



## Looking upstream to understand low back pain and return to work: Psychosocial factors as the product of system issues

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### ABSTRACT

Low back pain (LBP) is the most common and expensive musculoskeletal (MSK) disorder in industrialized countries. There is evidence that personal and occupational psychosocial variables play a more important role than spinal pathology or the physical demands of the job. However, it is unclear which psychosocial variables are most important. The objective of this study is to understand which psychosocial variables are deemed most important to various workplace stakeholders involved in the process of returning a worker with LBP to work. Nine focus groups were convened with injured workers, small and large employers, unions, health and safety associations, physicians and non-physician clinicians, return to work coordinators and compensation board representatives in Ontario, Canada. A qualitative grounded theory approach was applied to explore, from their perspectives, important psychosocial factors that prevent the promotion of early and safe return to work (RTW) for individuals with LBP. While the study began by asking questions related to the various psychosocial factors and their association to LBP and RTW, it took an interesting turn. The majority of study participants described how psychosocial factors were the product of larger systemic/organizational issues. Rather than focusing solely on individual psychosocial factors, respondents described how the context of a much larger system, and the complex interplay between the many different components of that system, contributes directly or indirectly to the treatment of LBP and RTW. It is the interrelationships between these systems that determine the process of returning an injured worker with LBP back to work. Although it is important to understand how psychosocial factors affect RTW, organizational structures within our social context seem to play a role in shaping how all stakeholders see and emotionally respond to LBP and RTW, as well as the degree to which they can envision taking action on them. We need to consider moving beyond a psychosocial conceptualization of LBP and RTW into a sociopolitical and economic conceptualization. This reconceptualization provides insight into the “upstream factors” associated with LBP and RTW.

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### Introduction

Despite over two decades of research, the cause of LBP in the majority of individuals remains elusive (Pincus, Burton, Vogel, & Field, 2002; Schultz, Crook, Berkowitz, Milner, & Meloche, 2005). Some medical opinions posit that low back pain (LBP) is partially due to an evolutionary weakness in our spines (Nachemson, 1994). There is also some evidence that physical demands such as lifting, bending, and twisting are associated with low back pain (Coste, Delecoeuillerie, Cohen de Lara, Le Parc, & Paolaggi, 1994). However, association is not equivalent to causation and years of teaching proper lifting techniques and body mechanics has not helped.

Although there are numerous reasons why individuals experience LBP, the primary focus of this paper is to explore this issue in the context of work. Research has shown that personal and occupational psychosocial variables play a more important role than spinal pathology or the physical demands of the job (Waddell, 2004). Psychosocial factors are those factors that affect a person psychologically or socially. Systematic reviews in the area of chronic (i.e., lasting more than three months) LBP have examined biopsychosocial determinants (Hartvigsen, Lings, Leboeuf-Yde, & Bakketeig, 2004) and occupational psychological factors (Linton, 2001) as predictors of chronicity/disability. However, it is unclear which psychosocial variables are most important (Pincus et al., 2002) in relation to return to work (RTW). Since some psychosocial factors are believed to have a large impact on RTW after a back injury, examining psychosocial factors appears to be an important part of prognosis.

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In addition to focusing on the importance of psychosocial factors and RTW, employers, insurers, injured workers, and other workplace stakeholders have expressed an interest in RTW interventions. A systematic review of the effectiveness of workplace-based RTW interventions found that they can reduce work disability duration and associated costs (Franché & Krause, 2002). Studies in Quebec and the Netherlands have suggested that return to work coordination at the workplace may reduce disability and improve RTW following an episode of LBP (Anema et al., 2007; Loisel et al., 1997). In these studies, the intervention included a health care professional leading the RTW coordination by first identifying the workplace barriers and then facilitating a meeting at the workplace with the goal of finding solutions and devising a RTW plan. Each intervention was tailored and implemented with consideration of the social and insurance settings of each jurisdiction (Quebec and the Netherlands). Such interventions are difficult to replicate as each jurisdiction has its own workers' compensation system, each workplace has its own unique circumstances, and within the workplace, different individuals ranging from occupational physicians/nurses to human resource managers are responsible for coordinating the RTW of an injured worker. These issues have led to the need for developing specific RTW interventions that are tailored to fit the needs of each jurisdiction and each workplace (Durand et al., 2007).

The purpose of this study is twofold. First, we explored which psychosocial factors were deemed most important to various stakeholders involved in the process of returning an injured worker with non-specific sub-acute LBP back to work. Second, we sought to obtain feedback from key workplace stakeholders regarding a draft workplace RTW program developed using an intervention mapping approach (Ammendolia et al., 2009). This paper explores the results from our first objective.

## Methods

### Grounded theory approach

Using qualitative methodology, the study employed a grounded theory approach (Morse et al., 2009; Strauss & Corbin, 1990). Formally introduced by Glaser and Strauss (1967), it has gained considerable popularity in the social sciences and may be the most widely used qualitative design (Bryant & Charmaz, 2007; Denzin, 1994; Olesen, 2007). Grounded theory is a process of social inquiry that utilizes generalized knowledge that is derived from specific observations of phenomena from the field. These observations can be used to build theory. The main purpose of using a grounded theory approach is to develop theory through understanding concepts that are related by means of statements of relationships (Strauss & Corbin, 1990). Using the concepts from grounded theory, this study began from the experience of the research participants. The data analysis stage focuses on finding recurrent themes or issues

in the data, and finally into developing or refining a theory about the phenomenon. To build this study's theory, a comparative analysis with different stakeholders' perspectives was used.

