Persistent pain: concepts of self-management

The PROMPPT research programme aims to improve care for patients living with persistent pain. To achieve this aim it will be useful for pharmacists to have a broad understanding of what we mean by persistent pain and how persistent can affect a person's life. This supplementary information outlines some of the concepts around what persistent pain is and some of steps that patients can take to adjust to living with persistent pain.

What is persistent pain?

Pain is normal. Pain is protective and there is sometimes a clear reason for having it, for example following a sprained ankle or a pin-prick. The perception of pain at any one time depends in part on the individual patient's previous experiences, the context and their mood at that time. The term nociception (and nociceptive pain) is used to describe pain in a normal functioning nervous system. Not all activity in the nociceptive system results in pain, because the noxious stimuli has to be perceived psychologically to be painful.

Persistent pain (otherwise known as chronic pain) is different to nociceptive pain (or acute pain). Often the reason for persistent pain is less clear than for acute pain, other differences between the two are summarised in table 1. It is important to note that it is not always clear whether a patient consulting with pain has acute or persistent pain, the reality in clinical practice is far muddier than on paper.

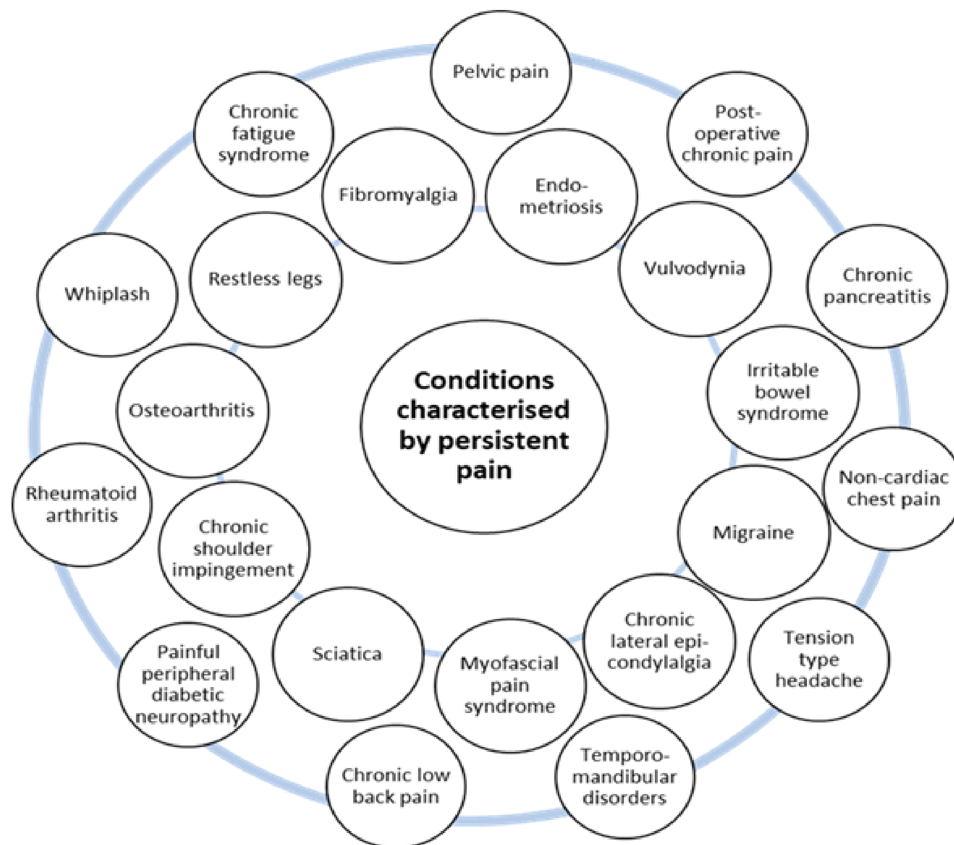
Table 1. Summary of differences between acute pain and persistent pain conditions

ACUTE PAIN	PERSISTENT PAIN
Likely to have recent onset, such as related to an injury or acute illness (for example pin prick, or sprained ankle)	Likely to have long duration (3 months or longer) and persist beyond expected tissue healing
Often localised to the area of injury	Widespread pain, unpredictable
Aggravating and easing factors are often clear	Pain often easily irritated and aggravating factors not clear
Responds well to simple analgesia and other treatments (for example, Physiotherapy)	Difficult to reduce, or control even when using regular pain medicines.

