

Abstract

Am J Ind Med. 1998 Dec;34(6):559-67.

Low back pain: predictors of absenteeism, residual symptoms, functional impairment, and medical costs in Oregon workers' compensation recipients.

Butterfield PG, Spencer PS, Redmond N, Feldstein A, Perrin N.

College of Nursing, Montana State University, Bozeman 59717, USA.

BACKGROUND: Wide variations in disability duration and magnitude have been noted among recipients of workers' compensation for low back pain. Findings from recent studies have indicated that inclusion of a broad array of variables (i.e., physical, occupation, social, economic) is needed to understand differences in workers' responses to occupational low back pain.

METHODS: Workers' compensation and questionnaire data from 340 Oregon workers with low back claims were merged to develop multivariate models predicting: (1) absenteeism days, (2) residual symptoms, (3) functional impairment, and (4) medical costs.

RESULTS: Forty-two percent of the variation in low back symptoms was explained by: discontinuing physical fitness activities post-injury ($\beta = -.419$), self-reported low energy/high fatigue ($\beta = -.227$), poorer general health ($\beta = .137$), and attorney involvement in claim ($\beta = .117$), (adjusted $R^2 = .418$, $p < 0.001$). Survival curves revealed significantly longer claim durations among workers who discontinued physical fitness activities post-injury, compared with workers who did not; these differences remained significant even after controlling for severity of the initial injury.

CONCLUSION: Continuation of physical fitness activities during the recovery process was found to be a significant predictor in three of four regression models, providing evidence on behalf of a relationship between fitness and positive health outcomes. However, it was not possible to clearly differentiate pre-morbid from post-injury fitness, nor to determine if this relationship was due to a therapeutic effect on the back, the general restorative benefits of remaining active, or represents a proxy variable for workers' self-care efforts during recovery.

PMID: 9816413