

American Family Physician

A peer reviewed journal of the American Academy of Family Physicians

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FPIN's Clinical Inquiries

Group Medical Visits for the Management of Chronic Pain

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Clinical Question

Are group medical visits effective in the management of chronic pain?

Evidence-Based Answer

Improvements of possible practical significance were seen for various clinical measures in studies of group treatment sessions for patients with back pain, arthritis, and rheumatic disease. However, studies on group treatment for patients with nonspecific pain are lacking, especially in the primary care setting. (Strength of Recommendation: B).

Evidence Summary

A Cochrane Collaboration review of 19 randomized controlled trials (RCTs) with a total of 3,584 participants found moderate evidence that back schools (where participants learn about back anatomy and function, mechanical strain and posture, and where exercise and activity programs are introduced) in occupational settings are effective in diminishing pain, improving function, and decreasing the interval of missed work. However, the size of the effect could not be calculated.¹

A review of 31 studies (19 RCTs, six case-control studies, and six cohort studies) of group education for 4,952 patients with arthritis found improved knowledge in 11 of 13 programs (85 percent) and improved physical health in 13 of 21 programs (62 percent); however, the magnitude of the effect was not quantified. Physical health improvement included changes in pain, disability, depression, and sleep problems. Group visits rarely resulted in improved psychosocial health.²

A review of 14 controlled trials (10 randomized) that included 2,073 patients with chronic rheumatic diseases found limited positive effects on quality of life (life satisfaction and/or functional health status) resulting from group sessions that taught active coping with stresses of daily life. Only six studies demonstrated improved functional health status, which was defined as decreased depression, decreased disability, and improved social relationships.³

Two uncontrolled prospective cohort studies (both sponsored by Kaiser Permanente) of group headache management programs suggested some effectiveness. In the first study, 497 patients participated in a single two-hour group session with a neurologist followed by two intensive two-hour individual visits with a nurse practitioner. Adjunctive services (biofeedback, psychiatric, and anesthetic interventions) were used when needed. Findings included a 15 percent decrease in use of oral and parenteral narcotics; 35 percent reduction in primary care office and emergency department visits; and decreased computed tomography scans (17 preprogram and zero postprogram). Additionally, using a zero- to 100-point scale, there was a 25-point improvement in migraine-specific quality of life, a five-point improvement in physical function, and a 16-point improvement in symptoms.⁴ The second study was of a comparable migraine program, and found similar results.⁵

A prospective RCT of the effectiveness of self management group intervention in 45 older persons with nonspecific chronic pain found that, on a zero- to 100-point scale, there was a 16-point improvement in physical role function ($P = .04$) and, on a zero- to 10-point scale, there was a 1.5 point reduction in pain intensity immediately following the group sessions ($P = .02$). Although the improvement in physical role function is of borderline clinical significance, the reduction in pain intensity is not. Further, this change was not evident at three months.⁶

Finally, a single-blinded randomized trial of 560 pregnant women with pelvic girdle pain found that those who participated in a group education program had no less pain at six and 12 months after childbirth compared with a control group. The study authors note that the control group participants were aware of their randomization status, and 60 percent sought alternative treatment for their pelvic pain.⁷

Recommendations from Others

The American Pain Society (APS) guideline on pain in osteoarthritis, rheumatoid arthritis, and juvenile chronic arthritis recommends that all patients receive education about pain, pain management options, and self-management programs. Methods for delivering this education include small group meetings, telephone contact, computer software programs, home study programs, or printed materials.⁸ The APS makes similar recommendations in their guidelines for the management of fibromyalgia syndrome pain in adults and children.⁹

Authors of Bonica's Management of Pain note that published evidence does not support the isolated use of education or group visits as methods for chronic pain treatment. However, the authors state that group therapy has several advantages, and they suggest it be used in conjunction with other modalities for comprehensive pain management.¹⁰

Clinical Commentary

Management of chronic pain is a common concern among physicians. In training programs, office meetings, informal networks, and support or Balint groups, we worry about undertreatment versus overtreatment, drug regulations, and professional interactions. We look for help and clarification for our patients and ourselves. The underlying concept, buried in the phrase "group visits," is that multi disciplinary management is best for chronic diseases. Although "somewhat effective" is the best current evidence answer for patient outcomes, the improved use of medical resources should be noted. Group visits are one way to broaden the doctor-patient relationship and incorporate system approaches to education, monitoring, process improvement, behavior modification, and social capital. We need support for sharing responsibilities with our teams, including the patients, staff, behavioral health specialists, and physicians.

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Author disclosure: Nothing to disclose.

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Clinical Inquiries provides answers to questions submitted by practicing family physicians to the Family Physicians Inquiries Network (FPIN). Members of the network select questions based on their relevance to family medicine. Answers are drawn from an approved set of evidence-based resources and undergo peer review. The strength of recommendations and the level of evidence for individual studies are rated using criteria developed by the Evidence-Based Medicine Working Group (http://www.cebm.net/levels_of_evidence.asp).

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