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Functional Reactivation: "Patient-Centered Care"

By Craig Liebenson, DC

A new and rather novel treatment has recently proven its value in the battle against acute and chronic back pain. Advice that gradual resumption of normal activities is both safe and effective has proven highly effective in spurring recovery.^{5,8,12,16,22,25,27} This new method now takes its place alongside other evidence-based treatments, such as spinal manipulation and medication.^{2,8,30} In contrast, the traditional treatment of bed rest has been unmasked as not only a prescription which lacks effectiveness, but if prolonged for more than a few days, it has been shown to produce harmful side-effects.^{1,2,8,9,11}

Why should a treatment as simple as reassuring and reactivating advice be so effective? As every chiropractor knows, the most disabling factor for patients is their fear and anxiety. The most powerful weapon we wield against pain is the reassurance that we can offer. Patients have pain and suffer. While pain is usually of mechanical origin, suffering is of psychological origin. When anxiety or fear-avoidance behavior are significantly involved, their identification and management are just as important as addressing spinal dysfunction in achieving successful outcomes.

While most clinicians are aware that a patient's suffering is relevant, history alone is not sensitive enough to reliably identify abnormal illness behavior.¹⁰ Questionnaires have been developed for capturing a patient's "yellow flags," psychosocial risk factors of a poor recovery.^{6,19,23,24} These have been shown to have very good sensitivity and specificity.

What is the Patient-Centered Model?

The emerging patient-centered paradigm focuses on the patient's **symptoms, distress** and **disability** (activity intolerances - see **Figure 1**).³⁵ It is grounded in functional reactivation of the patient. This addresses not only impairments identified by clinicians, but even more importantly, activity intolerances reported by the patient (see **Table 1**).¹⁵

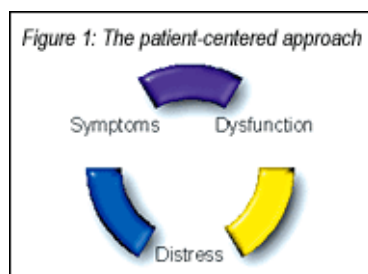
Table 1: The Patient-Centered Approach

- Symptoms
- Dysfunction
 - General - activity intolerances
 - Specific - i.e., joint dysfunction
- Psychosocial - i.e., fear-avoidance behavior

Symptoms can be distressing^{5,16} and lead to changes in how one performs **general functions**, such as walking,^{14,31} and **specific functions**, such as the body's ability to respond to a sudden load efficiently.²⁹ In turn, **psychological distress**, such as fear-avoidance behavior, negatively influences specific functional abilities,^{21,34} general functional abilities,⁷ and pain reporting.³³ Finally, specific dysfunctions, such as poor trunk extensor endurance, have been shown to be prospectively linked to the development of acute low back pain (LPB) in asymptomatic individuals,^{13,26,32} and recurrent LBP in acute LBP subjects.³

The Disabling Effect of an Overemphasis on Structural Pathology

Persistent pain reinforces negative attitudes about the relationship of activity and pain. Diagnostic tests that focus on pathoanatomy are frequently ordered to find the "cause" of the pain. Unfortunately, these tests have high false-positive rates for coincidental structural findings, such as degenerative joint disease or herniated discs, and thus reinforce the patient's self-image as having a "bad" back or needing to "learn to live with it."^{4,17,18,20} The result is further activity avoidance and deconditioning. Unfortunately, excessive immobilization interferes with the healing and recovery process. Thus, health care professionals (HCPs) are being urged by each successive international guideline on back and neck pain to first perform a diagnostic triage to rule out "red flags" of rare but serious disease, then reassure patients of the benign nature of their back pain and the safety and value of gradually resuming activities.^{2,8,30}



Are All Specific Dysfunctions Clinically Relevant?

The World Health Organization (WHO), in its *International Classification of Impairments, Disabilities and Handicaps* (ICDH-2),¹⁵ distinguishes "activity level" or general functional ability from "impairment in body function" or specific functional deficits. General functional ability is what the patient can do (or perceives he or she can't do!) in daily life. In contrast, specific functional deficits are found only on clinical examination, and may be related to the patient's symptoms or functional abilities. A challenge facing clinicians is to ferret out the specific dysfunctions (that are clinically relevant maladaptations) from those that are adaptive. The difficulty inherent in this task is highlighted by Mannion, who reported that functional measures accounted for only seven percent of self-reported pain, in contrast to psychological factors, which accounted for 26 percent!²⁸ Functional measures were responsible for 25 percent of self-reported disability, while psychological factors accounted for 36 percent.

That specific functional impairments (i.e., ROM, strength) have not correlated significantly with pain or disability suggests that these dysfunctions are more likely the consequence of pain rather than its cause. Mannion suggests that motor control dysfunctions, which have largely been ignored, are the most likely specific dysfunctions causally "linked" to pain and disability (general dysfunction).^{28,29}

Treatment

Active care approaches involving a variety of strategies, from simple advice to resume activities, and stabilization training to cognitive-behavioral approaches, have all been shown to be highly effective for reducing pain and disability. Of particular note is that **active care approaches without a psychological or cognitive-behavioral component have been highly successful in reducing psychological distress accompanying pain or disability.**²⁸

Information and advice emphasizing the value of fitness and the safety of resuming activities achieved superior outcomes to advice that reinforced rest, activity restrictions and the notion that the spine was injured or damaged (arthritis, herniated disc).⁵ Reassuring workers and encouraging resumption of ordinary activities was superior to medication, bed rest or mobilization exercises.²⁷ Little, et al., recently demonstrated that educational advice that encourages early exercise (not just advice to stay active) or endorsement by a physician of a self-management booklet has been shown to increase patient satisfaction and function while reducing pain.²⁵

Indahl emphasized the importance of dispelling patients' fears when giving reactivation advice.^{16,16a} **Table 2** summarizes the key points used by Indahl for patient education/reactivation. Being too careful was emphasized as the worst form of self-treatment. Patients were instructed to take regular walks, encouraging flexibility. Prolonged static postures, such as those involving carrying objects, were discouraged. For acute pain flare-ups, patients were advised to assume these were just acute muscle spasms and to perform stretching or light activity. Patients were informed that they should not be afraid to use their backs, not to be overcautious and to try to be as flexible as possible. Patients were very satisfied with this approach and that they were taught explicitly how to perform activities of daily living.

Table 2: Specific reactivation advice, according to Indahl.

<ol style="list-style-type: none">1. Patients were informed that pain or anticipation of pain could increase muscle activation/tension and thus increase pain;2. they were assured that light activity would not further injure the disc or other structures, causing pain;3. they were informed that light activity would enhance the repair process; and4. the link between emotions and pain was explained.

Conclusion

The patient-centered approach is less focused on the various signs of often coincidental **structural pathology**, or the patient's **subjective symptoms**, than on the patient's **dysfunction** and **distress**. A paradigm shift from a traditional biomedical model to a biopsychosocial one has taken firm hold in the spine field. The biopsychosocial approach teaches us that the old adage "let pain be your guide" can actually reinforce illness behaviors such as fear-avoidance behavior. The more modern report of findings reassures patients that they do not have a disease (tumor, infection, and fracture), and that staying active will actually speed recovery. Learning that pain does not always warn of impending harm or damage can empower patients to remain active, avoid disability, and prevent the transition from acute to chronic pain.

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Craig Liebenson, DC

Los Angeles, California

cldc@flash.net

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