet, surveys show that a great proportion of visits to the primary care clinician are for pain.⁴

What do people look for when they decide to seek medical help? Turner and colleagues⁵ asked patients with back pain to rate the importance of different objectives for their visit. The objective given highest ranking was to 'receive information' – on how to manage back pain, how to reduce back pain without prescription drugs, how to return to normal activities as soon as possible, how to prevent a recurrence of back pain, the likely course of back pain, and the cause of back pain.⁵ In addition, patients wanted a diagnosis, and reassurance that they did not have a serious disease. About half wanted 'a medical treatment that permanently cures the back pain problem'. As Von Korff states, *'for the large majority of primary care back pain patients, this is an unrealistic expectation that deserves discussion and clear feedback on the limits of medical diagnosis and treatment of back pain problems'*.⁶

Medical practitioners, however, identified that their primary focus

was on diagnosis, and 'palliative care' until the underlying injury resolves itself. While this may be a useful approach for acute low back pain, many patients routinely seen in primary care cannot be considered to have true 'acute low back pain'. Von Korff and Saunders found that over 80% of a sample of primary care patients assessed one year after a primary visit reported back pain in the prior six months, and 60% in the prior week. In other words, recurrent back pain is a typical presentation.⁷

Why is this important? Acute low back pain is defined in the *New Zealand Acute Low Back Pain Guide* as *'back pain that lasts less than three months'*.⁸ Included in this definition is an acknowledgement that *'there may be persistent or fluctuating pain for a few weeks or months'*. Chronic back pain is defined as *'pain lasting more than three months'*. Recurrent back pain is defined as *'episodes of acute low back problems lasting less*

than three months but recurring after a period of time without low back symptoms sufficient to restrict activity or function'. Based on this definition, many patients currently diagnosed as having *'acute low*

back pain' are likely to have *'recurrent back pain'*. That is, most patients can expect that they will have a recurrence of back pain some time in the next twelve months. This is important because patients who expect that their consultation with a health care provider will provide them with *'a medical treatment that perma-*

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nently cures the back pain problem' may not 'hear' information about the need to manage recurrences or 'flare-ups'. Correspondingly, if health care providers are not aware of the distinction in management between acute and recurrent back pain, they may not provide patients with information about how to self-manage these symptoms, or prepare them for the probability that they will have a recurrence of a troublesome, but not serious, condition.

Evidence-based guidelines for acute low back pain

The evidence-based health care and guidelines movement has provided health care providers and purchasers with a way to systematically review 'up-to-date information from relevant, valid research about the effects of different forms of health care, the potential for harm from exposure to particular agents, the accuracy of diagnostic tests, and the predictive power of prognostic factors'.⁹

The New Zealand acute low back pain guidelines were

first published in 1998 and reviewed in 2000. A reprint of the *New Zealand acute low back pain guidelines* has recently been made available, incorporating the *Guide to assessing psychosocial yellow flags*.

The main messages in the *New Zealand guidelines* and elsewhere support a self-management approach, and most GPs know about the basic messages of promoting good analgesia, encouraging return to graded activity, and providing reassurance to people presenting with acute low back pain.

From the start, the *Guides to assessing risk factors for chronicity: Psychosocial yellow flags* were included with the *Acute low back pain guide*. These suggest ways to identify individuals at risk of developing chronic disability from back pain. While

Guidelines documents around the world have provided structure to both assessment and management, and some suggestions as to how a health care provider can support positive health behaviour, reviews of clinician management and diagnostic strategies for back pain show that clinicians continue to vary widely in their practice.¹⁰ As Pruitt and Von Korff state: 'The distribution of evidence-based guidelines was expected to change physicians' clinical practices, presuming that a knowledge deficit was the principal reason for variability in practice, but this single method approach has failed'.¹¹ There are clear challenges between knowing what best evidence states, and being able to implement this in a clinical situation.