Persistent pain is characterised by pain sensitisation. Pain sensitisation is the amplification of pain caused by changes in the spinal cord and higher centres of the brain that cause an

increased sensitivity of neurons in the central nervous system. Often the reasons for persistent pain are not clear, but there are a number of pain conditions that are known to be associated with pain sensitisation. Figure 1. highlights some of these conditions. Clinicians in every medical speciality will see patients with persistent pain and despite differences, the underlying pathophysiological mechanisms for pain sensitisation is common across them all.

Figure 1. Conditions characterised by persistent pain. Adapted from (Arendt-Nielson, et al., 2018)[1]



Psychology and persistent pain

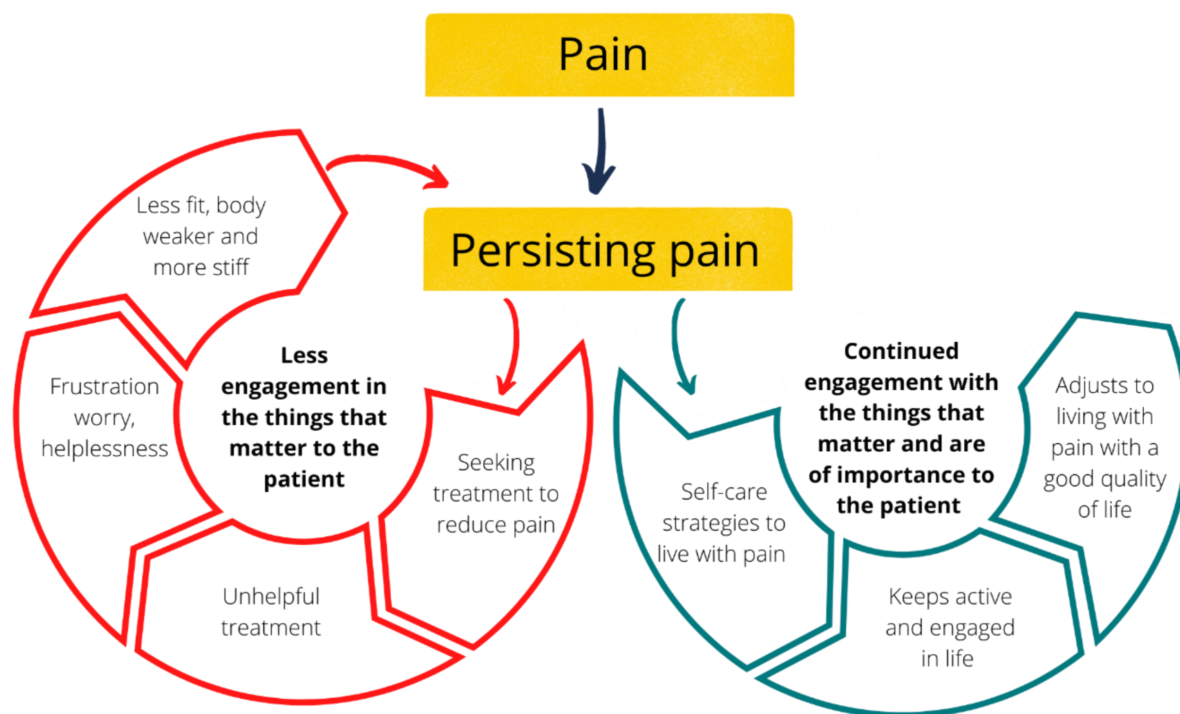
Persistent pain can affect all areas of life, and this contributes to the overall pain experience. Mood and psychology are always important to consider, even if biological or social causes seem to predominate. Many people living with persistent pain describe their mood as low. They often report feeling helplessness directly about their pain, loss about the things they can't do and worries about their future. This can be different to clinical depression where symptoms such as worthlessness and low self-esteem may be more problematic. When patients feel low or anxious, pain can be more distressing and harder to live with.

