

Motivating pain patients to become more active

.....
C. Liebenson

Author's note

This article is designed to introduce a new section to the journal on patient education. Changing a patient's behavior to modify lifestyle is a challenging but crucial component in holistic medicine. Many health-care providers under the banner of alternative health care offer "cures" for various illness. However, coping strategies and individual responsibility are essential components to improved management of illness. This article will discuss the ways by which practitioners can improve patient motivation to change lifestyle, modify activities, or perform self-treatment procedures. The patient education section will have two parts. First, an introduction to the clinician about why, when and how to educate the patient about a particular exercise, ergonomic advice, or activity modification. And second, sheet describing what we want the patient to do.

I recommended that you collect these into a file which you can utilize for copying purposes. So long as the patient education sheet is given free of charge to your patients or clients, the publisher's copyright is waived.

Introduction

Motivating patients to share responsibility for their recovery from pain or injury is challenging. Skeptics insist that patient compliance with self-treatment protocols is poor and, therefore, should not even be attempted. However, in chronic pain disorders where an exact cause of symptoms can only be identified 15% of the time the patients participation in their treatment program is absolutely essential (Waddell et al. 1996, Spitzer et al. 1987, Waddell 1998). Specific activity modification advice aimed at reducing exposure to repetitive strain is one aspect of patient education (Waddell et al.

C. Liebenson DC

10474 Santa Monica Blvd, #202, Los Angeles, CA 90025, USA

Tel.: 310 470-2909; Fax: 310 470-3286;

E-mail: Cldc@flash.net

Received: March 1999

Revised: April 1999

Accepted: April 1999

Journal of Bodywork and Movement Therapies (1999) 3(3), 143-146
 © Harcourt Publishers Ltd 1999



1996, Bigos et al. 1998). Another includes training in specific exercises to stabilize a frequently painful area (Richardson & Jull 1995, McGill 1998, O'Sullivan et al. 1997, Liebenson et al. 1996, Morgan 1998, Liebenson 1996). Patients who feel they have no control over their symptoms are at greater risk of developing chronic pain (Kendall et al. 1997). Teaching patients what they can do for themselves is an essential part of caring for the person who is suffering with pain.

Converting a pain patient from a passive recipient of care to an active partner in their own rehabilitation involves a paradigm shift from seeing the doctor as healer to seeing him or her as helper (Waddell 1998, Liebenson 1996, Waddell 1987). When health-care providers promise to fix or cure a pain problem they only perpetuate the idea that something is wrong that can be fixed (i.e. put back in place). In pain medicine the likelihood of recurrence is high (over 70%) and, therefore, it is important to show a patient how to care for themselves in addition to offering palliative care (Waddell et al. 1996). Simple advice regarding activity is often better than more sophisticated forms of conservative care including mobilization or ergonomics (Malmivaara et al. 1995, Coury 1998). Promoting a positive state of mind and avoiding the disabling attitudes which accompany pain is crucial to recovery (Liebenson 1996, Waddell 1998).

Patients who are at the greatest risk of developing chronic pain often have poorly developed coping skills (Kendall et al. 1997). They may tend to catastrophize their illness and feel there is nothing that they can do themselves. It is easy for them to become dependent on manipulation, massage, medication, and various physical therapy modalities. A key to getting a patient to become active in their own rehabilitation program

is to shift them from being a pain avoider to a pain manager (Waddell 1998, Liebenson 1996, Waddell 1987, Troup 1988, Roland et al. 1996). In a severely painful or unstable acute injury it may be appropriate to equate hurt and harm. But, in less severe cases or certainly in the subacute or recovery phase, hurt should not be automatically associated with harm. In fact, the target of treatment may be the stiffness caused by the patient overprotecting themselves during the acute phase. Muscles and joints which lose their mobility while the patient restricts their activities during acute pain should be expected to cause discomfort and re-mobilizing them may hurt but certainly won't harm.

Goal setting

The primary goal in pain management is to reduce any pain related disability the patient has (Bigos et al. 1994). In the AHCPR guidelines it was stated that 'the main goal for treatment of back pain has shifted from treatment of pain to treatment of activity intolerances related to pain' (Bigos et al. 1994). Human performance literature indicates that the goals one sets for task performances influences the performance itself (Lackner et al. 1996). Often patients have sacrificed different features of their lifestyle as a result of pain. An activity intolerances questionnaire (i.e. Oswesry, Roland-Morris) can quantify this (Waddell 1998). Such things as decreased sitting tolerance can be identified in the history. The patient may say 'I can't go to the movies anymore'; certain activities like tennis or golf may have been given up or compromised. If a patient says they always feel pain after nine holes of golf, a goal may be to play a full round. Sexual activity may also be a problem.

