

Association Between Recovery Outcomes for Work-Related Low Back Disorders and Personal, Family, and Work Factors

Denise M. Oleske, PhD,*† Gunnar B. J. Andersson, MD, PhD,‡
Steven A. Lavender, PhD, CPE,‡ and Jerome J. Hahn, MD†

Study Design. Incident cases of work-related low back disorders were identified in an automotive metal stamping plant. Individuals were asked to recall health and work habits at the time of diagnosis of the work-related disorder and to report their current low back pain and physical functioning.

Objectives. To evaluate five measures of health outcomes for work-related low back disorders in an industrial population and to determine potentially modifiable correlates of recovery.

Summary of Background Data. The factors that influence recovery in actively working adults and how to best measure recovery outcome in this population are not well known.

Methods. Eighty-eight hourly employees of a metal stamping plant who experienced a work-related low back disorder were interviewed. Health status, health habits, and family and work relations were assessed with a structured interview to determine their association with various recovery outcomes (low back pain, low back pain disability, physical functioning, general physical health, and lost workdays). Interview information was supplemented with data from the plant's Occupational Safety and Health Administration Form 200 log.

Results. The clinical measures of recovery from the work-related low back disorders examined had similar overall predictive ability. However, in multivariate analyses, different potentially modifiable prognostic variables emerged as significant among them. Poorer self-rated health status and high personal stress were correlated with low back pain disability. Higher levels of cigarette smoking were correlated with higher levels of low back pain disability, lower physical functioning, and more severe low back pain at follow-up.

Conclusion. The choice of measure of recovery from work-related low back disorders should be made in the context of the rehabilitation intervention goal. Interventions designed to modify and promote healthful personal behavior should be given more emphasis in rehabilitation efforts for work-related low back disorders. [Key words: health outcomes, low back disorders, work-related musculoskeletal disorders] *Spine* 2000;25:1259-1265