



BACK PAIN

Back Pain and Mortality: The Million-Dollar Question

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I frequently challenge clients with a "million-dollar question" about current clinically important research relevant to their practice. Today, you can also take the challenge: For \$1 million, "*Describe the relationship between back pain and mortality. Provide statistics, as appropriate.*" Recent research provides data that adds to our conversation with our patients and other health care providers.

Research Gives Us an Answer - and Everyone Needs to Hear It

This research was published in the prestigious, peer-reviewed *Journal of General Internal Medicine*.¹ The research team members were from Boston University School of Medicine and the University of Minnesota School of Medicine.

They performed a scientific review to examine whether back pain is associated with increased mortality risk and whether this association varies by back pain severity. The research team included studies evaluating the association of back pain with all-cause mortality, with follow-up periods from five to 23 years.



Three reviewers independently screened studies, abstracted data and appraised risk of bias. They identified 11 studies, involving 81,337 participants, with follow-up periods longer than five years. Please note that no previous review had quantitatively assessed multiple studies to clarify the direction and magnitude of the association between back pain and mortality.

The researchers found that the presence of any back pain, compared to none, was not associated with an increase in mortality. However, back pain was associated with 26 percent higher mortality in studies among adults with more severe back pain. An early mortality increase of 26 percent is a clinically important data point and requires a practitioner to include this information in conversations with severe back-pain patients.

Clinical Connections

The research team described the mechanisms by which more severe back pain may be associated with earlier mortality. They presented links to the following clinical connections:

- Patients with severe back pain often have difficulty performing daily living activities, and functional limitation related to pain is associated with mortality.²
- Less physical activity may lead to weight gain and development or worsening of cardiovascular disease, which can escalate mortality risk.³
- Back pain has also been linked with poor balance and falls, which can result in fractures and mortality.⁴
- There is an association between back pain and suicide.⁵
- Opioids, which are frequently prescribed for back pain, can carry the risk of dependence, addiction, overdose, and death.⁶
- NSAIDs, which are often used to manage back pain, may also impact mortality risk due to the increased risk for cardiovascular events.⁷
- Spinal surgery may contribute as well, as the risk of death from back surgery is approximately 0.4 percent.⁸

- Additionally, not seeking care or selecting harmful self-care may lead to disability, which may contribute to earlier mortality.

The Good News to Share

The good news, of course, is that chiropractors can offer a safe path to effectively treat back pain. Clinical practice guidelines from the American College of Physicians recommend nonpharmacologic approaches (e.g., spinal manipulation, spinal therapeutic exercise, acupuncture) as first-choice therapeutic options for acute and chronic low back pain.⁹

In addition to communicating with our patients the treatment benefits of a nonpharmacologic package, we should also strongly emphasize prevention. Prevention of the next episode, especially a severe episode, is now even more important to our patients. Researchers have demonstrated that preventive spinal exercises are an effective preventive intervention for back and neck problems.

Two research teams independently conducted a systematic review and meta-analysis to assess the effect of exercise in population-based interventions to prevent low back pain and associated disability.¹⁰⁻¹¹ They found that therapeutic preventive spinal exercise can prevent new low-back pain episodes by 33-41 percent.

Did you correctly answer the million-dollar question? Great! You now have critically important information to share with your patients and other health care providers. This information serves to not only inform, but also motivate practitioners and patients toward an effective and safe prevention strategy and treatment plan. Cutting-edge research strengthens communications with your patients, which promotes better patient outcomes, higher patient satisfaction and more referrals.

Editor's Note: The research presented in this article is also available in video format at <https://chiroevidence.com/research-capsule-240>.

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NOVEMBER 2021