

Acupuncture Treatment Improves Disabling Chronic Low Back Pain in Older Adults

NIH-funded study supports acupuncture as a safe and effective pain treatment for this group.

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According to a study funded by the National Institutes of Health (NIH), older Americans with chronic low back pain who received acupuncture had greater improvement in physical function and reduced pain than those who received usual medical care only, generally prescribed medications or physical therapy.

Chronic low back pain is the leading cause of disability worldwide and affects over one-third of older adults in the United States. Treatment options range from pain-relieving drugs to complementary therapies, including [acupuncture](#). There is an urgent need for safe, effective, and non-addictive pain management approaches.

“Of the different treatments we have for chronic low back pain, most have a somewhat modest effect. They often reduce pain by about a third at best and can help people function better,” said lead author Lynn L. DeBar, PhD, Kaiser Permanente distinguished investigator. “Our clinical results suggests that acupuncture is working as well as many things that are more familiar to people. We found that the size of this effect, while modest, was positive and sustained.”

The clinical trial, known as BackInAction, enrolled 800 participants, with results based upon self-reported pain-related disability assessments following treatment that either included or omitted acupuncture. Researchers looked at whether manual acupuncture needling, which is eligible for Medicare coverage, could improve function and reduce pain for older adults who have chronic or persistent low back pain.

Acupuncture, with its origins in traditional East Asian medicine, has gained in popularity in the United States since the 1970s. The manual acupuncture needling technique entails inserting fine needles into the skin at points that follow a prescribed anatomical grid. The practice provides various benefits, including reduced discomfort from back, joint or neck pain. While acupuncture has been found to be safe and effective for chronic low back pain in adults overall, few acupuncture studies have focused on adults 65 years of age and older.

Participants in BackInAction included men and women aged 65 and older with a medical history of low back pain for at least three months. All participants had health coverage and were not restricted from receiving usual medical care for their back pain. A third of those received up to 15 acupuncture treatments over three months (standard acupuncture treatment), and another third received an additional six acupuncture treatments (maintenance sessions) over the following three months.

At three study milestones — after three, six and 12 months from enrollment — participants provided self-assessment of their pain and physical limitations. Their agreement with any of 24 statements that describe everyday activities made difficult because of back pain contributed to the participant's disability score. The researchers used additional tools for insights into pain levels, degree of physical functioning, depression and anxiety.

At the six-month and 12-month assessment, both groups who received acupuncture had greater reductions in pain disability than those who received usual medical care alone. The acupuncture-treated groups also had reduced pain intensity and greater physical function after six months as compared to participants who did not receive acupuncture. The researchers also reported that acupuncture treatment was associated with fewer anxiety symptoms as compared to usual medical care alone at the six and 12-month assessments.

“What sets the BackInAction study apart is that it focused specifically on adults 65 years of age and older, and it was pragmatically designed,” DeBar said. “We worked hard to involve adults in multiple regions of the country so that participant demographics were consistent with the U.S. census for older adults—and we worked with licensed acupuncturists in the community, who are most likely to deliver these services.”

The study authors suggest that access to acupuncture is important for older adults with chronic back pain and that if acupuncture practitioners could bill Medicare directly it could greatly improve access to such services.

“We saw very little in the way of adverse effects during the clinical trial,” said co-lead researcher Andrea J. Cook, PhD, Kaiser Permanente senior biostatistics investigator. “Older adults often are dealing with other medical problems in addition to back pain. Acupuncture offers a less invasive option that has a better safety profile than a lot of the common treatments for back pain in older adults.”

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