Many reasons have been suggested for the failure of *Acute low back pain*

guidelines to consistently change provider behaviour. Pruitt and Korff suggest that new behaviours are required to implement the ALBP guidelines.¹² In comparison with guidelines for other medical conditions, such as asthma care that

endorse behaviours clinicians carry out daily (such as prescribing medication appropriately), the acute low back pain guidelines ask clinicians to reassure patients, return to usual activities, and most importantly, to continue to make these suggestions even when patients continue to report pain. Carrying out these behaviours in the face of distressed patients demands a set of skills that medical providers may not regularly use.

While the medical diagnosis and management of acute low back pain is relatively straightforward, the practical management of the situation in the clinic, and the ongoing management of the person presenting with risk factors is much more complex. Primary health care providers may be fully aware of the factors that are associated with chronicity – at least at

Summary of acute low back pain guidelines⁸

- Advise to stay active and working
- Explain and reassure
- Agree on a plan
- Control symptoms
- Note potential yellow flags
- Manage a review

the level of 'intuition' or 'gut feel', but may not feel confident to assess this area, are uncertain about who to refer to for further assessment, and once a person is identified as being at risk, are not sure what to do next.

Psychosocial risk factors for chronicity in low back pain

What are the major risk factors for chronicity in people developing musculoskeletal pain? It is believed that while biological factors may initiate physical dysfunction of the back, psychological factors influence pain perception and social factors influence behaviours demonstrated by the person in response to pain.¹³ It is these latter two factors that appear to most strongly influence the development of chronic disability. Psychosocial factors that are being explored are increasingly from the anxiety spectrum, for example factors such as vigilance to and interpretation of pain. Linton¹⁴ cites a review by Turk¹⁵ in which a number of studies found that pain intensity at onset was a predictor of later pain and disability, anxiety, fear, depression and psychological distress have been found to be related in a number of studies. Maladaptive coping, passive cognitions and stress have also been found to be related to chronicity. Most importantly for primary care clinicians, pain-related fear of activity was strongly associated with persistent disability.

Fear of injury/reinjury (kinesiophobia)

Kinesiophobia is a term coined in 1990 by Kori, Miller and Todd referring to the feeling of 'an exces-

sive, irrational, and debilitating fear of physical movement and activity resulting from a feeling of vulnerability to painful injury or reinjury'.¹⁶ The kinesiophobia model has since been investigated by others, and the basic formulation confirmed, noting similarities between this presentation and the definition of specific phobia in the DSM IV. Vlaeyen and colleagues identify a major difference, however, between specific phobia and pain-related fear: people with a phobia are generally aware that their fear is excessive and irrational, whereas people with pain are convinced that their fearful avoidance protects them from injury.¹⁷ Thus, people attending a primary care clinician 'know' that their pain is the cause of being unable to participate in tasks – they will rarely question this belief, and such is the confirmatory bias of humans, they tend to notice information that supports the belief that they should not do activities, rather than reassurance that returning to activity is safe.

Human tendency towards this cognitive bias is so strong that a recent study by Vlaeyen supports the notion that health care practitioners themselves continue to hold fear-avoidant beliefs and inadvertently reinforce the notion that re-

People with a phobia are generally aware that their fear is excessive and irrational, whereas people with pain are convinced that their fearful avoidance protects them from injury

turning to normal activities may not be in the patient's best interests.¹⁸ This is a question that many clinicians struggle with as they decide how to advise patients, for example advising nurses when it is advisable to return to work.

The effect of pain-related fear is that patients will avoid activities they believe will increase their pain. The origins of this behaviour are in acute pain. Avoiding activities is a protective response – it enables the individual to avoid being exposed to situations in which they may be vulnerable to further injury, and allows

tissues to heal. Usually, returning to activity occurs at the same time as pain subsides, and pain reduction is usually correlated with tissue healing. Two events may disturb this typical process. Firstly, pain may not reduce – this may be for many reasons, including physiological changes to the central and peripheral nervous system. The second is when the individual fears returning to activity, and avoids those things that he or she believes will provoke pain. In time, this leads to muscle reactivity and disuse, which further contribute to the pain experience.

