

at work

Information on workplace research from the **Institute for Work & Health**

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Research Excellence
Advancing Employee Health

Study to determine optimal return-to-work processes

Over the last decade, there has been an increased focus in research on work disability and return to work following occupational and non-occupational injuries and illnesses. This rising interest is partially due to the increase in musculoskeletal disorders and their considerable societal cost.

A team of Institute researchers, led by Dr. Renée-Louise Franche, has launched a new pilot study of Ontario lost-time claimants and their return-to-work experiences. It is being undertaken with the assistance of the Ontario Workplace Safety and Insurance Board (WSIB), the WSIB's Research & Evaluation Branch and the University of Toronto Survey Research Unit.

Cross-sectional study

This study examines the factors contributing to an optimal return-to-work process, with a special emphasis on the role of work accommodation. It uses a cross-sectional design, which examines two groups of workers at a particular point in time. The groups, each consisting of 250 workers who have had back or upper-extremity musculoskeletal disorders as a result of an occupational injury, are currently being recruited to participate. Both groups of workers will be asked to describe their experiences around lost-time injury. One group will



be asked to provide information within the first month after injury while the other group will be asked to share their experiences six months after injury. Workers will be asked about their:

- workplace (work environment, employer, co-workers)
- experiences with their health-care provider
- physical and mental health
- opinions, decisions and feelings about returning to work
- experiences with their return-to-work process and work accommodation

A specific focus on young injured workers is also part of this study.

The study builds on earlier work by Institute Senior Scientist Dr. John Frank and colleagues. They identified the importance of collaboration between the "main players" in the return-to-work process. These include the worker, the workplace, the insurer and the health-care provider(s) with whom the worker interacts.

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The Institute for Work & Health is an independent, not-for-profit organization whose mission is to research and promote new ways to prevent workplace disability, improve treatment, and optimize recovery and safe return to work.

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The Institute for Work & Health operates
with the support of the Ontario
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Workplace

REPORT CONFIRMS NURSES AT HIGH RISK FOR WORKPLACE ILLNESS AND INJURY

A report that synthesizes the findings of three separate research studies on the health of nurses working in acute care is now available. The findings confirm that nurses are a high-risk group for illness, emotional exhaustion, and musculoskeletal injuries. Heavy workloads, inadequate staffing levels to cover sick-time, an extensive use of overtime, lack of social support from management and each other, and stressful relations with physicians are identified as the major work-related health factors.

The principal investigators for the study were Judith Shamian from the Office of Nursing Policy at Health Canada and Linda O'Brien-Pallas from the Nursing Effectiveness Utilization and Outcomes Research Unit at the University of Toronto. Institute Scientists Drs. Mickey Kerr and Mieke Koehoorn were part of this interdisciplinary research team. The study was funded by the Ontario Workplace Safety and Insurance Board's Research Advisory Council.

Data from three Ontario sources were linked together at the hospital level into one database. First, there was an analysis of a survey completed by 8,229 nurses from 139 Ontario hospitals. Second, a trend analysis was conducted of WSIB claims data for nurses over nine

years. Third, nurses and various hospital stakeholders from 10 hospitals were interviewed to gain their perspectives on possible hospital interventions to reduce injuries, stress, and absenteeism among nurses.

The interviews suggested that "good" working environments for nurses were characterized by access to ongoing education, respect for nurses, and better staffing levels. Improving benefits (incentives and rewards, staff programs, and personal days), improving nurses' autonomy, and increasing flexibility in scheduling for nurses were also offered as positive ways for hospitals to create good working environments.

The researchers concluded that, "injuries among nurses are costly to hospitals in terms of lost productivity, disruption to work flow, and workers' compensation claims, as well as to nurses in terms of pain, stress, and possible loss of employment." They emphasized that the concerns they raised also have the potential to negatively affect retention and recruitment of qualified nursing personnel, as well as the delivery of quality patient care. 🏔️

To obtain a copy of the report, please contact Project Co-ordinator Shirliana Bruce by e-mail at shirliana.bruce@utoronto.ca or by phone at (416) 946-7152.

Continued from page 1: Study to determine optimal return-to-work processes

Other research has established that work disability evolves through specific temporal phases, for example, the acute, sub-acute and chronic phases of disability. Each disability phase is different when considering the individual risk factors, the role of the social environment and how effective various interventions might be. There is also evidence that work accommodation is crucial to successful return to work. However, there is limited information about how many individuals are offered work accommodation, the

optimal timing of the offer, and the ideal process for making the offer.

The results of the study will be transferred to key audiences, including clinical and workplace, using already established knowledge conduits. The results will also be used as the foundation for a longitudinal study that will follow a group of injured workers over a period of time. This will enable researchers to examine causal relationships, and may provide more information about what factors are critical in optimal return to work. 🏔️



Policy-Makers

INTERNATIONAL STUDY ON LABOUR MARKET EXPERIENCES AND HEALTH TO BEGIN THIS FALL

Understanding the relationship between people's labour market experiences and their health status has important implications for policy-makers around the world.

This fall, the Institute will take the lead on an international, multidisciplinary study that will delve into these issues. The project, led by Institute Scientist Dr. John Lavis, will examine the impact of labour market experiences and health within the different policy and economic environments of four countries—Canada, United States, Germany and Sweden. The countries represent the range of welfare-state types in developed countries.

“By studying the relationship between labour market experiences and health within these very different environments, we hope to understand the contextual factors that affect these



relationships,” says Lavis. The team will explore experiences such as job insecurity and job strain within the four countries and how they have changed over time. They will also examine the association between unemployment, job characteristics and self-reported health and disability. The use of longitudinal data from each of the countries will enable comparisons within and between countries over time.

