
Despite advances in workplace safety and in the assessment and treatment of occupational injuries, the prevalence of pain-related disability and the cost of compensation due to pain-related injury remain alarmingly high.1–4 Increasingly, there have been calls for the development of interventions that will minimize the probability of disability following occupational injury.5–7

Pain-related disability arising from soft tissue injuries to the back or neck have been on the rise since the 1950s.1,4,8,9 The rise in low back pain disability has been attributed to workplace, social, and psychological factors, as well as policy and administrative factors.4,9

Approximately 80% of soft tissue injuries will follow a path of uncomplicated recovery in the first 3 months after injury.10 A small but significant percentage of persons will remain occupationally disabled at 6 months after injury, and many of these persons will become permanently disabled. More than 80% of available health and rehabilitation resources will be consumed by the 15% of persons who remain symptomatic and occupationally disabled at 6 months after injury.4,11,12

A number of different secondary prevention programs have been implemented over the past decade, aimed at curbing the rate of disability subsequent to back injury.10,13 Programs have taken many forms, including advice from primary care practitioners, information pamphlets, physical therapy, aggressive multidisciplinary treatment programs, and policies restricting access to financial compensation for pain-related disability.14

Reviews of the outcome literature have not provided convincing evidence for the efficacy of secondary prevention programs.4,10,14 It has been difficult to demonstrate that secondary prevention programs impact on rehabilitation outcome beyond what would be expected from the natural course of recovery from back injury.15 Despite the intuitive appeal of the concept of secondary prevention, the experiences of the last decade have given rise to serious doubt that cost-effective programs can be developed to minimize the probability of prolonged pain-related disability.

Is it premature to abandon the quest for cost-effective secondary prevention programs for back pain disability? This is the question that prompted the development of this Special Series. A collection of articles is presented with the aim of highlighting the challenges that have been faced in developing effective secondary prevention programs. The articles also sketch directions for innovative pathways for solving the puzzle of pain-related disability.

Five papers are included in this Special Series, each describing different programs or strategies that aim to minimize the pain-disability problem subsequent to occupational injury. The articles go beyond simple description of treatment outcome to address issues related to cost-efficacy, treatment accessibility, treatment adherence, program implementation, and program sustainability. What emerges from these papers is the view that effective secondary prevention will require attention to (1) screening for risk of long-term disability, (2) timely implementation of rehabilitation interventions, (3) mechanisms for...
addressing psychological barriers to rehabilitation progress, and (4) models of service delivery that can be implemented on a population-wide basis.

Linton and Boersma describe a screening measure to identify persons at risk for the development of back pain disability. Loisel et al. delineate a stage model of multidisciplinary intervention that has shown positive results in reducing pain-related disability. Van den Hout et al. present the results of a randomized controlled trial of the effects of graded exposure and problem-solving therapy on sick leave and return to work. Sullivan et al. discuss the implementation and preliminary evaluation of a community-based intervention directly targeting psychological barriers to rehabilitation progress. Finally, Pulliam et al. review issues related to treatment adherence and its impact on rehabilitation outcome.

The secondary prevention programs described in this Special Series reveal high rates of successful return to work (60% to 77%) in injured workers considered at risk for prolonged disability. High rates of return to work were reported by programs that target very different components of pain-related occupational disability. What the different programs share is the explicit goal of achieving work reentry. It appears that this goal can be attained through physical interventions that prevent the evolution of disability, by minimizing psychological barriers to rehabilitation progress, by workplace interventions, medical reassurance, or a combination of these.

Interestingly, none of the programs described in this Special Series specifically targets pain symptoms, even though pain symptoms are the presumed basis of disability. Traditional approaches to the management of pain-related disability have tended to focus to a significant degree on pain reduction, and pain severity has been considered as a central outcome variable. As a result, many of the interventions included in pain management programs have included palliative strategies aimed at minimizing pain and emotional distress. Although analgesics, ultrasound, transcutaneous electrical nerve stimulation, or relaxation training can reduce physical and emotional distress, these approaches do not appear to impact significantly on return-to-work potential.

It is possible that effective secondary prevention of pain-related disability may be determined not by the degree to which pain can be reduced, but by the degree to which barriers to work reentry can be minimized. Pain itself may not be the most important barrier. The key to success may lie in shifting emphasis away from the goal of managing or reducing pain to the identification and elimination of psychosocial and workplace factors that contribute to the development and maintenance of disability.

The contributors to this Special Series share the view that cost-effective secondary prevention is a possibility. It is becoming clearer, however, that meaningful impact on the pain-disability problem will require greater collaboration among policy makers, administrators, researchers, and clinicians. It is the hope that this collection of articles will be heuristic in generating discussion among different stakeholders, to ensure that innovative strategies for the prevention of pain-related disability can be implemented in a manner that maximizes their impact and ensures their sustainability.

Michael J. L. Sullivan, Ph.D.
Department of Psychology,
University of Montreal,
Montreal, Quebec, Canada

REFERENCES