In grounded theory, generating theory is "grounded" in semi-structured interviews, fieldwork observations, case-study documentation, and other forms of textual material (Pidgeon, 1996). The grounded theory approach is based on the notion that data should be collected and analyzed in a way that allows the basic social, psychological, and structural processes inherent in a given phenomenon to emerge naturally. Grounded theory was deemed to be the most appropriate qualitative methodology for this study mainly because it provided a systematic approach to explore the multiple realities of various viewpoints (Guba & Lincoln, 1994) and to discover how meaning and interactions were constructed. Our study considered the multiple perspectives of workplace stakeholders in relation to LBP and RTW; an area where to date there has been little research. The data generated from this study was used to develop theory based on their insights.

### Participants and recruitment

Nine focus groups were convened with a total of 59 key informants. The focus group sessions took place between February 25th, 2008 and December 18th, 2008. Study participants include: non-physician clinicians, physicians, injured workers, union representatives, compensation board representatives, return to work coordinators (RTWc), small employers, large employers and health and safety consultants (see Table 1). The focus groups examined knowledge shared among group members.

The study involved purposeful sampling (Patton, 2005), the rationale of which is to select information-rich cases whose study will illuminate the research questions under study (Morse & Field, 1995). Potential participants were identified through previous contacts with members of the research team. The larger research team consisted of representatives from each of the different workplace stakeholder groups. Thus, each team member was able to disseminate information regarding this study and approach key stakeholders within their organizations to provide names and contact information of potential participants. In addition, the compensation board also provided other names and contact information of potential participants not otherwise accessed by the research team for the union, large employer, compensation board representatives and clinician focus groups. These sampling strategies ensured that a robust sampling technique was employed.

### Data collection procedure

For this study, focus groups were conducted with stakeholders using semi-structured interview guides. These guides were used to gather information about which psychosocial factors they believed

**Table 1**  
Description of focus group participants.

Focus group	Number of participants	Type of participants
Non-physician clinicians	5	Chiropractors, physiotherapists, ergonomists, occupational therapists
Physician	4	Family physicians, specializing in occupational health
Injured workers	6	Sustained a work-related injury and either returned on modified duties, or did not return to work
Union	8	Canadian Union of Public Employees, Industrial Accident Victims Group of Ontario, Teamsters, Toronto Police Association, Service Employees International
Compensation board representatives	11	Managers, adjudicators, nurse case managers, psychologists
Return to work coordinators (RTWc)	6	RTWc located in a tertiary hospital setting
Small employer	5	Employers with less than 20 employees
Large employer	9	Employers with more than 500 employees
Health and safety consultants	5	Representatives from across all 14 Health and Safety associations in Ontario

to be most important for returning injured workers to work. Through this method, it was possible to gain an understanding of the stakeholders' perspectives of their unique challenges with returning injured workers back to work and the implications of those challenges when seeking to create an intervention geared towards improving the RTW process.

Four of the nine focus groups (union, compensation board representatives, large employer, health and safety consultants) were conducted during a previously planned conference over lunch. This was an advantageous approach to conducting focus groups as the potential participants were already scheduled to attend the all day conference.

The issue of geographic dispersion among the physician participants led the research team to consider creative means of data collection. Co-locating physician participants for a face-to-face focus group was not possible as the participants of this study were located in rural, suburban and urban areas across the province of Ontario, Canada. Adobe Connect™ is an online system originally developed for web conferencing and online meeting services. It allows meeting participants to view and interact with material from different locations. Due to the diverse locations of the physician participants, we used this technology to host the focus group. For the purpose of the focus group, participants dialled into a conference call hosted by the focus group interviewers. Simultaneously, they logged onto a website using a password that had been emailed to them. Once logged on, the website showcased a power point presentation that helped orient participants to the issues at hand, and stimulate discussion.

The other three focus groups (injured workers, small employer, RTWc) were scheduled at a time and place convenient to most participants.

Although three different modes of data collection were used—conference, web conferencing, and traditionally scheduled around convenience—the interviewers maintained the same rapport and level of engagement with all participants regardless of setting. The dialogue among focus group participants remained robust and the quality and content of the transcripts did not appear to have any important differences across the groups. All focus groups were approximately 60–90 min in length.

#### Focus group questions

The interview guides for each of the nine focus group sessions had a similar structure with additional components tailored to the different kinds of stakeholders. The following questions were initially posed to elicit their views and understanding of the most important psychosocial barriers of RTW:

- (1) What are some of the individual and workplace challenges related to the process of RTW?
- (2) How can we address some of these challenges to improve the process of RTW?
- (3) Who is responsible (injured worker, supervisor, co-workers, unions, employer, and health care provider) for implementing some of these suggestions for improving the RTW process?

In studies that use grounded theory, researchers look for ideas by studying data and then returning to the field to gather focused

data to answer analytic questions and to fill conceptual gaps (Holstein & Gubrium, 2003). Thus, as the focus groups progressed, and consistent with grounded theory, the guide became a less important source and the questions asked were directed by the emergent themes and ongoing iterative analysis of the data.

#### Data analysis

The transcripts from the focus groups were coded and analyzed using a constant comparative approach (Brown, Weston, & Steward, 1995). To begin coding, as transcripts became available they were read two or three times, with the following questions in mind: Are there similarities/differences between transcripts? Are there similar ideas that cut across each of the transcripts? When are the ideas similar or different? What were the initial impressions and how have they been substantiated and unsubstantiated? Is there a central idea (e.g., on challenges of RTW) with a series of subplots, or is it more like a series of ideas and thoughts described by the respondents? Answers to these questions (which eventually led to more detailed questions) were highlighted in the margins of the transcripts.