How do patients present with pain-related fear? On the surface, these patients share characteristics very similar to others with persistent pain. They may describe sleep disturbance, altered movement patterns, reduction in energy and irritation with health and compensation systems that fail to resolve their problem. They become disabled – the disruption to their usual activities leads to loss of roles, with-

drawal from enjoyable pastimes, and changes to family dynamics. What may be characteristic of patients who have developed pain-related fear is their level of 'catastrophising', and the degree of interference pain has made in their lives. While

some people bitterly complain that they no longer do things they used to enjoy, and their lives are dominated by losses, others indicate that pain intensity is not a major concern – however, careful examination identifies that they have adjusted their lives so that they rarely encounter activities that provoke pain.

These patients are fearful of situations that they believe will provoke pain. If asked to carry out activities they are fearful of, they demonstrate anxiety responses including avoidance or escape, increased physiological arousal and hypervigilance. While

some may report that they have stopped favourite activities 'because of the pain', they may have not actually attempted these activities since they originally experienced their pain (thus never challenging their belief that pain will be overwhelming). When asked about their pain, they may express fears of being unable to cope if their pain increased, or describe in vivid terms what they imagine will happen to their body if they should carry out the activities. These beliefs may not be tested – that is, because people don't do the feared activity, pain does not occur, thus confirming the belief. Deactivation then occurs, with reduced ability to comfortably carry out usual (and non-feared) activities.

Catastrophising

Catastrophising is described as '*a cognitive process characterised by negative expectations about future outcomes and lack of confidence*'¹⁹ Examples of catastrophic statements are '*it's awful and I'll never cope*' and '*it will never stop, and I think I might die*'. In a recent study conducted by Picavet, Vlaeyen and Schouten,²⁰ Dutch participants who had responded to a previous survey about back pain were surveyed in a six-month follow-up. It was found that for subjects with low back pain at baseline, a high level of pain catastrophising predicted low back pain at follow-up, and chronic low back pain, in particular severe low back pain and low back pain with disability. For those without low back pain at baseline, a high level of pain catastrophising or kinesiophobia predicted low back pain with disability during follow-up.²¹

Catastrophising has been found to be associated with higher levels of psychological distress,²² poorer physical functioning and performance on functional capacity evaluations,²³ withdrawal from work,²⁴ and depression.²⁵ People who catastrophise describe a strong sense of being unable to control their pain or their lives.

The relationship between catastrophising and pain-related avoidance of

activities appears to relate to appraisals of the threat that pain holds for them, and the ways that individuals choose to approach or control their situations. Catastrophising is associated with the use of passive coping – which includes avoiding situations in which the pain occurs.

Many people would not describe their activity avoidance in terms of fear – to them it appears reasonable that they should not do any activity that provokes their pain. Some people even fear taking analgesics because they believe *'it will mask my pain and I won't know whether I am doing myself some damage'*.

Primary care of patients at high risk of developing persistent disability

The time available for comprehensive evaluation that would help to identify 'at risk' people in a typical general practice consultation is very limited. A qualitative examination of the 'anatomy of a consultation' conducted by Turner in 1998 identified that clinicians tightly structure their consultations in order to complete it within the typical 10–15 minutes. However, as reported by Von Korff,⁶ these consultations did not coherently *'consider patient worries, identify functional difficulties, identify goals for overcoming difficulties, develop plans for achieving goals, or systematically identify and address significant difficulties in performance of work activities.'*

People enter a clinical consultation for acute low back pain with beliefs about pain, fears about serious and ongoing disability, concerns about what is safe and unsafe to

do in their activities, and a desire to return to a normal life with minimal medical intervention. Clinicians also enter a consultation with beliefs about their role in diagnosis and successful symptom management. In doing this, they are guided by evidence-based rec-

ommendations, which in the case of acute low back pain require a number of behaviours that clinicians may find differ from those that they typically use during a consultation. Guidelines in New Zealand explicitly identify recommendations for assessing patients at risk of chronicity, and ways to promote self-care. A 10–15 minute consultation may be thought to be too brief to carry out these recommendations, but some qualitative studies have demonstrated

that clinicians miss opportunities to promote self management, and could do more to counter patients' anxieties and concerns. The following recommendations are drawn from Von Korff's work.⁶