Whatever lifestyle changes they have made as a result of their pain should be uncovered in the initial history. Then, the restoration of these activities becomes an agreed goal of rehabilitation. Establishing functional restoration as a goal along with pain relief is essential to achieving a positive outcome.

Distinguishing hurt and harm is important in enhancing the patients expectations of what they can and cannot do. Once it is understood that slow, gentle limbering movements are not injurious even if they hurt at first then the patient is empowered to develop confidence in reactivating their lifestyle. If physical performance rehabilitation is being proposed to the patient then the rationale for developing a higher level of musculoskeletal function needs to be explained to the patient. If their muscles are too tight or weak then it is explained that this is what leads to instability, irritation and thus pain with activity.

Rehabilitation or restoration of function prevents pain or irritation from arising in the first place. Such rehabilitation may be somewhat more painful in the short-term, but improving function is explained as the preventive key to long-term pain relief. The chronic pain patient must understand that always seeking temporary pain relief will do nothing to prevent the problem from starting again. Only improving function and modifying activities in biomechanically appropriate ways will prevent the pain from beginning over and over again (Harding et al. 1998). Flare-ups are not failures to manage the pain, but challenges to learning how to better self-manage their back condition.

Progressing an exercise program

Objectification of functional deficits and activity intolerances is a key tool in motivating patients

(Liebenson 1996, Alaranta et al. 1994, McIntosh et al. 1998). Simple, reliable low-tech tests of muscular endurance are ideal for quantifying the patient's various physical capacities such as squatting, trunk flexion or trunk extension endurance. Since there is such a large normal range with these tests they are more appropriate for getting a patient started than actually monitoring their progress. Functional disability or activity intolerances questionnaires are preferable for monitoring progress over time since they are not only reliable but also responsive to clinically significant change over time (Baket et al. 1989). Focusing patients on function rather than pain is an important first step. Then, baseline levels of functional impairment, pain distribution and intensity, and level of disability should be quantified. These quantifiable baselines can be used to track the patient's progress objectively. Treatment should be guided by the results of the objective, functional capacity evaluation. Progress can be monitored at regular intervals (every 2-4 weeks) to give the patient accurate feedback of how they are improving (Care Trak). As the patient sees their walking and sitting tolerance go up along with their number trunk curls this will serve as positive reinforcement. Pre- and post-treatment checks of painful manouvres (i.e. Kemp's test or lumbar flexion) or measurable functional deficits (i.e. strength, flexibility) is an excellent way to motivate patients.

The basic progressions to facilitate a 'weak link' and improve motor control include the following:

- Train awareness of postural (neutral range joint) control during activities
- Prescribe beginner ('no brainer') exercises

- Facilitate automatic activity in 'intrinsic' muscles by reflex stimulation
- Progress to more challenging exercises (i.e. labile surfaces, whole body exercises)
- Transition to activity specific exercises (i.e. w/tubing)
- Transition to health club exercise options.

Rehabilitation seeks to reduce functional impairment and does not focus on the symptoms. Quantification of functional capacity and patient education about well behaviors are essential building blocks. Manipulation to restore function to key muscles or joints is often necessary to initiate patient reactivation. Finally, physical training which focuses on stabilizing key regions of the body – such as the feet, lumbo-pelvic, T4, cervico-cranial or – orofacial is the final step in rehabilitation of the motor system.

Conclusion

Motivational problems should be dealt with through appropriate goal setting, gradual conversion of the patient from a pain avoider to a pain manager, explaining the difference between hurt and harm, and if necessary referral to a pain psychologist for cognitive behavioral reeducation. Early activation is a key concept in converting patients from pain avoiders to pain managers (Liebenson 1996, Waddell 1987, Malmivaara et al. 1995, Troup 1988, Linton 1985, Troup, Videman 1989). It is not easy getting patients to exercise but psychology literature suggests that biobehavioral reeducation can improve adherence, compliance, and motivation (Jensen et al. 1997, Turk, Rudy 1991). In fact, evidence from controlled clinical trials has shown that biobehavioral strategies when

combined with exercise programs improve compliance and outcomes (Friedrich et al. 1998).

