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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.

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 (Franche & 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