Once codes were developed, they were grouped at a higher, more abstract level termed *categorization* (see Fig. 1). Categories were generated through the same analytical process of making comparisons to highlight similarities and differences that is used for coding. Categories provide the means by which theory can be integrated (Strauss & Corbin, 1990).

Several steps were taken throughout the entire research process to address concerns about the trustworthiness of the data analysis. For example, all transcripts were read, re-read and analyzed by the first two authors. In addition, a select number of transcripts were provided to the larger research team with a summary of the main emerging themes. The team was asked to question and play the role of “devil’s advocate” towards the findings (Kvale, 1996). Agreement of common themes among team members was reached. Sandelowski (1998) would argue that, since multiple realities exist that are dependent on subjective interpretations, validation among co-researchers is questionable. We agree that reality is multiple and subjective but defend the value of dialogue among researchers, not merely to verify that data are labelled and sorted in the exact same way, but to determine whether or not various researchers would agree with the way those data were labelled and sorted (Woods & Catanzaro, 1988).

Ethics approval from the University Health Network Research Ethics Board was obtained for the study. Each respondent signed a consent form after a verbal explanation of the study. Injured workers, in particular, were assured that their participation (or lack thereof) would have no bearing on their health care treatments, and that the information they provided would not be reported to the compensation board. All respondents were assured that appropriate measures for anonymity and confidentiality would be followed according to the standards of the hospital’s research ethics board.

#### Results

While the study began by asking questions related to the various psychosocial factors and their association to non-specific sub-acute LBP and RTW, the respondents guided the process in a different

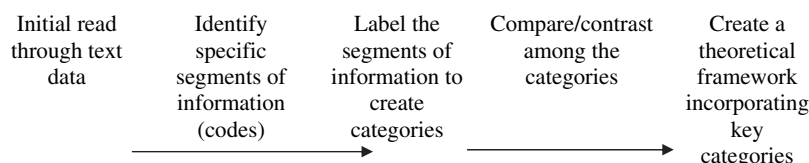


Fig. 1. The categorization process.

direction. The majority of respondents described how psychosocial factors were the product of larger systemic/organizational issues. Rather than focusing solely on individual or workplace psychosocial factors, respondents described how the context of a much larger system, and the complex interplay between the many different components of that system, contributes both directly and indirectly to the management of LBP and RTW.

Two main themes with several sub-themes emerged from the data. The first theme describes how the *culture of a community* can stimulate psychosocial factors that negatively impact RTW. The culture of a community is comprised of where you come from (i.e., community environment), the cultures within that community, and where you work (i.e., the culture of the workplace). For the purpose of this study, culture consists of symbolic vehicles of meaning such as the values, beliefs, behaviours, practices and material objects that constitute a way of life (Swidler, 1986). These symbolic vehicles of meaning are the means through which “social processes of sharing modes of behaviour and outlook within [a] community” (Hannerz, 1969: 184) take place. The second theme examines *the way in which compensation, healthcare, and workplace systems (dys) function and delay the RTW process*. Respondents described how the complex and often fragmented interplay within these systems produces a perceived lack of motivation to RTW and contributes to a perceived entitlement philosophy. In addition, the systems involved with RTW were described as ineffectively communicating with one another, and when they are, respondents described how conflicting information from employers, health care providers, employers, and union representatives produce feelings of resentment and depression in the injured worker. Respondents also described some of the *unintended negative consequences* that evolve as a result of these larger system issues that further impede RTW.

#### *The community culture and the cultures within a community*

##### *Where you come from*

According to several respondents, the role of the community environment influences certain psychosocial factors that influence RTW. In particular, the physician focus group described how attitudes that workers have towards injuries, recovery times, and the compensation system are “inherited” from the family they grew up with and influenced by their community environment. According to this physician:

We see differences cross-culturally... [Name of town] is sort of a blue collar town...and we find that a lot of attitudes that the workers bring towards work hardiness and taking time off and sort of compensation attitudes and missing time seem to be inherited from the family they grew up in... We inherit that from a culture and from a region and from the type of community we are in.

In addition to the community culture, there are other factors such as the cultures within a community to consider. For example, several respondents described some of the perceived difficulties that immigrant workers face following a workplace injury. As this union representative explained, language barriers exacerbated the process of understanding the injury trajectory and the benefits of early RTW:

We are dealing with a lot of immigrant workers now, and it's the language barrier, because they have a really hard time expressing themselves, with everybody, not just employers but also the medical community, trying to make them understand what's wrong with them... That plays a big, big [role] because it intertwines with knowledge of what's going on, what's happening to themselves and that's I think where you start getting into fear of re-injury, catastrophizing, depressed mood...

Respondents also described how new immigrants tended to unwillingly expose themselves to injury because they were afraid of reporting hazardous situations. They explain that there was a fear among new immigrant workers of losing their job and thus they may not report an injury until they were so badly injured, that a job modification would not help their situation. As this Health and Safety representative pointed out:

Sometimes you get immigrants coming to Canada... they are being exposed to risks that they don't feel safe to report the hazards. They don't feel safe in reporting even that they've got some aches and pains until they reach breaking point or something tragic happens.

Several respondents described how some cultural beliefs impeded recovery and RTW. For example, this non-physician clinician described how one injured worker's cultural beliefs prevented him/her from doing what was believed to be the necessary exercises needed for successful recovery:

Depending your culture, your belief system. For example, in some cultures, when we try and get them back to work, you get them in a gym and exercise; it goes against their cultural beliefs to be sweating. So that whole process of an active recovery doesn't happen.