REFERENCES

- Alaranta H, Hurri H, Heliovaara M et al. 1994 Non-dynamometric trunk performance tests: Reliability and normative data. *Scand J Rehab Med* 26: 211-215
- Baker CD, Pynsent PB, Fairbank JCT 1989 The Oswestry Disability Index revisited: Its reliability, repeatability, and validity, and a comparison with the St. Thomas's Disability Index. In: Roland MO, Jenner JR, eds. *Back Pain: New Approaches to Education and Rehabilitation*. Manchester University Press, 174-86
- Bigos S, Bowyer O, Braen G et al. 1994 Acute low back problems in adults. *Clinical Practice Guideline*. US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research, Rockville, MD
- Care Trak Outcomes Software. Synergy Solutions. (800) 393-7255, www.caretrak-outcomes.com.
- Coury HJCG 1998 Self-administered preventive programme for sedentary workers: reducing musculoskeletal symptoms or increasing awareness? *Applied Ergonomics* 29: 415-421
- Friedrich M, Gittler G, Halberstadt Y, Cermak T, Heiller I 1998 Combined exercise and motivation program: Effect on compliance and level of disability of patients with chronic low back pain: a randomized controlled trial. *Arch Phys Med Rehabil* 79: 475-487
- Harding VR, Simmonds MJ, Watson PJ 1998 Physical therapy for chronic pain. *Pain-Clinical Updates, International Association for the Study of Pain*, 6: 1-4
- Jensen GM, Lorish C, Shepard KF 1997 Understanding receptivity to change: Teaching for treatment adherence. In: *Handbook of Teaching for Physical Therapists*. Butterworth-Heinemann, London
- Kendall NAS, Linton SJ, Main CJ 1997 Guide to assessing psychosocial yellow flags in acute low back pain: Risk factors for long-term disability and work loss. *Accident Rehabilitation & compensation Insurance Corporation of New Zealand and the National Health Committee*. Wellington, NZ. Available from <http://www/nhc.govt.nz>.
- Lackner JM, Carosella AM, Feuerstein M 1996 Pain expectancies, pain, and functional self-efficacy expectancies as determinants of disability in patients with chronic low back disorders. *J Consulting and Clin Psych* 64:212-220

- Linton SJ 1985 The relationship between activity and chronic back pain. *Pain* 21: 289-294
- Libenson CS, Hyman J, Gluck N, Murphy D 1996 Spinal stabilization therapy. *Topics in Clinical Chiropractic* 3: 60-74
- Libenson C 1996 *Rehabilitation of the Spine: A Practitioner's Manual*, Libenson C (ed). Williams and Wilkins, Baltimore-
- McGill S 1998 Low back exercises: Evidence for improving exercise regimens. *Physical Therapy* 78: 754-765
- Malmivaara A, Hakkinen U, Aro T et al. 1995 The treatment of acute low back pain - bed rest, exercises, or ordinary activity? *N Engl J Med* 332: 351-355
- McIntosh G, Wilson L, Affleck M, Hall H 1998 Trunk and lower extremity muscle endurance: normative data for adults. *J Rehabil Outcomes Meas* 2: 20-39
- Morgan D 1988 Concepts in functional training and postural stabilization for the low-back-injured. *Top Acute Care Trauma Rehabil* 2: 8-17
- O'Sullivan P, Twomey L, Allison G 1997 Evaluation of specific stabilizing exercise in the treatment of chronic low back pain with radiologic diagnosis of spondylolysis or spondylolsthesis. *Spine* 24: 2959-2967
- Richardson CA, Jull GA 1995 Muscle control-pain control. What exercises would you prescribe? *Man Ther* 1: 2-10
- Roland M, Waddell G, Moffett JK, Burton K, Main C, Cantrell T 1996 *The Back Book*. The Stationary Office, London.
- Spitzer WO et al. 1987 Scientific monograph of the Quebec Task Force on Whiplash-Associated Disorders. *Spine* 20:8S; 1S-73S
- Troup JDG 1988 The perception of musculoskeletal pain and incapacity for work: prevention and early treatment. *Physiotherapy* 74: 435-439
- Troup JDG, Videman T 1989 Inactivity and the aetiopathogenesis of musculoskeletal disorders. *Clin Biomech* 4: 173-178
- Turk D, Rudy TE 1991 Neglected topics in the treatment of chronic pain patients - relapse, noncompliance, and adherence enhancement. *Pain* 44: 5-28
- Waddell G, Feder G, McIntosh A, Lewis M, Hutchinson A 1996 *Low back pain evidence review*. Royal College of General Practitioners, London
- Waddell G, 1998 *The Back Pain Revolution*. Churchill Livingstone, Edinburgh
- Waddell G 1987 A new clinical model for the treatment of low back pain. *Spine* 12: 634