Study reveals personal motivation influences healing following knee surgery

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Personal motivation may be the biggest factor in determining the length of time it takes for a patient to return to work following a total knee replacement, according to new research published in the *Journal of Bone and Joint Surgery* (*JBJS*).

"Although the physical demands of a patient's job certainly have some influence on their ability to return to work following a primary total knee replacement, the patient's characteristics, particularly motivation, play a more important role," said study author Joseph F. Styron, PhD, of Case Western Reserve University.

- According to the U.S. Department of Health and Human Services, arthritis is the leading cause of disability among working-age Americans, and total knee replacement, or total knee arthroplasty (TKA), is commonly used to help treat advanced forms of arthritis of the knee.

- According to the American Academy of Orthopaedic Surgeons (AAOS), about 581,000 TKAs are performed each year in the United States, and experts say that number is expected to grow significantly as the population ages.

Study Findings:

The authors enrolled 162 patients who were scheduled for a TKA, and

asked them to complete questionnaires assessing their physical status, ability to perform job responsibilities, physical demands at work and other workplace characteristics, as well as questions about their motivation and desire to return to work. The study was designed to consider both part-time and full-time work scenarios, and also included patients who were self-employed. The median time to return to work for these patients in this study was 8.9 weeks.

Dr. Styron noted a patient's individual motivation to return to work may rely on a more complicated combination of factors, including the value an individual places on the role of work, as well as a patient's commitment to his or her particular job.

"Research has shown, an individual's motivation to work is a complex interaction among the individual's personality traits, needs, values and feelings about the importance of working as well as the commitment to his or her work," he said.

In addition to personal motivation, other factors that predicted an earlier return to work included:

- Being female;
- Having a less-physically-demanding job;
- Being self-employed;
- Being employed at a handicap-accessible workplace; and
- Having a stable preoperative emotional state.

The authors noted that all of these factors were similar to the factors

found in previous literature to be associated with returning to work following other orthopaedic procedures or injuries.

Surprisingly, the study results indicated the physical demands of a patient's job played a minor role in their return to work, especially for patients who were able to modify their work responsibilities to compensate for their knee surgery. Although patients with higher physical demands took slightly longer to return to work, the effect was modest, the study noted. Personal financial status and social motivations also did not appear to have an influence on how quickly a patient returned to work.

Because personal motivation appears to play an important role in a patient's decision to return to work, the study authors recommend doctors take that factor into consideration when advising patients prior to knee surgery and during recovery.

"It appears that properly managed, highly motivated patients are capable of returning to work even in physically demanding jobs," Dr. Styron said. "The implications for advising patients preoperatively are clear: they should be told that returning to work depends more on the patient than his or her type of job."

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