

# Lower back and foot pain associated with more severe knee osteoarthritis symptoms

November 17 2010

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A new study found that patients with osteoarthritis (OA) of the knee who also have pain in other joints were more likely to experience greater knee pain. Specifically, pain in the lower back as well as foot pain and elbow pain on the same side as the affected knee were associated with more severe knee pain. Full details appear in the December issue of *Arthritis Care & Research*, a journal published by Wiley-Blackwell on behalf of the American College of Rheumatology.

Knee OA is the leading cause of disability in the U.S., with nearly 4.3 million adults over age 60 having the symptomatic form of the disease according to the Centers for Disease Control and Prevention (CDC). A study by Helmick et al. published in [Arthritis](#) & Rheumatism reported 59 million people have low back pain, which is the most common cause of lost work time among individuals less than 45 years of age and the third most common cause among those 45 to 65 years of age.

The current study team led by Pradeep Suri, M.D., from Harvard Medical School, New England Baptist Hospital, and Spaulding Rehabilitation Hospital in Boston, Massachusetts used data provided by individuals from the Osteoarthritis Initiative—a multicenter population-based observational cohort study of knee OA. A subgroup of 1,389 participants, ages 45-79 years who had symptomatic knee OA in at least one knee were included, with patients also asked to identify pain in the lower back, neck, shoulder, elbow, wrist, hand, hip, knee, ankle or foot. Researchers used the Western Ontario and McMaster Universities [Osteoarthritis](#) Index (WOMAC) to measure the level of pain of patients

in the study on a scale of 0 to 20 with lower scores representing less pain and stiffness.

Results indicate that 57.4% of participants reported having pain in their lower back. Participants with low back pain had a mean WOMAC pain score of 6.5, while those without pain in their lower back scored 5.2. Researchers found that low back pain was significantly associated with an increase in the WOMAC [knee pain](#) score, with similar associations demonstrated in all other individual joint locations that were studied. Those models analyzing pain locations simultaneously show only low back pain, and ipsilateral [foot pain](#) and elbow pain were significantly associated with a higher knee pain score.

Additionally, researchers determined that having more than one pain location, regardless of the site, was associated with greater WOMAC knee pain score. In participants with four or five pain locations the severity of knee pain was even higher. "Our findings show that pain in the low back, foot and elbow may be associated with greater knee pain, confirming that symptomatic knee OA rarely occurs in isolation. Future studies are needed to determine whether treatment of [pain](#) occurring elsewhere in the body will improve therapy outcomes for knee OA," Dr. Suri concluded.

**More information:** "Low Back Pain and Other Musculoskeletal Pain Comorbidities in Individuals with Symptomatic Osteoarthritis of the Knee: Data from the Osteoarthritis Initiative." Pradeep Suri, David C. Morgenroth, C. Kent Kwoh, Jonathan F. Bean, Leonid Kalichman, and David J. Hunter. *Arthritis Care and Research*; Published Online: August 26, 2010 ([DOI:10.1002/acr.20324](https://doi.org/10.1002/acr.20324))

Provided by Wiley

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