It is evident from this quote that clinicians' beliefs played a role in characterizing the RTW process. This quote revealed how their ideas about the management of LBP were constructed through their own “professional cultural” beliefs (active recovery requires sweating).

##### *Where you work*

Respondents across all focus groups discussed how various workplace factors played a key role in perpetuating and (mis)managing an early and safe RTW. Several respondents described how psychosocial factors, such as co-worker support (or lack thereof), fear of re-injury, perceived favouritism of certain employees over others, and the importance of support and validation from a supervisor, were created by the organizational structures at the workplace. For example, the size of the workplace, the need for the employer to efficiently run their business and the lack of appropriate modified duties were described as creating a negative and unproductive environment for the returning injured worker.

Several respondents described how the size of the workplace influenced whether there was support for the injured worker to claim compensation in the first place. As this non-physician clinician stated:

I do find, if you work for a large organization, you are very likely to say, “I'm going on compensation”... but if you are working for a little, small company a lot of times the employers are saying, “[We] don't want you on Workers Compensation What can we do so you don't do that?”

In particular, small business owner respondents described the difficulties they encounter when modified duties move from temporary to permanent:

I don't want to sound crass when I say this but, if this injury is going to be an injury that is going to last them forever and they've got a certain job they've been doing for you, because you are a small employer, you sometimes do not have the scope of work available to put first in another responsibility where you can employ him forever.

Many respondents described the lack of modified work as one of the major factors that delay RTW. According to this union representative:



I don't see [it] in terms of the [psychosocial] work factors. For example, my experience is along the lines of the employer often looking to do the quickest, easiest accommodation fastest as opposed to what may be in the best interests of the worker and how that worker feels in terms of their work placement.

One compensation board respondent, in particular, described how the term *appropriate* modified work could be problematic depending on whether you were an employer, an injured worker, the compensation board, or even on factors such as gender. He described how even the most seemingly straightforward modified duties solution can be very complex and deemed inappropriate by the injured worker:

The RTW plan from the employer was that their light work was in a particular area. Unfortunately, there was a male worker and the light work was all done by females. And by putting this individual into that circumstance, the hit that he would take from a personal pride standpoint, he could not allow himself to do that. There was nothing wrong with the work from a [compensation board] standpoint [or employer standpoint]. [We said to the male worker], "You have to do it."...

From the injured worker's perspective, this was an obvious misfit. This misfit contributed to their perceived lack of choice and loss of control to refuse modified duties that were socially inappropriate. Respondents believed that situations, like the one above, create an atmosphere whereby the injured worker felt devalued by both the employer and his/her co-workers, leading to negative psychosocial factors such as anxiety and depression and a general loss of a sense of belonging. As these union representatives explained:

U1: The worker feels that they are a burden to everybody and they are not valued... I see it all the time, they [injured workers] say, "I can't do what I used to do." They get harassed from other co-workers, they get called names sometimes, and although they want to be productive, it is very difficult for them to have to deal with it. U2: Plus... as soon as they [injured workers] step into the workplace... that's where you get the anxiety and the depression.

*The way "systems" (dys)function delay RTW.* When a worker becomes injured, they enter into complex relationships with the compensation system, unions, workplace, and health care system. How these systems interact with one other and with the injured worker can affect the RTW process. Below, the respondents describe their interpretation of how psychosocial factors associated with a delay in RTW were the product of these larger systems issue.

During the compensation board representatives' focus group, one respondent reflected on the need for players within the various "systems" to look at their role in the process of RTW:

It is interesting, sort of just as a thought, that this group sitting here looks at worker factors and employer factors and we haven't really talked about compensation factors or the other factors, so it is just an interesting point that we haven't looked at ourselves in this picture.

As similar statements emerged from the other focus groups, we encouraged respondents to describe how system factors affected the RTW process. Two streams of thought surfaced: first, the systems (i.e., compensation, union, and healthcare) do not motivate RTW and in fact, often perpetuate an "entitlement philosophy" that impedes the RTW process. Second, there is a lack of communication among the system components that further delays the process.

#### *Motivation and entitlement*

The majority of respondents within the small and large employer groups agreed that the compensation system provided

financial incentives that do not motivate injured workers to RTW after a workplace injury. According to this large employer:

Also the motivation, especially if they are getting whole pay with [the compensation board], there is no motivation of returning back to work... they go off and they get journeyman's right while they are off on compensation, while they are actually making more money off on the system, it is very hard to get them back to work...

These participants also believed that, in addition to the compensation system, unions indirectly supported an "entitlement philosophy" which contributed to a lack of motivation to RTW. A few respondents believed that because the role of the union was to advocate for the individual, they tended to reinforce a worker's belief of "entitled to time off." As this large employer stated:

I don't like to pinpoint the union but in some cases, the union has something to do with the reinforcement of the entitlement thinking.

During the RTW coordinator focus group, respondents often cited union policies as barriers to RTW. For example, bargaining units often superseded an injured worker's rights to RTW. Depending on the nature of the work, some workplaces have more than one union involved with different collective agreements. Therefore, workers cannot "cross over" to jobs that they are not unionized for. As this RTW coordinator explains:

[If a worker is in a] heavy job and then they get injured and now they need administrative type duties but they can't do that because then you're taking a job away from an office worker and it's not the same union.

