A 6 week psychoeducational programme reduced pain and improved quality of life in adults with chronic idiopathic pain


Question
Can a low cost, community based psychoeducational programme (Chronic Pain Self-Management Program [CPSMP]) reduce pain and improve quality of life in adults with mixed idiopathic chronic pain conditions?

Design
Randomised controlled trial with 3 months follow up.

Setting
A community based study in St John’s, Newfoundland, Canada.

Patients
110 adults (mean age 40 y, 75% women) with chronic, non-malignant, idiopathic pain were recruited from hospital clinics, health professional referrals, and volunteers. Inclusion criteria were age ≥18 years, idiopathic pain for > 3 months, ability to speak and read English, no major cognitive or psychiatric disorders, not currently participating in another educational or supportive intervention for pain management, and not scheduled for surgery. Follow up was 93%.

Intervention
57 adults were allocated to the CPSMP programme and 53 to receive the programme after waiting for ≥3 months. The nurse led programme included print material, 6 weekly 2 hour sessions with 6–10 participants in each group, discussions, group problem solving, a relaxation tape and instruction, and individual instruction and experimentation with various other cognitive and behavioural self management techniques. Information was also provided on exercise, depression, nutrition, medication, fatigue, problem solving, contract-
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ing, and feedback.

Main outcome measures
Identification of variables was guided by Braden’s Self-Help Model of Learned Response to Chronic Illness Experience. Antecedent variables included pain quality, pain problem severity, depression, disability, dependency, and uncertainty. Mediating variables included self efficacy and resourcefulness. Outcome variables included role behaviours and life satisfaction. Health related quality of life included physical functioning, physical role functioning, bodily pain, general health, vitality, social functioning, emotional role functioning, and mental health.

Main results
Analysis was by intention to treat with separate analysis of covariance. Compared with patients who were delayed in starting the programme, patients in the programme group had improved scores for pain quality (p = 0.04), pain problem severity (p = 0.002), disability (p = 0.008), dependency (p = 0.001), self efficacy (p < 0.001), resourcefulness (p < 0.001), role behaviours (p < 0.001), life satisfaction (p < 0.001), physical role functioning (p = 0.001), reduced bodily pain (p = 0.002), vitality (p < 0.001), social functioning (p = 0.05), and mental health (p < 0.05).

Conclusion
Adults with chronic idiopathic pain had reduced pain and improved quality of life scores after a multifaceted community based psychoeducational programme.

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Commentary
This study by LeFort et al is the first to indicate that a nurse led community educational programme can be effective in the treatment of chronic idiopathic pain. Its strengths derive from attention to detail in the research design: it was based on a theoretical framework which distinguished antecedent and mediating variables from outcome variables; tests of validity and reliability for the self reported measures were provided; the randomisation procedure was robust; assessments were conducted blind; attrition was negligible; findings were based on intention to treat analyses; and type 1 errors were minimised. In terms of potential weaknesses, the authors recognised that a single facilitator may have influenced treatment effects and that direct comparisons with other studies are difficult. It was assumed in the design of the study that being on a waiting list was a neutral condition for the purposes of control, whereas it is possible that this sustained hope and suspended coping activities. Although the research assistant was blind to the treatment condition when assessing outcomes at the end of the study, the participants, unlike those in drug trials, were not and this could have affected control group reporting.

The researcher relied on statistically significant rather than clinically significant outcomes, which are more conservative.1 The long term effects of the programme and the need for booster sessions to maintain self management should be evaluated in view of the many intervening variables that could interfere with sustained effects. Assessment strategies need to be developed to predict which people are most likely to benefit from such a programme and to devise follow up strategies to maintain self help behaviours and improvements in quality of life.

Nurses who work in pain clinics where multidisciplinary teams do not exist, as well as those who work in primary care settings, should try to replicate this programme using similar outcome measures and incorporating economic analyses.

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