

Chronic pain: psychological formulation and MDT working

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Abstract

Chronic pain is complex and often a challenge to manage. Patients' expectations are frequently at odds with the treatment outcomes which can be a significant source of distress. Pain is best understood within the biopsychosocial model. Clinical psychologists work as part of the multidisciplinary pain team to draw together information and develop an understanding of how to support patients to live well while experiencing ongoing pain. This article presents two alternative models for formulating and providing therapy for individuals experiencing chronic pain; cognitive behaviour therapy and acceptance and commitment therapy. Psychologically informed strategies to support healthcare professionals in their interactions with people with chronic pain are presented.

Keywords Acceptance and commitment therapy; chronic pain; cognitive behaviour therapy; formulation; pain management; psychology

Royal College of Anaesthetists CPD Matrix: 1H02, 2E03, 3J02, 3E00

Why have clinical psychologists in pain clinics?

The field of chronic pain presents unique challenges both to clinician and patient. Pain can impact upon an individual's ability to engage in meaningful activities and relationships. The individual's sense of self, view of others and the world around them may be impacted. These challenges will be influenced by psychological factors, such as anxiety, depression or trauma. Chronic pain is for many a wholly destructive experience, characterized by equally chronic distress, with psychological difficulties being exacerbated as pain is heightened. Activities that would otherwise bring a person joy or emotional stability, such as spending time with friends or engaging with hobbies, may not be possible or be extremely limited.

Pain and suffering on some level are fundamental to human beings. Life is punctuated by losses, failures, bereavements and

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Learning objectives

After reading this article, you should:

- understand the role of the clinical psychologist in chronic pain teams
- know what is meant by formulation
- understand two psychological approaches commonly used in pain settings
- be able to consider methods of communication that will support engagement and understanding

adverse life events. This can feel at odds with the modern world which can be conceptualized as an 'analgesic culture' in that we make efforts to avoid pain and distress.¹ When the avoidance of inevitable pain fails we may think that any pain experienced should be short lived, treatable and a cause for sympathy.² Eccleston (2011) suggests that generally the analgesic culture is successful. When it fails it is because pain falls outside of these expectations such as when pain continues for too long, does not respond to treatment and impairs social function. This chronic nature of pain presents particular challenges to clinicians as patients arrive at pain clinics with specific beliefs about their pain and expectations of the treatment. Clinicians and patients alike can feel overwhelmed by the multitude of factors which influence pain levels and this may impact upon the efficacy of any treatment offered.

Since the most commonly cited definition of pain holds that pain is '... an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage',³ we see that psychology underpins the very definition of pain. Thoughts and emotions impact pain processing at the neural level which in turn establishes the foundations for the mind-body connection.⁴ While patients may conceptualize pain as a purely physical sensation, it is widely understood that pain has biological, psychological and emotional factors.

Clinical case formulation

Clinical psychologists are well placed to work alongside people living with chronic pain. A core component of the profession includes the drawing together of complex, clinically relevant information into a clinical case formulation. Formulation aims to 'summarise and integrate a broad range of biopsychosocial causal factors. It is based on personal meaning and constructed collaboratively with service users and teams'.⁵ In clinical practice, formulations are used to develop a collaborative hypothesis and provide a framework for the most suitable treatment approach. The widest formulation will be that of the biopsychosocial model and will be relevant to the whole multidisciplinary team and their interventions. Indeed, it could be argued that the central purpose of a multidisciplinary team meeting is to collaboratively develop the biopsychosocial formulation in order to decide upon the most appropriate treatment approach.

To illustrate some alternative ways of formulating the experiences of chronic pain we will present a case study and two different theoretical formulations; cognitive behavioural therapy and acceptance and commitment therapy.

A case example

Mr A is a 50-year-old man presenting with a 5-year history of back pain. He served in the military, seeing active service in Iraq and Afghanistan. During this time he was exposed to significant traumatic events. Prior to developing chronic pain Mr A was working as a security guard, he has been unemployed and claiming benefits for the past 3 years. He enjoyed regular games of golf and cycling until developing pain. Mr A is finding it difficult to engage with physiotherapy and is becoming increasingly frustrated with his 'lack of progress'. Mr A adheres to his medication regimen but does not report that his pain is controlled. Mr A's wife expressed concern that his mood is low and he 'doesn't do anything anymore'. Mr A stated that he feels 'worthless – no use to man nor beast'.