Another RTW coordinator mentioned that an employer may have an appropriate job for an injured worker, but it is not unionized, which then sets up a "combative" relationship between the union and employer:

Or sometimes an appropriate job might be outside the union and that's what an employer can offer and so now it's saying to the plant, hey look we've got this job for you but you have to go outside of the union for it... the worker has to really side with the union... sometimes the workers have a great relationship with their supervisor while they are working and then an injury happens and they end up being represented by the union quite heavily and it sets up a conflict.

The majority of injured worker respondents agreed that neither the union nor the compensation system helped to motivate them to RTW, but they cited very different reasons. In response to the union and their role in reinforcing an entitlement philosophy, the majority of union-represented injured workers did not agree. These injured workers often described the union's role in the process as absent. This dialogue between two injured workers illustrated their perceived lack of communication with the union:

INJURED WORKER 1: They [union] don't contact you. They just contact you when your dues are. They remind you about your dues.

INJURED WORKER 2: Mine hasn't phoned me once to see how I'm doing or anything.

The notion that injured workers felt entitled to time off and enjoyed their "compensation holiday" was strongly contested by the injured workers during their focus group. Several injured workers shared either their personal experience or knew of others' experiences of how difficult it was to financially depend on the compensation system. They described how prior to their injury,

they performed overtime hours, but when the compensation board calculated their salary post-injury, those overtime hours were not taken into account. The compensation board pays for 80 percent of an injured worker's salary. However, with overtime hours not being considered, many injured workers described that their pay decreased to approximately 60 percent of their salary. As this injured worker explained, there was no financial incentive for being dependent on a compensation system:

My adjudicator said, "Don't worry, you'll be covered [even] if you can't ever go back to work, you're covered." Covered for what? Making \$24,000 less a year than I was the year before I got hurt. I am making \$24,000 less with no pension and with no medical. I want to go back to work, don't even start talking about that [not going back to work].

The decrease in salary contributed to feelings of stress and powerlessness. According to this injured worker:

We're all going broke. Like... if you have money problems, you've got stress and basically the [compensation board] is making us go broke.

During challenging economic times when jobs are scarce, and in communities where jobs are already in short supply, respondents described situations whereby not only do injured workers want to return to work, but they will often accept modified jobs that are not appropriate for them out of fear of losing their livelihood. As this HSA representative noted:

If you are in northern Ontario you don't see a lot of work refusals and stuff like that because they [injured workers] don't want to jeopardize their job

Respondents explained how the recent economic recession negatively affected all industries across the province of Ontario, but particularly affected industries, such as mining and logging, in northern Ontario. For these injured workers, the risk of losing employment and suffering the negative effects of job loss resulted in a lack of refusals for modified work (regardless of whether the "fit" was appropriate or not).

#### *Lack of communication, lack of coordination and fear of communication*

Several injured workers reported feelings of frustration culminating in stress and anger as a result of perceived delays and confusion due to interactions with the compensation system. For example, the majority of injured worker respondents described how sorting out their compensation benefits through the adjudication process was often difficult and frustrating. This dialogue between an injured worker and the interviewer illustrates how the compensation system's perceived lack of continuity of care contributed to these feelings of frustration:

SS: So when your adjudicator gets switched on you. What does that mean for you? What do you have to do?

INJURED WORKER: You start all over.

SS: Start all over?

INJURED WORKER: Yea, it's frustrating. To get on the phone and you've got a bad attitude because now you have to go through the whole story all over again. And they wonder why you have such a bad attitude!

Several RTW coordinator respondents agreed with the experience of the injured worker above. They described how many of their clients get "passed around" from adjudicator to adjudicator, which added to the frustration injured workers experience as they wait to receive their benefits:

The fact, for a lot of clients, is that they've been passed around from adjudicator to adjudicator to adjudicator so there is no consistent care for somebody to really understand the case... it [the case] has to be re-explained all over again and it just gets mind numbing.

As this RTW coordinator explained, the health care system and compensation system need to communicate and work together to ensure that the injured worker is receiving timely care and is in receipt of their benefits in a timely manner. However, these systems do not always work together and, as a result, injured workers get lost in the system. This RTW coordinator recounted some of the common questions and subsequent challenges:

"Why am I not getting paid now?" Well that was a decision made by two adjudicators ago, and even making sure there is follow-up within the health care system. "How many times am I going to get dropped?" And they are waiting for something to happen. You know they call and call and call and get a voice mail every time and there is no follow-up on whether that MRI is booked, or the follow-up with their physician is booked. Challenges [are greater] when they don't even have a physician. Many don't have a family doctor. WSIB is sort of that point of contact. If they don't have any communication then the client is just out wading in the water.

Focusing specifically on the health care system, physicians, in particular, and the coordination of scheduling of health care treatments were perceived as contributors to delaying an RTW plan. During the physician focus group, one physician was quite critical of colleagues who delay the RTW process when they "advocate" for patients:

You know, physicians who tend to be what I call "advocates" for their patients. But are not really advocates for the patient's health. No, they do whatever the patient says ...The underlying cause there of course is the employee doesn't want to go back to work and so you know, when you get the root cause of why is the employee, who probably could work, telling their doctor they can't work then you get into all those other factors, relationships at work, or those cultural factors, other sort of secondary gain etc.

This general critique among colleagues suggests that physicians were divided regarding their role in the RTW process. The majority of physician respondents perceived the "role of the physician advocate" in a negative light. This quote illustrated how physicians may be contributing to the discourse of blaming injured workers and stigmatizing them (via their colleagues) and thus inadvertently were complicit in such marginalizing practices.

