

MULTIDISCIPLINARY PAIN PROGRAMS

CLINICAL QUESTION

Are multidisciplinary pain programs (MPPs) effective and efficient in the management of patients with chronic non-malignant pain ≥ 3 months' duration?

THE EVIDENCE

Treatment	Condition	Comparator	Relevant Results/Authors' Conclusions [#]
REVIEW ONE on Effectiveness [†] Multidisciplinary biopsychosocial rehabilitation (MBPSR): minimum of a physical and one other dimension (psychological or social/occupational)	Chronic disabling low back pain	Non-multidisciplinary inpatient therapy and outpatient rehabilitation, usual care, or waiting list	Strong evidence that intensive daily MBPSR > 100 hours improved function compared with other inpatient or outpatient interventions. Moderate evidence that intensive daily outpatient MBPSR reduced pain, compared with outpatient control intervention. Moderate evidence that less intensive outpatient MBPSR (< 30 hours once or twice/week) for pain, functional, or vocational outcomes is equivalent to comparative interventions.
REVIEW TWO on Effectiveness [†] Program: minimum physician consult plus one of psychological, social, or vocational dimension.	Fibromyalgia and widespread musculoskeletal pain	Waiting list, provision of education, conventional care, aerobic exercise (inpatient or outpatient)	Moderate evidence that there is no quantifiable benefit of MPPs for fibromyalgia. Unable to determine if MPPs for widespread musculoskeletal pain were effective.
REVIEW THREE on Effectiveness [‡] MBPSR: minimum of a physical and one other dimension (psychological or social/occupational), 5 to 6 weeks duration.	Neck and shoulder pain	Traditional care and MBPSR with a clinical psychologist acting as supervisor (inpatient or outpatient)	Limited evidence that MBPSR is equivalent to traditional care for any outcome assessed at 12 to 24 months follow up.
REVIEW FOUR on Effectiveness [‡] Multidisciplinary pain program (MPP): 6 month duration included physiotherapy, psychology, attention to dietary, and environmental factors.	Chronic pelvic pain due to pelvic congestion syndrome or adhesions	Standard care	Moderate evidence that MPP improved function but not pain scores after a 1 year follow up.
REVIEW FIVE on Efficiency [§] MPP: minimum of three different medical specialists or health providers.	Chronic pain > 6 months' duration	Various interventions	Due to methodological problem in study designs and outcome measures used in individual studies, it was not possible to draw conclusions on clinical or economical effectiveness.

[†]Based on ten **GOOD*** to **AVERAGE*** quality randomized controlled trials (RCTs), as assessed by the authors of this review, published between 1966 and 1998; [‡]Based on four **POOR*** quality RCTs on fibromyalgia and three controlled trials on musculoskeletal published between 1966 and 1998; [‡]Based on **POOR*** quality studies (one RCT and one controlled trial) published between 1966 and 1998; [‡]Based on one **GOOD*** quality RCT published in 1991; [§]Based on four **POOR*** quality RCTs and three controlled and two uncontrolled trials published between 1966 and 1999; [#]Refer to Grading Key document for explanation of evidence grading

ADDITIONAL NOTES

All reviewed clinical practice guidelines recommended the use of a multidisciplinary team approach that included a physician, psychologist, and physical/occupational therapist, but the evidence was limited.

IMPLICATIONS FOR PRACTICE

What we don't know:

- Are the observed outcomes attributable to a particular treatment modality or to the interactions among multiple treatments?
- What is the optimal duration and intensity for specific conditions and level of involvement of the patients and their families?
- Which subgroup (condition, symptoms, and level of pain severity) of patients benefits the most from MPPs?
- Are MPPs cost effective?

Research Evidence: What we know

In patients with chronic low back pain, evidence indicates that in well established programs:

- multidisciplinary biopsychosocial rehabilitation (MBPSR) with a functional restoration approach produces greater improvements in pain and function than non-multidisciplinary rehabilitation or usual care;
- less intensive MBPSR is not effective.

It is not appropriate to refer patients with chronic low back pain for a multidisciplinary intervention without knowing the actual content of the program.

In a well established program, MBPSR improves function but does not reduce pain in patients with chronic pelvic pain.

For patients with fibromyalgia, widespread musculoskeletal pain, and neck and shoulder pain, the evidence for MPPs is inconclusive.

Recommendation from Clinical Ambassadors

Get to know the MBPSR program in your referral centre and use it for selected cases of chronic low back pain and pelvic pain.

MBPSR should be considered for patients who are significantly affected by chronic pain and who have failed to improve with adequate trials of first line treatment.

The Clinical Ambassadors: Dr Pamela Barton, Dr Saifee Rashid, Dr Paul Taenzer

September 2004

Reference: This Evidence Brief is based on results from an **AVERAGE*** quality systematic reviews (SR).
Ospina M, Harstall C. *Multidisciplinary pain programs for chronic pain: evidence from systematic reviews*. Edmonton, Alberta: Alberta Heritage Foundation for Medical Research, Health Technology Assessment; 2003 Jan. Report: HTA 30. Available: <http://www.ihe.ca/publications/library/>

***Quality ratings for RCTs & SR:** Good ● Average ● Poor ●

[Key to Evidence Gradings](#)

[Glossary](#)

[Methodology](#)