Combined pain self-management and antidepressant therapy are effective in patients with chronic musculoskeletal pain with depression

Synopsis


**Question:** Does a combination of pain self-management and antidepressant therapy improve pain and depression in people with musculoskeletal pain and depression? **Design:** Randomised, controlled trial with concealed allocation and blinded outcome assessment. **Setting:** Six primary care clinics and five tertiary outpatient clinics in the USA. **Participants:** Primary care patients were eligible if they had at least moderate pain in the low back, hip, or knee, present for at least 3 months despite analgesic medication, and depression of at least moderate severity. People taking antidepressants but who still met the inclusion criteria were eligible. Severe cognitive impairment, major psychoses, and current pain-related disability claims were exclusion criteria. Randomisation of 250 participants allotted 123 to an intervention group and 127 to a control group. **Interventions:** The intervention group participated in the Stepped Care for Affective Disorders and Musculoskeletal Pain (SCAMP) program. During the initial 3 months (Step 1), this group optimised their antidepressant medication according to an algorithm based on clinical response, with a potential increased dose at 3 weeks and change of medication at 6 weeks for those who had not improved. During the following 3 months (Step 2), fortnightly pain self-management sessions were conducted by a nurse care manager, modelled on the Stanford self-management program. Participants were taught to modify their behaviour through behavioural plans and problem-solving techniques. During the final 6 months (Step 3), two telephone calls from the nurse care manager were used to assess symptoms and adherence, and to adjust management if required. The control group were informed that they had depressive symptoms and that they should seek advice about treatment, but received no other intervention unless a psychiatric emergency arose. **Outcome measures:** The primary outcome was a combined improvement in both depression and pain. Depression was assessed using the 20-item Hopkins Symptom Checklist and pain severity using the Brief Pain Inventory. Global improvement in pain was also assessed. **Results:** 205 (82%) participants completed the final assessment. At 12 months, 26% of the intervention group achieved the primary outcome, compared with 8% of the control group (RR 3.3, 95% CI 1.8 to 5.4). For depression specifically, 37% of the intervention group had a 50% or greater reduction in depression severity from baseline compared with 16% of the control group (RR 2.3, 95% CI 1.5 to 3.2). When expressed in terms of major depression, 41% of the intervention group had major depression at 12 months compared to 68% of the control group (RR 0.6, 95% CI 0.4 to 0.8). A reduction in pain of at least 30% was more likely in the intervention group (41%) than the control group (17%) (RR 2.4, 95% CI 1.6 to 3.2). Global improvement in pain also significantly improved. **Conclusion:** Combined pain self-management and antidepressant medication result in substantial improvement in depression as well as moderate reductions in pain severity and disability.

Commentary

Over 6 000 000 Australians suffer from musculoskeletal conditions such as low back pain, knee, and hip pain (ABS 2006). Over twice that number report some level of psychological distress, the most commonly reported problems being mood disorders such as depression (ABS 2006). Musculoskeletal pain and depression frequently coexist, impacting on health outcomes, disability, and quality of life (Bair et al 2003). For primary care practitioners, treatment of patients with co-morbid pain and depression presents a challenge and treatments do not always result in clinically worthwhile benefits for patients.

This clinical trial represents a significant step forward to address this dilemma. The authors investigated the long-term outcomes of a combination of pharmacological and behavioural interventions in primary care patients with musculoskeletal pain and co-morbid depression. The evaluation of the synergistic effects of these two treatments in this patient group is novel. The design, conduct, and analysis of the trial were robust. The investigators found that optimised antidepressant therapy followed by a self-management program resulted in substantial reductions in the severity of depression. The combined intervention also produced clinically significant improvements in pain, which is impressive in this patient group with musculoskeletal pain of long duration (up to 20 years).

The Stepped Care for Affective Disorders and Musculoskeletal Pain (SCAMP) program was evaluated in North America and implemented by a nurse care manager, under the supervision of a physician depression specialist. It would be valuable to trial this inter-disciplinary primary care program in Australia, in which physiotherapists with expertise in cognitive-behavioural approaches to pain management could play a prominent role. If found to be equally effective in the Australian health care setting, the establishment of this program for co-morbid musculoskeletal pain and depression has the potential to substantially reduce the burden on primary care practitioners and enhance long term patient outcomes.

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**References**
