



Patient Education Fails to Improve Outcomes for Patients

Not to be discounted, further investigations into instructional interventions and its impact on pain chronification are necessary. A low back pain case.

Reported by Claire Altschuler, with Adrian C. Traeger, PhD, James H. McAuley, PhD, Gabriel Sella, MD, MPH, and Steven Richeimer, MD

Intensive patient education—involving 2 hours of detailed information about pain, psychosocial contributors, and self-management techniques, all provided by a trained clinician—failed to improve pain outcomes for patients with acute low back pain when added to first-line care, according to a study¹ involving what authors believe to be the first randomized, placebo-controlled clinical trial on the subject.

Lower back pain is the world's leading cause of disability.² In the US alone, 80% of adults can expect to experience at least one bout of it in their lifetimes.³ Lower back pain contributes to higher healthcare costs and missed work, costing the US economy more than \$100 billion a year—two-thirds of which is due to lost wages and reduced productivity.⁴ These costs, along with the significant toll lower back pain takes on an individual's quality of life, has created a sense of urgency to find treatments that can prevent an acute condition from becoming a chronic one.

Treatment Guidelines and the Role of Education

International treatment guidelines for acute low back pain—that is, pain lasting for 6 weeks or less—include advising patients to remain active, giving reassurance, administering simple analgesics when necessary, and providing pain education.⁵ While this approach works for most patients, as many as 20 to 30% of these patients will still go on to develop chronic pain.⁶

Intensive patient education is widely considered to be an important component of acute low back pain treatment, wrote the study's authors based out of Neuroscience Research Australia who point to a review⁷ of existing research that concluded its effectiveness. However, while it has been adopted by “every major clinical guideline,”⁸ intensive education had never been rigorously tested in a clinical trial. The researchers set out to address this need.

Trial Design and Findings

The study included 202 patients, aged 18 to 75 years, with acute low back pain whom researchers concluded were highly likely to develop chronic pain based on the Predicting the Inception of Chronic Pain (PICKUP) prognosis model.

In addition to the first-line care patients received from their regular practitioner, half of the subjects were randomly assigned to receive intensive patient education, which consisted of 2 hour-long sessions with a trained clinician who provided detailed information about the psychosocial aspects of pain, advice about staying active, and instructions on how to use pacing, which is a means of adapting to limitations by creating a balance between activity and rest. The placebo group received active listening, but no advice or information about low back pain. More than 90% of the participants completed the year-long study.

Self-reported data was collected at baseline; 1 week after the completed sessions; and at 3, 6, and 12 months after the

date of pain onset. After analyzing their data, the researchers concluded that, “Adding 2 hours of patient education to recommended first-line care for patients with acute low back pain did not improve pain outcomes.” Therefore, recommendations for complex and intensive support to high-risk acute low back pain patients “may have been premature.”

The researchers did find significant differences in secondary outcomes (the probability of having pain recurrence, interference, and the odds of seeking additional healthcare) during the first few months. However, these differences were not present at 6 or 12 months after pain onset. “It is difficult to comment on usefulness based on those outcomes, given the risk that the differences were just noise,” said Adrian C. Traeger, PhD, early career fellow at Australia’s National Health and Medical Research Council and co-lead researcher of the study. “However, I do think it is worthwhile to continue to test patient education using different outcomes.”

Implications for Pain Care and Patient Communication

Based on their findings, the authors told *PPM* that physicians don’t need to provide intensive patient education to acute low back pain patients. “It seems that more information is not necessarily more effective,” said co-lead researcher James H. McAuley, PhD, associate professor at the University of New South Wales and Neuroscience Research Australia.

However, Dr. Traeger said he hasn’t given up on the benefits of patient education entirely. He hopes the study will inspire others to pursue robust trials using outcomes other than pain. “I think it would be very worthwhile investigating [the] effects of education interventions on health service use and medication use,” he told *PPM*.

Gabriel Sella, MD, MPH a practicing physician at the Ohio Valley Medical Center, told *PPM* that regardless of how well intentioned, “Patients with acute symptoms expect relief... not education.” Only when the intense symptomatic period

is over, will they be able to benefit from training, he said. Dr. Sella offered some suggestions for clinicians who want to provide education to their patients. He recommends limiting teaching sessions to 20 minutes, and said that trainers should use simple, clear language understandable to a layperson.

To determine if the patient has grasped the material, he says instructors need to ask questions as they go along and should provide a summary of the previous session before beginning a new one. Dr. Sella added that instruction must, “address the impairment of chronic pain rather than its disability.”

Steven Richeimer, MD, professor of anesthesiology and psychiatry at the University of Southern California told *PPM*, “The study is limited in its practical application.” Instead of intensive education sessions, Dr. Richeimer recommends “occupational therapy and pain psychology to provide the kind of on-going educational intervention that is needed” for patients who are likely to progress to chronic pain. •

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