FUNCTIONAL RESTORATION PROGRAMS FOR THE TREATMENT OF INJURED WORKERS

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Association Between Compensation Status and Outcome After Surgery
A Meta-analysis

Harris, I., et al.

Journal of American Medicine
2005;293(13):1644-1652

211 studies satisfied the inclusion criteria
Of these, 175 stated that the presence of compensation (worker’s compensation with or without litigation) was associated with a worse outcome
35 found no difference or did not describe a difference
1 described a benefit associated with compensation

A meta-analysis of 129 studies with available data (n = 20,498 patients) revealed the summary odds ratio for unsatisfactory outcome in compensated patients to be 3.79 (95% confidence interval, 3.28-4.37 by random-effects model).

Grouping studies by country, procedure, length of follow-up, completeness of follow-up, study type, and type of compensation showed the association to be consistent for all subgroups.

OWC PAIN MEDICAL TREATMENT GUIDELINES

CHAPTER 21, PAGE 18

(a). Interdisciplinary Pain Rehabilitation: An Interdisciplinary Pain Rehabilitation Program provides outcomes-focused, coordinated, goal-oriented interdisciplinary team services to measure and improve the functioning of persons with pain and encourage their appropriate use of health care system and services. The program can benefit persons who have limitations that interfere with their physical, psychological, social, and/or vocational functioning. The program shares information about the scope of the services and the outcomes achieved with patients, authorized providers, and insurers.

FUNCTIONAL RESTORATION

Functional restoration is both a rehabilitation treatment approach and also a wider conceptualization of the problem, its diagnoses and management.

More comprehensive gathering of information in addition to clinical symptoms and problems:
• Risk Factors
• Comorbidities
• Measures of Physical Capacity and Effort

Objectives are more than simply trying to alter pain complaints and reduce medication.

An important focus is on restoring function and activity, including return to work.

Critical Elements of Functional Restoration are:
• Formal, repeated quantification of physical deficits to guide, individualize, and monitor physical training progress.
• Psychosocial & socioeconomic assessment to guide, individualize, and monitor disability behavior-oriented interventions & outcomes.

• Multimodal disability management programs using cognitive-behavioral approaches.
• Psychopharmacological interventions for detoxification and psychological management.
• Interdisciplinary, medically directed team approach with formal staffings and frequent team conferences.
• Ongoing outcome assessment using standardized objective outcome criteria.

Effective For Pain Reduction And Reduced Disability

Evidence-Based Scientific Data Documenting the Treatment & Cost-Effectiveness of Comprehensive Pain Programs for Chronic Nonmalignant Pain.

Gatchel, R. & Okifuji, A.

The Journal of Pain
2006:Vol 7, No 11

Comprehensive pain programs (CPPs) offer the most efficacious & cost-effective treatment for persons with chronic pain, relative to a host of widely used conventional medical treatment.

Multidisciplinary team approaches for the treatment of chronic low back pain.
Guzman, J., Esmail, R.,
Malmivaara, A., Karjalainen, K., Irvin, E., Bombardier, C.

Cochrane Database Syst Rev
1998;(2):CD00963

- Systematic literature review assessed the effectiveness of biopsychosocial rehabilitation on outcomes in patients with low back pain
- There was strong evidence that intensive biopsychosocial rehabilitation with functional restoration improves function when compared with inpatient or outpatient treatments
- Also moderate evidence that intensive rehabilitation reduces pain when compared with outpatient, non-multidisciplinary rehabilitation, or usual care
- The reviewed trials are evidence that intensive multidisciplinary biopsychosocial rehabilitation with functional restoration reduces pain and improves function in patients with low back pain.

A 5-year-follow-up evaluation of the health and economic consequences of an early cognitive behavioral intervention for back pain:
A randomized, controlled trial.
Linton, S.J., Nordin, E.
Spine 31:853-858, 2006

- A randomized trial, acute low back patients seen in primary setting were assigned to either standardized treatment or cognitive behavioral treatment and physical therapy
- The standard treatment had greater numbers of days off work for back pain during 12 month follow up than the other groups
- Risk for developing long-term disability leave more than 5 fold higher in standard treatment than the other two groups

MORE EFFECTIVE THAN USUAL CARE

PERSISTENT LOW BACK PAIN
Caragee, E.J.

