

Why would anyone think low back

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There is a lot of confusing information around at the moment suggesting new ways to “cure” non-specific low back pain. The article published in the *Daily Mail* health supplement on Tuesday 28 July 2015 and the reactions to it in the comment section got me thinking.

As a healthcare practitioner, I believe that the interplay between body and mind is a critical factor in resolving chronic pain. I worked as a Dance and Movement university lecturer in the UK for several years, and I researched human body movement. What I learned then was the value of extending my teaching of movement techniques by including the importance of mental attitude. Sports psychologists tell a similar story: what makes a top sportsperson is a combination of physical prowess and mental attitude.

Let's start at the beginning: what is chronic low back pain? Chronic low back pain (LBP) is pain that has persisted for more than three months – this differs from back pain evident for less than three months, which is referred to as acute. We expect the body to heal itself naturally in the short term. Appropriate medical intervention such as painkillers, or in some cases surgery, may be required to help the healing process.

Distressing

But when back pain becomes chronic, this signals either that the back has not healed itself or that the pain is caused by nerve pathways in the brain and not by abnormalities in the back itself. When medical practitioners cannot find anything wrong or find only abnormalities that are just as common in people with no pain, this can cause confusion about what is wrong. Not having a well-defined abnormality in the back can be distressing and it may seem that the pain is not properly acknowledged or recognised. It can then be difficult to say to family and friends, who are naturally concerned, that the pain is due to an imbalance in brain nerve pathways.

But when medical screening rules out serious problems, then it is important to look for causes of that imbalance in the autonomic nervous system. In simple terms, the autonomic nervous system has two modes of operation and if they are not in balance, the body may experience pain even if it has no abnormalities or has healed itself from an acute injury. This pain is just as real and can be every bit as severe as pain from acute injury.

The balance of the autonomic nervous system can be affected by many things, in particular

stress. As the nervous system is operated unconsciously, it may require a different approach from the conventional biomedical one to re-balance it: mental attitude plays a part.

In order to rebalance the autonomic nervous system, we need to locate sources of stress in our lives (which are not always easy to recognise) and to uncover triggers that might perpetuate symptoms. This will help with pain resolution as well as improving stress resilience, which can lead to life-changing results.

Improve confidence

Pain cannot be seen; it is experienced. This means that sometimes the patient becomes so concerned about convincing others that their pain is real that this becomes counterproductive. A more useful activity is to try to identify sources of stress: family, workplace, adverse childhood experience, traumatic events, excessive anxiety, depression.

Another useful approach is to work directly with the body. When someone arrives at my studio with LBP, they are assessed to see what movement range they have. As a movement specialist I teach gentle, adapted Pilates-based movement to free up the body where it has restrictions, using particular movements to strengthen muscles that may have been neglected. The intention is to improve confidence in moving and to extend the range of pain-free movement. At the same time, deep breathing techniques are introduced to stimulate the intercostal muscles in the ribcage.

Significantly, most people experiencing chronic LBP can breathe in for only two, or maybe three seconds. Over time it becomes more normal for them to breathe in for up to five seconds. As each person is different, they set their breathing goal according to their preference, for any number of seconds up to eight. Apart from activating and strengthening the ribcage muscles, deep breathing can stimulate self-healing activity in the body through the parasympathetic nervous system. There is considerable evidence that health professionals teach deep breathing as a useful somatic tool to reduce back pain.

All of my patients complete a Roland Morris questionnaire during or after their first session. This provides a means of measuring practical improvements as the pain diminishes. A quantitative measure of this kind is helpful, as it



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pain is in your head?

allows us to measure a patient's improvement, which may increase their motivation. The Resolving Chronic Pain programme, which I teach, is an evidence-based path towards the resolution of chronic pain. Other psychophysiology disorder practitioners adopt similar approaches.

Is back pain in your head? No it is not, and the *Daily Mail* was provocative and misleading to use such a headline. In the case study that the *Daily Mail* reported on, did Marie Lovell get rid of her pain by changing her mental attitude and improving her resilience to stress? Yes she did. I have met Marie and she speaks eloquently about the process. Is there gathering evidence that back pain can be treated by re-balancing the autonomic nervous system? Yes, absolutely.

In some respects, this is groundbreaking. It might explain why surgery can be hit or miss, why some patients given the same treatment respond positively and others don't. It highlights the critical nature of the therapeutic relationship. In other respects it fits with what many people already intuitively believe – that we need time off from our phones and social media, that we need to take responsibility for our own health, nutrition and exercise. We know that we need to find time to process our thoughts and to relax. Neurophysiology provides us with evidence that back pain may be the cost we pay if we don't listen to our intuition.

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