Von Korff and Turner identify that during physical examinations, physicians could explain what they are looking for, explicitly addressing patient concerns about serious pathology. At the same time, patient's queries about other health matters that they suspect may be associated with their back pain should be specifically identified and addressed. Patients commonly worry that their back pain may mean long-term inability to do normal activities, and although most pa-

Given patient expectations that medical treatment should completely cure pain, it is important to be explicit about the usual pattern of recovery

tients are advised to exercise, clear explanations about why exercise and activity is both safe and recommended must be given. This provides fearful or catastrophising patients with a realistic view of the benefits associated with maintaining activity – despite pain that may not settle quickly.

Patients often mention things they are doing for themselves to manage their pain. Turner's study identified that this opportunity to support self-care was often missed by clinicians.

A collaborative approach can also provide an opportunity for the clinician to direct the consultation from medical 'treatment' to self-management

Encouragement to continue with active self-management can help the person with pain maintain a focus on what they can do, rather than relying on passive 'medical' interventions to

recover. Clinicians could ask the person what they are currently doing for exercise and relaxation, and encourage appropriate maintenance of these activities. This promotes a collaborative approach that can also provide an opportunity for the clinician to direct the consultation from medical 'treatment' to self-management.

As noted earlier, many people presenting with a back pain have previously had, or certainly can expect to experience, a further episode of back pain. Turner's study identified that 72% of patients were advised that their pain would 'improve', but were not guided as to what 'improved' meant. Given patient expectations that medical treatment should completely cure pain, it is important to be explicit about the usual pattern of recovery. To be told that pain 'should settle in a few days or weeks' may provoke unnecessary concern and/or avoidance in patients who find their pain takes longer to settle. Von Korff suggests that patients should be advised that back pain may take a while to settle, up to a couple of months. He suggests that patients be told that it is common to have a flare-up, but that this doesn't mean there is anything seriously wrong, and that they will probably have a complete recovery over time. This directly addresses the person's concerns that their problem is caused by some serious condition, and that they may be permanently disabled, while being open about the typical pattern of relapse.

Patients come to see a primary health care provider for many reasons. Von Korff suggests that one of the first tasks of a consultation is to

identify what the person would like from his or her visit. This could be asked by the practice nurse prior to the medical consultation, or covered in a checklist completed by the patient in the waiting room.

While patients and clinicians ask questions about specific functional limitations (e.g. driving, lifting, walking, sitting), most questions asked by clinicians appear to be related to pain quality and pattern.⁵ This may unintentionally reinforce the importance placed in pain symptoms, which may resolve only slowly, and away from self-management strategies that may help the person return to usual activities. Clinicians may be better advised to ask about what the person can and cannot do, and reassure that person that it is

advisable to attempt activities despite pain, rather than waiting for pain to completely settle. This helps to address kinesiophobic beliefs. Persistent avoidance of activities that have been specifically recommended during a clinical consultation is a key indicator that this person may require further clear advice about specific concerns or fears, and perhaps graded exposure to activities that the person is avoiding.

Anxiety reduces human capacity to absorb and process information. People attending medical appointments are usually somewhat anxious, and it may be difficult for people to remember the recommendations and advice given to them during the course of a consultation. Written advice summarising recom-

mendations can be integrated into a 'Green Prescription' – this is especially helpful when patients are not receiving a prescription for medications.

People with back pain will visit primary care providers because of ease of access to care, and because providers act as a gateway for further management. While the medical management of these people is relatively simple, the clinical management in terms of actively reducing distress and encouraging return to feared activities requires skills that primary care clinicians have, but may lack confidence to use. The suggestions included above may help reduce the number of patients who require medical management for the ordinary symptom of back pain.

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