In addition to the perceived "physician-as-advocate" as barriers to RTW, a RTW plan generally includes health care treatments that could also contribute to this delay. These treatments were usually expected to be coordinated outside of work hours. Several respondents described how injured workers might perceive treatments outside of work hours to infringe on their lifestyle. Thus, it may be a "benefit" to both the injured worker and employer if RTW was delayed until there was full recovery from the injury. As this compensation board respondent explained:

As soon as they [injured workers] go back to work, we expect, the employer expects that the therapy occur after work or before work and the worker doesn't want to do that... while they're off [work], they can have therapy whenever they want. There is a lot of potential alterations to personal circumstances or lifestyle that can be attached to a RTW plan that for the most part, the other parties or compensation board don't care.

The majority of small employer respondents agreed that it was often difficult to accommodate an injured worker's health care treatments during work hours. In these cases, it was deemed more appropriate for the injured worker to remain on compensation and not RTW until they were able to fulfill their work hours. According to this small business employer:

Because well, what it boils down to is if it [health care treatments] causes such an interruption [while at work] then he's better off spending another month on workers comp and then come back... you're a small employer...[if] all of a sudden that guy leaves for three hours, well the whole crew doesn't do anything.

In more general terms, several respondents described how overwhelming it could be for an injured worker to coordinate seamlessly and simultaneously through the complexity of each of these systems. In particular, contradictory and conflicting advice among the system players added an additional layer of complexity to a worker's ability to RTW. As this union representative stated:

They [injured workers] are trying to navigate their way through these very complex situations and I think that then that makes people kind of nervous and insecure because if they don't know who is their ally... "The employer is telling me to do something, is that good or bad? The compensation board is telling me to do something, is that good or bad? My doctor is telling me to do something, is that good or bad?"

This situation becomes compounded, as it was perceived by several injured workers that if they asked too many questions in their search for clarity, it portrayed them in a negative light. These injured worker respondents described feeling afraid of "pushing too hard" for answers for fear of causing further problems for themselves and their employers. As this injured worker explained:

And the [compensation board] is not really contacting you and you don't want to chase, at the beginning you don't want to chase them down too much because then you are afraid you are going to get your work in trouble and then you're going to get in trouble... We don't know where to phone [for information] and you are kind of worried about who to ask because you don't want to throw too many flags up everywhere and then everybody's in trouble, right?

In addition, many small employers described how they also did not want to "push too hard" for an injured worker to return because it might create feelings of resentment and frustration. For example:

I think, you just can't upset the injured worker because if he comes back earlier than he thinks, he is just going to cause you another year of grief... if you upset the injured worker, he is coming back and in a week he is off again, and then he is off for another year.

A discourse of blaming the injured worker seemed to be a common theme among various stakeholders in the RTW process. These multiple sources of stigmatization and blame (from clinicians to workplaces etc.) influenced the psychosocial experiences of all stakeholders, in general, and that of the injured worker, in particular.

#### *Unintended consequences*

Several respondents also commented on how the overall conceptualization of *psychosocial factors* had a negative connotation, as it seemed to focus directly on the injured worker. This dialogue among three union representatives described the problem of taking such a "worker behavioural approach":

UNION 1: While I agree those are psychosocial barriers, what I don't like about them is they kind of have this undercurrent that it is kind of the worker's fault and I'm kind of not liking that... I think we are really perpetuating a stereotype and stigmatizing injured workers. I would have to say I am very uncomfortable with that so I don't know how we go somewhere else but I don't like starting here.

UNION 2: Yea, we are starting from a place of judgment. Does that capture it? It's a prejudice I believe.

UNION 3: Taking a worker behavioural approach to it.

Some respondents suggested that there were unintended consequences when taking a worker behavioural approach to understanding the psychosocial factors that influence RTW. Although several factors such as fear avoidance, anxiety and depression were discussed, one unintended consequence that emerged in the injured worker focus group, and has been largely ignored in the occupational health literature, was the issue of how changes in an injured worker's physical body affects their perceived emotional readiness to RTW. For example, all of the injured worker respondents described significant amounts of weight gain following their injury. They attributed their considerable weight gain to inactivity due to the injury. However, they also strongly believed that the compensation system was partially responsible for their weight gain. This dialogue between the injured workers and the interviewer described their views on the role of the compensation system, their weight gain and any potential future health problems:

INJURED WORKER 1: Another thing, weight gain. Everybody does that... I am 55 pounds over what I was when I was fit.

INJURED WORKER 2: Yea I'm eight months going on nine months [post-injury], so I'm 20–25 pounds I've put on.

SS: And how about you?

INJURED WORKER 3: Ten months [post-injury] and 15 pounds.

INJURED WORKER 1: Yea, when you talk to your adjudicator and I said, "The one thing that really bothers me about going back to work is...the weight... and they said the compensation board has nothing to do with your weight". If you gain weight and you have a nervous breakdown and a stroke, and high blood pressure, you know, you gained 60 pounds; the compensation board has nothing to do with that. I'm toast. Shocked. It has everything to do with this.

Although weight gain remained unrecognized by the compensation board representative it was a significant issue for injured workers. From the perspectives of the injured workers, weight gain was a work-related issue that impeded the RTW process.

## **Discussion**

Each of the above themes was used to create an overarching theoretical framework to build an understanding of how system factors "hit the pavement" at the psycho-behaviour level. Through the research process, we discovered that although psychosocial factors can have a significant impact on RTW after a back injury, they are not the only constructs to consider when determining which individuals are at risk of poor work outcomes. In fact, by taking a sociological perspective and looking "upstream" to what may have created or influenced the psychosocial factors associated with poor work outcomes, we get a holistic representation of the organizational structures within our social context that shape how individuals see and emotionally respond to LBP and RTW.

