Study reveals what happens when depression, anxiety coincide with minor injury

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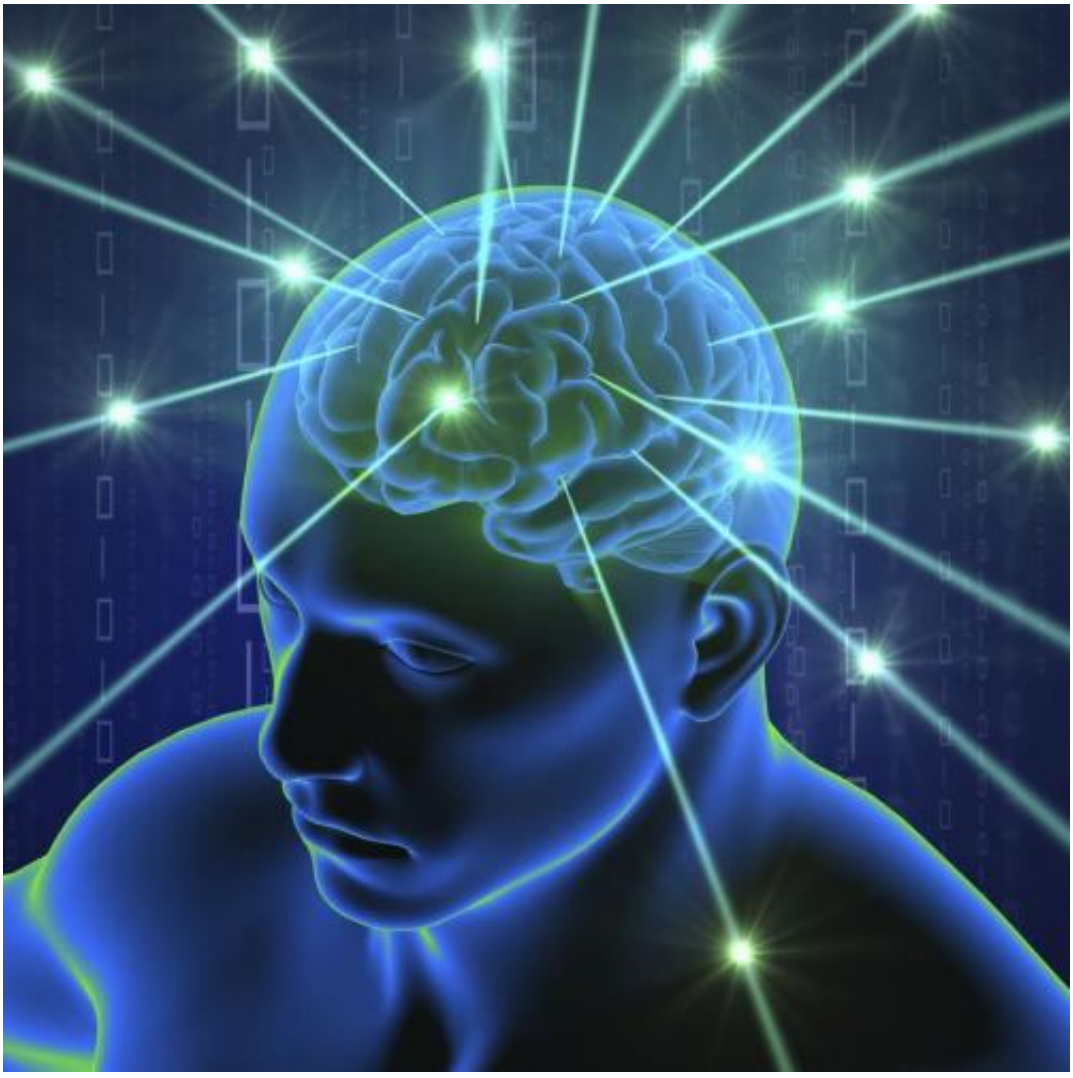

Credit: Rice University

When someone breaks a leg or fractures a rib, injuries considered relatively minor, providers often don't look beyond what's initially required to help that person heal. But new research from Therese Richmond and Sara Jacoby of the University of Pennsylvania shows that may not be the best approach.

Their work, published in the International Journal of Nursing Studies, revealed that someone who arrives in the emergency department needing help for a minor injury and who also expresses symptoms of depression and anxiety at that time will likely experience poorer work performance and increased health-related time in bed 12 months out.

"If an injury is not life-threatening, we tend to patch people up and send them home," said Richmond, the Andrea B. Laporte Professor of Nursing and Associate Dean for Research and Innovation at the Penn School of Nursing. Yet "one out of 10 U.S. adults goes to an emergency department every year for injury. That's millions and millions of people."

Richmond and Jacoby, a postdoctoral fellow in the Penn Injury Science Center wanted to find out how such patients fared long-term, something relatively well-studied for people with severe injury but uncharted in this context. They turned to data they had collected from previous work about long-term recovery from minor injuries.

In that initial study, published in 2009, the researchers used standard criteria to identify 1,110 patients who had sustained minor injuries, after excluding those with head trauma, those with a previous psychiatric diagnosis and those hospitalized during the past year for another minor injury. From this group, 275 men and women of varying races and ethnicities were randomly selected and interviewed at intake in the emergency room, as well as at three, six and 12 months after injury.

"Along with the larger diagnostic exams that were given, we collected each patient's symptoms of depression and anxiety using symptom-severity scales" called the Hamilton Depression Rating Scale and Hamilton Anxiety Rating Scale, Jacoby said.

Ninety percent of participants continued for the entire study duration, which helped Richmond and Jacoby draw some strong conclusions. They learned that people with more symptoms of depression at the time of their injury still had trouble working a year later and more frequently required bed rest due to health problems. They found connections, though less substantial, for anxiety, too. The researchers stress, however, that they determined correlation, not causation.

"We don't know what's driving the relationship between psychological symptoms at the time of injury and long-term recovery," Jacoby said. "But we do know there is a spectrum of symptoms which, if evaluated, could change the way we allocate resources or suggest more intensive follow-up for certain people who might be at higher risk for poor outcomes."

It's an important link between physical and mental well-being for these patients, Richmond added.

"What our work over time shows, and this reinforces, is we can't separate people into psych and physical because there's an interplay that's important to understand," she said. "My goal of care as a nurse is, 'I want you to live your life to the best that you can, I want you to have optimal function, I want you to be able to go back to your normal activities.' If we don't incorporate the psychological wellness after injury , I'm not going to help people reach that goal."

Broad but simple changes to integrated care systems could make a difference, such as dismantling disciplinary silos that currently exist

between physical and mental-health care or using electronic health-record systems to set reminders for providers to ask patients about psychological symptoms at follow-up visits.

"If you can embed the change in a system, it's more likely to be successful than having to educate thousands of providers," Richmond said.

The researchers note that future research should focus on building a better understanding of the pathways through which psychological symptoms influence long-term recovery.

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