New England Journal of Medicine

This study concluded that CPPs that focus on functional improvements produce the best outcomes.
More Effective For “High Risk Patients”


Gatchel, R. J., et al.
Journal of Occupational Rehabilitation
2003; 13:1-9

In a randomized, controlled study, patients with acute low back pain who were identified as “high risk” for developing chronic back pain disability were randomly assigned to an early functional restoration group or a treatment-as-usual group.

The functional restoration group displayed significantly fewer indices of chronic pain disability at 1-year follow up on a wide range of work, healthcare utilization, medication use, and self reported pain variables

The functional restoration group was:
- Less likely to be taking narcotic analgesics
- Less likely to be taking psychotropic medications
- The treatment-as-usual group was less likely than the functional restoration group to have returned to work
- The treatment-as-usual group cost twice as much as the functional restoration group over 1-year

The Results Are Maintained For Years After Program Ends

Long Term effect of a combined exercise and motivational program on the level of disability of patients with chronic low back pain

93 patients with chronic and recurrent low back pain were randomly assigned to either a control group (standard exercise program) or a CPP.

Follow up assessments at 3.5 weeks, 4 months, 12 months, and 5 years demonstrated the greater long-term efficacy (up to 5 years) of the CPP group in terms of decreased disability & pain intensity scores, as well as increased working ability.

Long-term return to work after a functional restoration program for chronic low-back pain patients: a prospective study

Cécile Poulain, Solen Kernéis, Sylvie Rozenberg, Bruno Fautrel, Pierre Bourgeois, and Violaine Foltz

European Spine Journal

105 chronic LBP patients with over 1 month of work absenteeism were included in an FRP.
Pain, professional status, quality of life, functional disability, psychological impact, and fear and avoidance beliefs were evaluated at baseline, after 1 year and at the end of follow-up.

Main effectiveness criterion was return to work. 55% of patients returned to work after mean follow-up time of 3.5 years, compared with 9% of the patients at work at baseline.

Quality of life, functional disability, psychological factors, and fear and avoidance beliefs were all significantly improved.

Return to work of 87 severely impaired low back pain patients two years after a program of intensive functional rehabilitation.

Bontoux, L., Dubus, V., et al.

*Annual of Physical Rehabilitation Medicine*


Open Prospective Study:

Population: 87 chronic LBP patients.
Intervention: multidisciplinary functional restoration program.

Ergonomic advice on the workplace was performed for 53 patients.
Outcome: work status and number of sick leaves due to LBP.

The characteristics of the 26 patients lost to follow-up did not differ significantly from the rest of the population before the program.

In the 61 remaining patients, 48 (78%) were at work at 2 years, 43 full-time and 22 at the same job. Nineteen worked in a different environment. Sick leaves were reduced by 60% compared to the 2 years prior to the program: 128 days (+/-200 days) versus 329 days (+/-179 days); p<0.005.

The Outcomes
(Reduced Pain, Reduced Medical Costs, Reduced Disability)
Justify The Expense Of
The Program: I.E., Are Cost Effective

Annual medical therapy costs, including medications for back pain, are estimated to be $12,900 to $19,823

Annual medical costs following a CPP are reduced by 68%.

Using 45 as the average age at CPP and the life-expectancy age of 77, the lifetime healthcare cost per patient can be calculated as:

CPP: 8,100 + (12,99 - 19,823) x (100%-68%) x 32 years = $149,190 - $211,087

Conventional: (12,900 - 19,823) X 32 years = $412,800 - $634,366

Lifetime saving = Conventional – CCP = $272,610 - $423,279

CONCLUSION:

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CPPs offer the most efficacious treatment for chronic pain, and have been shown to be more cost-effective than conventional medical interventions.