Workplace stakeholders are psychological and physiological individuals interacting with the social environment. Thus, the diagnosis of LBP solely on the basis of specific biomedical factors is

incomplete because the manifestation of LBP is a long and complex process that eventually appears as a symptom. To determine the *cause* of the symptom it is necessary to establish a relationship between the biomedical processes and the socio-psychological factors of LBP.

Similarly, RTW is a multi-faceted process that involves the injured worker, union, employer, healthcare, and compensation system. Many theories place the injured worker's ability to achieve a desirable RTW outcome through their own beliefs, expectations, locus of control, self-efficacy and coping at the centre of inquiry (Linton, 2001). Although there is literature that supports the injured worker as the ultimate agent of change in the RTW process (Franche & Krause, 2002) a critique to such an approach is that it can inadvertently blame the injured worker for unsuccessful RTW outcomes. There are various stakeholders involved in the RTW process and thus an injured worker's physiological and psychological position as an agent of change must be examined and understood within this wider social context. In fact, our findings revealed that psychosocial factors were often created and perpetuated by these wider social structures, thus limiting the injured worker's ability to act as an agent of change. By focusing our theoretical lens on the upstream factors, we attempt to bring some clarity to the challenges these factors pose for workplace stakeholders who struggle to limit their risk of injury, ill health, and poor RTW outcomes.

#### *The upstream factors*

The majority of respondents in our study described how various upstream factors impacted an injured worker's ability to RTW. The issue of culture arose in all of the focus groups, with the exception of the injured workers focus group. Very few individuals would deny the need for understanding and respecting differences among people based on factors such as gender, ethnicity, social class, sexual identity, or religious beliefs. Looking specifically at health-care arena, medical education tends to take a cultural competency approach by looking at the language and customs of particular non-dominant groups, especially their beliefs and behaviours surrounding health and illness (Mangus & Mick, 2000). The reasoning behind this approach is that when medical student learn characteristics of these groups, they can provide better health care because they will no longer hold ignorant or biased beliefs about those groups. However the problem with this approach, as was illustrated in this study, is that groups of people are often "lumped" together. As Hunt reminds us, "culture is neither a blueprint nor an identity; individuals choose between various cultural options... it is not possible to predict the beliefs and behaviours of individuals based on their race, ethnicity, or national origins"(2001:3–4). The need for a reflexive approach that provides space to challenge assumptions, confront the effects of power and privilege and to know people beyond labels may help develop a greater capacity for compassion and respect (Eckenfels, 2000) which could ultimately facilitate the RTW process.

Respondents also described how the concept of validating an injury, particularly with injuries that are "invisible", is often embedded in the policies/practices within larger institutional structures. Institutional policies/practices may be such that they foster or reproduce discourses of abuse; an expectation that injured workers will engage in "abuse" of their entitlements. A Quebec study that interviewed 85 injured workers found that more than half of the respondents described prejudices and stereotypes that portrayed all injured workers as scam artists who abuse the system (Lippel, 2007). As a consequence, the majority of injured workers in our study described the need to validate their injury to doubting employers, friends and colleagues. Other studies have shown that the need to

justify injuries results in considerable emotional trauma and anxiety, which leads to a diminished sense of social status within the workplace, family, and general community (Robert-Yates, 2003).

The literature shows that in addition to injured workers' descriptions of how they are treated with suspicion, they are often accommodated at work with difficulty or not at all (Beardwood, Kirsh, & Clark, 2005). The majority of respondents, particularly the injured workers described how the inability of some workplaces to find physically and socially appropriate modified duties produced psychosocial factors such as perceived lack of supervisory/co-worker support, perceived favouritism, and fear of re-injury. An injured workers' prolonged disengagement from the workplace could contribute to feelings of devaluation and a loss of a sense of belonging. Injured workers described feeling like they were a burden to others. Our findings suggest that the loss of emotional and social links to the workplace appear to impede RTW outcomes. Loss of physical links to the workplace has been discussed as a contributor to poor rehabilitation outcomes following long-term work disability (Waddell, 1998). Both epidemiological studies and clinical studies have shown that individuals with musculoskeletal disorders with longer duration of work absence make fewer treatment gains (Marhold, Linton, & Melin, 2001; Scerri et al., 2006; Sullivan et al., 2005) and their likelihood of returning to work significantly diminishes (Frank et al., 1998; Waddell, Burton, & Main, 2003).

These issues seem to be magnified for small businesses as the majority of small business employer respondents described feeling vulnerable with their ability to bridge the gap between running a business and offering modified duties. According to the occupational health literature, in small workplaces, the RTW rates are lower than in larger ones (Oleinick, Gluck, & Guire, 1995) and they are less likely to have RTW programs or policies (Brooker, Clarke, Sinclair, Pennick, & Hogg-Johnson, 1998). Barriers to disability management in small workplaces are related to structural issues (Drury, 1991). Our findings illustrate how each stakeholder group's experience is constructed in relation to the other. For example, employers' struggle as disciplinary agents in managing disruptions in the workplace and injured workers respond by protecting their personal and social identities in the face of the discourse of abuse associated with modified duties and RTW (Eakin & MacEachen, 1998).

Our findings propose that an injured worker's reactions to upstream factors within the compensation system, healthcare workplace and union result in a sense of diminished social status. The majority of injured workers described how they experienced a decline in their mental health status that set in motion a cycle of intense negativity, low self-esteem, and intense feelings of anger and frustration. Anxiety and depression are regarded as being responsible for a large percentage of work absence over the long term and often leads to job loss (Stansfeld, Fuhrer, Shipley, & Marnot, 1999). This coupled with what appears to be a failure on the part of compensation board representatives refusing to acknowledge that weight gain is a significant issue for injured workers further exacerbated this cycle of intense negativity.