Figure 2. The wider aspects of pain that can contribute to an overall pain experience.

In a consultation with someone who has pain, it is difficult to avoid the psychology of it but the temptation is often to duck out of talking about it. In people with pain, it is often psychological factors, such as anxiety and depression, that predict whether patients consulting with pain move on to having persistent pain. [2]

The psychology of pain partly explains why it is difficult to control or reduce persistent pain using pharmacological treatment or by using treatments such as injections. For these reasons, in patients with persistent pain, pain relief is typically not the primary aim of treatment[3] and the focus instead is on an improvement in activity, mood and quality of life *with* pain.

Figure 3. The cycle of pain versus self-care. Adapted from Vlaeyen and Lintson (2000)[4].



As human beings, we naturally tend to avoid or control pain. There is nothing wrong with this when it works, but in the long-term, continuing unsuccessful control strategies can make matters worse rather than better. Self-care strategies to help the patient adjust to living with pain, rather than avoiding pain are important because it brings opportunities to improve quality of life by enabling patients to better manage the impact of pain on everyday life[4] (see figure 3).

Many patients recognise that they are stuck (or becoming stuck) in a vicious cycle of pain that is taking them away from living a good life, even if they can't quite see how to apply it to their own situation.

Self-care strategies for persistent pain

It is difficult to control or reduce persistent pain, even if it is very severe and there are very few pharmacological treatments that help long-term. For this reason, the best way to manage pain is through supporting self-management.

Patients often develop their own strategies to help them manage the things they do every day with pain. Examples of these strategies include doing things in different ways, finding things that distract them from pain, finding things that are soothing, planning, avoiding and prioritising tasks[5]. Some strategies are more helpful than others and having a number of self-care strategies is often more useful than having one or two.

To find out more about supporting patients to live well with pain visit the online resource developed by clinicians and patients in collaboration with Durham University and Live Well with Pain.

Talking about persistent pain

During a pain review, a patient may have questions about their pain, it is useful for patients to understand that in varying degrees, their pain and symptoms are likely to be caused by pain sensitisation.

Many patients will have been given an explanation for their pain at some point and may have been happy with this explanation. For patients with questions about their pain, using metaphors can be a useful way to describe the process of pain sensitisation.

One useful metaphor is to think about pain as an alarm system:

> *Pain is like a house or car alarm. Normally that alarm only goes off when there is an intruder, or someone breaks a window. But when pain goes on for a long-time, like yours, we know that the alarm system re-sets itself so that when the wind blows it triggers an alarm. We call that pain sensitisation.*

This explanation is often sufficient for many patients, but a few may remain stuck and sometimes it helps to give an alternative explanation that is more tangible. In these cases, for example, a patient with sciatica, we then explain that it is less about what caused the pain in the first place (and patients will often refer to a slipped disc) and more about why the pain is not getting better.

If the patient remains stuck, a suggestion would be to step back and find common ground in order to validate their experience. This common ground might be an agreement between you and the patient that whatever the cause of the pain, there does not seem to be a quick fix for their pain or that medicines don't seem to be the answer. With common ground established, the next step would be to help the patients to shift their focus away from their pain, whatever its explanation and move their focus towards the things they do to help them manage their pain.

Talking about pain can be difficult. The metaphor of the alarm is outlined for patients in the leaflet "Understanding Persistent Pain" and there is a useful video for you and the patient. There may be times when this continues to be a barrier to making progress (for example, it is inconsistent with other explanations, or when the patient is actively seeking further investigations). An option would be to liaise with the GP if you need further support to help the patient move forwards with their pain.

Supplementary information

References

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4. Vlaeyen, J. W. & Linton, S. J., 2000. Fear-avoidance and its consequences in chronic musculoskeletal pain: a state of the art. *Pain*, 85(3), pp. 317-332.

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