Cognitive behavioural therapy

A cognitive behavioural formulation of pain will consider the relationship between thoughts (including all cognitive events such as memory and mental images), feelings, behaviours and somatic experience. This interrelationship is considered in the light of early experiences and belief systems that have been developed as a result. Interventions may include psychoeducation about pain and how it relates to emotion and behaviour, relaxation, pacing, behavioural activation, behavioural experiments and cognitive restructuring (Figure 1).

A collaborative formulation would be drawn up with the patient and treatment plan developed. Personalized psychoeducation regarding pain, mood, cognitions and behaviour would be provided in a way that enhances the formulation. Strategies to disrupt the maintenance cycle will be considered. For example, it is likely that Mr A is experiencing distress related to his loss of role. As a result he is less likely to engage in enjoyable activity therefore reducing the likelihood of experiencing joy and further increasing his experience of worthlessness. Exploring ways of re-engaging in activities by using behavioural activation and pacing is one way that this maintenance cycle could be disrupted. Mr A's thought processes will be considered, paying particular attention to thoughts that are

reinforcing the maintenance cycle, cognitive restructuring will be used to reduce the impact of these thoughts. In addition, relaxation techniques may be taught and applied.

The formulation will be shared, with the patients' consent, with other healthcare professionals involved in order to inform all areas of his care. Sometimes joint sessions with different members of the MDT can be helpful.

Acceptance and commitment therapy

Acceptance and commitment therapy is part of the larger family of behavioural and cognitive therapies based on principles of contextual behavioural science.⁶ The six core therapeutic principles of ACT work to develop psychological flexibility. These are:

- Acceptance – the process of being actively aware of internal experiences (e.g. thoughts, feelings, somatic sensations) allowing them to come and go without engaging in a struggle with them.
- Cognitive defusion – labelling and observing internal experiences without becoming caught up with them. There is no attempt to restructure thoughts rather the change is in the interaction with the thought.
- Present moment awareness – ongoing non-judgemental awareness of internal and external events as they occur.
- Self as context – this is the awareness that an individual is not their experiences, thoughts or feelings but that these occur within the self.
- Values – identifying what gives meaning and purpose to an individual.
- Committed action – behaviours guided by values that take the individual in the direction of a meaningful life.

In the case of Mr A developing a sense of what gives his life meaning (values) and ways of moving in that direction (committed action) in the context of his current pain will be an important step. Unlike CBT thoughts will not be explicitly challenged, instead exercises to encourage an awareness of and diffusion from the thoughts are used. The intention is to develop ways of living well while experiencing pain and distress.

Complex presentations

It is important when assessing individuals for psychological therapy to consider all factors that could be relevant to the difficulties they face. For example, it was noted that Mr A was exposed to 'significant traumatic events'. Therefore the psychological assessment should consider the impact of these events and if it is necessary, indeed even essential, to address and psychological issues related to trauma first.

How should psychological therapy be delivered and by whom?

There are many ways that psychological therapy can inform and impact upon patient care. The most obvious is the provision of individual psychological therapy, while this is likely to be necessary for individuals with complex presentations is in not necessary for all patients presenting with psychological distress related to chronic pain.

Pain management programmes (PMPs) are psychologically informed multidisciplinary group interventions and have a strong