Injured workers described how they experienced economic instability and weight gain as a result of their injury. Although only a few researchers have attempted to understand socioeconomic status and its relationship with obesity (e.g., Ball & Crawford, 2005; Ball, Mishra, & Crawford, 2003; Jeffery, French, Forster, & Spry, 1991), we know that in developed countries, individuals who experience economic instability tend to gain weight (Smith, Stoddard, & Barnes, 2009). Several studies have shown that individuals who suffer from depression, anxiety, and other mental health disorders are more likely to gain weight overtime and become obese (Parkes, 1987). Given that approximately eight percent of Canadians will experience major depression during their lifetime (Stephens & Joubert, 1999) and that depression frequently



co-exists along with other physical conditions (Buist-Bouwman, de Graaf, Vollebergh, & Ormel, 2005; Demyttenaere et al., 2006), such as chronic pain, this is an area in occupational health that cannot be ignored. Wilkin (2009) suggests a realist approach that takes into account the political economy of the body and conceptualizes LBP as both a biological and social entity (Wainwright & Forbes, 2000). LBP and RTW are concepts that have been socially constructed through health and lay discourses but they refer to physical and biological conditions that are beyond discourse (Wilkin, 2009). These concepts cannot be understood and explained only through observation and measurement; they have to be situated within the context of the social, historical and structural conditions of everyday life (Kumar, 2001; Williams, 1999). To understand the ontological depth of workplace stakeholders' experiences of LBP and the RTW process we need to take into account the perspectives of the workplace stakeholders, the context in which they live and the systems (i.e., unions, healthcare, employers, health and safety associations) devised by society.

All respondents in our study agreed that there was the need for better communication channels between the various workplace stakeholders involved with RTW. Studies have shown that communication among those involved in the RTW process is important to successful RTW (Dasinger, Krause, Thompson, Brand, & Rudolph, 2001). Those involved in RTW could adapt some of the principles of teamwork. For the purpose of this paper, we define teamwork as something that exists when two or more people are working together with a shared purpose. Thus, teamwork in RTW would require an explicit decision by the workplace stakeholders to co-operate in meeting a shared objective. Research has shown that teams working together in high-risk and high-intensity work environments, such as commercial aviation, the military, firefighting and rapid-response police activities, make fewer mistakes than do individuals (Baker, Gustafson, Beaubien, Salas, & Barach, 2005).

In Canada, the Health Council of Canada has identified improving teamwork as a critical component to both accelerating system change, as well as improving human resource management (Canada Health Council, 2007). Health care teams in primary care consist of different health professions (i.e., physician, nurse, pharmacist, social worker) working collaboratively to improve patient care. In health care teams, the physician or nurse is the team lead. Currently, there is a plethora of information on how teamwork contributes to quality health care for patients with complex needs through the cost-effective collaboration and coordination of health professionals (Opie, 2007). "Complex patients" are usually defined as having clinically advanced illness and they are among the most expensive cases in healthcare (Berk & Monheit, 2001).

We could apply the abovementioned approach of teamwork in health care to the context of RTW. For example, approximately 10 percent of individuals with LBP are considered to be "complex" because they develop chronic LBP and account for up to 85 percent of health care costs (Workplace Safety and Insurance Board of Ontario, 2006). These individuals pose the greatest challenge to the RTW process. To facilitate the process, key representatives within the unions, compensation system, workplace, health professionals, and the injured worker, could form a "RTW team." Instead of the nurse or physician as the team lead, a return to work coordinator could fulfill that role (Gardner, Pransky, Shaw, Hong, & Loisel, 2010). In fact, the job of the return to work coordinator is often understood as the bridge between the workplace stakeholder silos. Since RTW can be viewed as an interdisciplinary process among the different workplace stakeholders, a reconceptualization of the current approach to RTW into a teamwork approach might improve the process for everyone involved.

Caution is duly noted, as nature of this research was descriptive and exploratory, and thus cannot provide definitive conclusions.

However, with qualitative studies, the concepts generated are generalizable and may be transferable to other settings. Thus, the upstream factors we focus on here do enable us to highlight how barriers to RTW are sustained in the contemporary era as a structurally embedded phenomenon, and how it can prevent RTW from succeeding. We posit that the RTW process can be more effectively modified if the social context in which it occurs is taken into account.

## Conclusion

RTW must be conceptualized and understood within a systemic context that considers the interplay among the various systems. The upstream factors described in this paper are not to be conceptualized as simply placing constraints upon human agency, but as influencing and enabling psychosocial factors. We should not ignore the potential of interventions at the psychosocial level to improve RTW outcomes. However, researchers need to be mindful of the tendency within occupational health research to "psychosocialize" workers by turning structural factors into personality traits. Several respondents commented on how the overall conceptualization of "psychosocial factors" had a negative connotation, as it seemed to focus directly on the injured worker as opposed to focusing on the organizational factors responsible for delaying RTW. This "psychosocialization" can further stigmatize and disengage an injured worker. By exploring the upstream factors and the possibilities of a teamwork approach to RTW, research and policy makers can better direct their resources in the development of a comprehensive RTW program.

RTW is ultimately a social phenomenon that requires supportive social policy that will enable all the players to work together. Although proper individualized RTW coordination is useful and important, it cannot overcome policies that marginalize workers or interfere with safe and sustainable RTW.

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