Co-investigators in the study include: Dr. Cameron Mustard, the Institute's scientific director; Dr. Alina Gildiner, the current Mustard Fellow;

Dr. Benjamin Amick an IWH adjunct scientist and professor at the University of Texas, Houston; and Chris McLeod, a research associate at IWH who will be embarking on his PhD studies at the University of York in the UK this September. His thesis will focus on the relationship between unemployment and health within each of the study countries.

This project builds on the work of a two-country study, whose results were presented at the Canadian Health Economics Research Association's (CHERA) annual conference in Halifax this May. 🏔️

IWH PROVIDES UNIQUE OPPORTUNITY FOR LEARNING

Data analysis is a key component of most research projects. It provides researchers with a deeper insight into a particular issue or topic and helps to quantify a hypothesis.

For Jason Pole, a PhD student, the Institute has helped him expand his data analysis skills through his work on various Population/Workforce Studies projects.

Recently, Pole was involved in two projects in which he analyzed data drawn from large population-based surveys. He is part of a team that is examining different types of contingent work (e.g. part-time work). “We're trying to assess how not having a full-time job may affect a worker's health,” Pole says.

He was also part of a project team examining the calculation of youth injury rates, which resulted in a suggested new method for calculating these types of rates.

This summer, Pole will be analyzing data for a return-to-work (RTW) study, led by Scientist Dr. Renée-Louise Franche (see *RTW story* on page 1).

In his second year of the PhD epidemiology program in the Department of Public Health Sciences at the University of Toronto, Pole hopes to finalize his thesis topic over the coming months.



Jason Pole

He has a Master's degree in epidemiology from Queen's University.

Pole was recently awarded first prize for his poster presentation at the annual Public Health Sciences Student Day at the University of Toronto. He used a large dataset to outline the association between asthma, low-back pain and depression.

He says that his Institute experiences have been quite rewarding as he's been exposed to researchers from a variety of disciplines, including economists and social scientists. “I've also learned new skills, especially in terms of using larger, more complicated datasets, that have broadened my knowledge base,” he said. 🏔️



Clinical

KNOWING EXPECTATIONS ABOUT RECOVERY HELPS PROGNOSIS

Clinicians who know and understand their patient's expectations about recovery from a work-related injury can better predict when their patients will be better.

In a study led by Institute Senior Scientist Dr. Donald Cole, patients' expectations were found to play a predictive role and, taking them into consideration, can reduce the physician's uncertainty about recovery time by about one-sixth.

The study, published in the *Canadian Medical Association Journal*, followed a group of 1,566 injured workers and found that those who had a more positive outlook about their recovery, regardless of their level of injury, returned to work sooner. "These workers also reported feeling better than those who had more negative or uncertain expectations," says Cole.

All of the study participants were interviewed at five predetermined intervals over one year following a work-related injury and claim to the Workplace Safety and Insurance Board. A worker's perceptions about progress to date, expected change in condition, and expected length of time to return to normal activities were significant predictors of recovery. Recovery was measured using four indicators: the number of days off work, pain grade, quality of life, and functional status of the injured area.

Cole suggests clinicians try to get to the root of negative expectations. "Listening to injured workers' expectations may not only be therapeutic in the clinician-patient encounter, but may also uncover barriers to return to work that the patient and the physician can deal with together," adds Cole.

Literature review: surgery for patients with a pinched nerve

There is not enough evidence at this time to support the use of cervical spine surgery to reduce pain and disability in patients with a pinched nerve.

According to a medical literature review conducted by the Cochrane Back Review Group, some patients have short-term pain relief following surgery. After one year, however, there were no differences in outcomes between the group of patients who had the surgery and those who did not.

As a result, the reviewers state that it is not yet clear whether the risks of cervical spine surgery are offset by the benefits. They suggest that more large-scale randomized trials are needed to provide clear evidence.

The review, whose results were published in *Spine*, included two trials involving 130 patients.

To view this study's abstract, visit <http://www.cochrane.iwh.on.ca/review.htm> and click on "Surgery for cervical radiculomyelopathy."



Institute News

Call for abstracts for conference

Clinical and academic researchers are invited to submit papers and/or posters to the *First International Conference on Symptom, Diagnostic, and Disability Validity: Improving Patient Outcomes* to be held Sept. 26 to 29 in Markham, Ontario. The Institute is one of the sponsoring organizations.

The conference is the first international meeting of its kind. It aims to improve patient outcomes by disseminating and fostering advances on the assessment of symptom, diagnostic and disability validity.

Poster and paper submissions should address one of the conference's five themes, which include diagnostic validity, physician/patient communication and medical, ethical and legal aspects of symptom, diagnostic and

disability validity. A cash prize will be awarded to the principal author of each of the winning posters. Deadline for submissions is June 30, 2002.

For further information, visit the conference's web site at www.icpro.org.

Tell us what you think!

We're interested to find out if *At Work* and *Infocus* are meeting your needs, how you're using them, and what you think needs to be changed.

A two-page survey is inserted into this month's newsletter. Please take a few moments to complete it and return it to us by fax at (416) 927-4167 or you can complete the survey online at: www.iwh.on.ca/survey.htm

Questions about this survey may be directed to Manager, Communications, Kathy Knowles Chapeskie by e-mail at kchapeskie@iwh.on.ca or by phone at (416) 927-2027 ext. 2115.

at work

Published by Institute for Work & Health
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Issue #28 June 2002 ISSN # 1261-5148

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