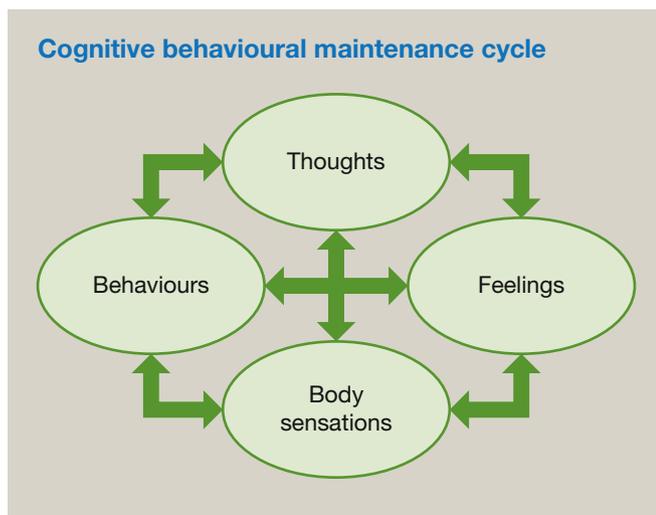


Figure 1

evidence base.⁷ PMPs have traditionally been based upon cognitive behavioural principles, although many PMPs have moved towards the principles of acceptance and commitment therapy, these models are outlined below. PMPs are generally delivered by clinical psychologists and physiotherapists with input from other members of the disciplinary team. Within a PMP individuals will be given a clear understanding of chronic pain and encouraged to reflect upon how their experiences and current coping strategies may be maintaining their distress and reduced functional level. The psychological model used will then be applied in order to develop alternative ways of living with pain, this will vary depending on the underlying model on which the PMP is based.

Using psychological understanding when working with people with chronic pain

The psychological formulation is key when guiding any communication with all patients. As noted above, in Western society there is a strong narrative that pain and distress are symptoms of underlying pathology that can be cured. Therefore, the experience of chronic pain contradicts the dominant narrative and as a result can cause distress. It is very common for patients to be distressed when advised by a medic 'Good news, your scan is perfectly normal'. Unfortunately this can be very difficult for the clinician who may not be aware that for the individual this represents more uncertainty and a lack of answers.

Some guiding principles for healthcare professionals working in chronic pain include:

- Understand where the patient is starting from (what is their formulation?):
 - What do they understand about their pain? Be mindful of misinformation that could be increasing fear and influencing behaviour.
 - What do they expect from you? Are their expectations realistic?
 - What is their prior experience of chronic pain?
 - Do they have particular concerns about their pain?
 - Assess for co-morbid mental health problems and consider onward referral to mental health services if appropriate.
- Clear and personalized communication:
 - Remember the impact of pain and many medications on concentration.
 - Ensure information is clearly delivered.
 - Check understanding.
 - Offer written information where appropriate.

- Be mindful of language that can increase fear (e.g. 'Your spine is crumbling') or reduces hope (e.g. 'There is nothing we can do').
- Provide psychoeducation about the biopsychosocial understanding of pain:
 - Ensure that the patient understands that the healthcare team know their pain is real and not 'all in their head'.
 - Explain the difference between acute and chronic pain and why they need to be treated differently.
- Encourage self-management:
 - Avoid becoming a 'fix that will fail', reiterate that medication and interventional approaches are not curative.
 - Consider current coping and reinforce strategies that are effective and identify those that may be maintaining pain and distress.
 - Help to develop additional self-management strategies.
 - Encourage the individual to think about what makes life meaningful and consider how they can work to gradually build towards activities that take them towards meaning.

While it is unrealistic to expect every healthcare professional to address psychological or behavioural difficulties presented by patients with chronic pain it is hoped that the above suggestions will support healthcare professionals to improve engagement and reduce the risk of miscommunication in this complex area. ◆

REFERENCES

- 1 Eccleston C. A normal psychology of chronic pain. *The Psychologist* 2011; **24**.
- 2 Morris DB. *The culture of pain*. Berkeley: University of California Press, 1991.
- 3 Merskey H, Albe Fessard D, Bonica JJ, et al. Pain terms: a list with definitions and notes on usage. *Pain* 1994; **6**: 249–52.
- 4 Gracely RH, Geisser ME, Giesecke T, et al. Pain catastrophizing and neural responses to pain among persons with fibromyalgia. *Brain* 2004; **127**: 835–43.
- 5 Division of Clinical Psychology. Practice guidelines on the use of psychological formulation. Leicester: British Psychological Society, 2011.
- 6 Hayes SC, Levin ME, Plumb-Villardaga J, et al. Acceptance and commitment therapy and contextual behaviour science: examining the progress if a distinctive model of behavioural and cognitive therapy. *Behav Ther* 2013; **44**: 180–98.
- 7 British Pain Society. Guidelines for pain management programmes for adults: an evidence-based review prepared on behalf of the British pain society, 2013.