Low back pain? Don't blame the weather
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Australian researchers reveal that sudden, acute episodes of low back pain are not linked to weather conditions such as temperature, humidity, air pressure, wind direction and precipitation. Findings published in Arthritis Care & Research, a journal of the American College of Rheumatology (ACR), indicate that the risk of low back pain slightly increases with higher wind speed or wind gusts, but was not clinically significant.

According to the World Health Organization (WHO) nearly everyone experiences low back pain at some point in their life, making it the most prevalent musculoskeletal condition and affecting up to 33% of the world population at any given time. Those with musculoskeletal (bone, muscle, ligament, tendon, and nerve) pain report that their symptoms are influenced by the weather. Previous studies have shown that cold or humid weather, and changes in the weather increase symptoms in patients with chronic pain conditions.

"Many patients believe that weather impacts their pain symptoms," explains Dr. Daniel Steffens with the George Institute for Global Health at the University of Sydney, Australia. "However, there are few robust studies investigating weather and pain, specifically research that does not rely on patient recall of the weather."

For the present case-crossover study 993 patients seen at primary care clinics in Sydney were recruited between October 2011 and November 2012. Weather data from the Australian Bureau of Meteorology were sourced for the duration of the study period. Researchers compared the weather at the time patients first noticed back pain (case window) with weather conditions one week and one month before the onset of pain (control windows).

Results showed no association between back pain and temperature, humidity, air pressure, wind direction or precipitation. However, higher wind speed and wind gusts did slightly increase the chances of lower back pain, but the amount of increase was not clinically important.

"Our findings refute previously held beliefs that certain common weather conditions increase risk of lower back pain," concludes Dr. Steffens. "Further investigation of the influence of weather parameters on symptoms associated with specific diseases such as fibromyalgia, rheumatoid arthritis, and osteoarthritis are needed."

More information: "Weather Does Not Affect Back Pain: Results from a Case-Crossover Study." Daniel Steffens, Chris G. Maher, Qiang Li, MBiostat, Manuela L. Ferreira, Leani S.M. Pereira, Bart W. Koes and Jane Latimer. Arthritis Care and Research; Published Online: July 10, 2014 DOI: 10.1002/acr.22378

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