Université de Montréal

EFFECT OF CONFLICTING ADVICE ON RETURN TO WORK IN PATIENTS WITH LOW BACK PAIN

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Effect of conflicting advice on return to work in patients with low back pain

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RÉSUMÉ

Plusieurs études ont documenté le rôle des facteurs psychosociaux dans la lombalgie. Cependant, peu ont exploré le désaccord perçu entre le patient et le clinicien par rapport à la gestion de la lombalgie. Nous avons mené une étude pilote longitudinale sur des travailleurs indemnisés pour une lombalgie, référés en physiothérapie par leur médecin traitant en suivant les objectifs suivants : 1) déterminer le désaccord entre le patient et le physiothérapeute, ainsi qu'avec le médecin, 2) déterminer si le patient a perçu du désaccord entre le médecin et le physiothérapeute, 3) explorer des facteurs associés sur le désaccord avec le clinicien et 4) déterminer si le désaccord avec le clinicien est associé avec la chronicité et l'incapacité perçue par le patient. Des entrevues téléphoniques ont été menées avec 35 travailleurs dans la semaine de leur référence en physiothérapie, et à leur retour au travail. La plupart des patients (97.1%) étaient d'accord avec le physiothérapeute, et tous étaient convaincus que le physiothérapeute donnait le traitement que le médecin aurait approuvé. Toutefois, seulement 71% étaient d'accord avec le médecin. Ceux en désaccord avec le médecin étaient insatisfaits avec le traitement prodigué (p=.05) et la qualité technique de la visite (p=.01). Le désaccord du patient avec le médecin n'était pas associé avec la chronicité et l'incapacité perçue par le patient. En conclusion, malgré les 29% des patients qui ont été en désaccord avec leur médecin, il est apparu que ce désaccord n'a pas affecté leur retour au travail ni leur incapacité au suivi. De plus grandes études devraient déterminer le rôle d'autres facteurs,

tel que les attentes des patients, dans la transition à la chronicité et l'incapacité perçue par le patient.

Mots-clés : Lombalgie ; accord ; psychosocial ; chronicité ; résultats ;

ABSTRACT

Several studies have investigated the role of psychosocial factors in low back pain (LBP), however few have explored perceived disagreement between the patient and clinician with respect to the clinical management of the LBP. We conducted a longitudinal pilot study of workers compensated for LBP who were referred to physical therapy by their treating physician with the following objectives: 1) to determine patient disagreement with the physical therapist (PT) and physician, 2) to determine whether the patient perceived any disagreement between the physician and PT, 3) to explore factors associated with patient disagreement with the clinicians and 4) to determine whether patient disagreement with clinician is associated with outcomes (chronicity and self-perceived disability). Telephone interviews were conducted with 35 workers within one week of referral to physical therapy and upon return-to-work. Most patients (97.1%) agreed with the PT and all believed that the PT was providing the treatment that the physician would have approved. However, only 71% agreed with the physician. Those who disagreed with their physician were dissatisfied with the care provided (p=.05) and technical quality of the visit (p=.01). Patient disagreement with the physician was not associated with chronicity and self-perceived disability. We conclude that although 29% of patients disagreed with their physician, this did not appear to affect outcomes. Larger studies should investigate the role of other factors, such as patient expectations, in the transition to chronicity and self-perceived disability in LBP.

Key words: Low back pain; agreement; psychosocial; chronicity; outcomes;

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LIST OF ABBREVIATIONS

CPQ	Chronic Pain Questionnaire
CSQ	Coping Strategies Questionnaire
CSST	Conseil de Securité en Santé du Travail
GHQ-12	General Health Questionnaire (12 items)
ICC	Intraclass Correlation Coefficient
JCQ	Job Content Questionnaire
LBP	Low back pain
ODQ	Oswestry Disability Questionnaire
PSS	Patient Satisfaction Subscales
PT	Physical Therapist

DEDICATION

À mes parents pour leur amour, soutien, et encouragements

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CHAPTER 1

INTRODUCTION AND STUDY OBJECTIVES

1.1 Introduction

Low back pain (LBP) has become a problem of epidemic proportions in industrialized countries, affecting 60-85% of the population at least once in their life (1). In addition, LBP places a significant socio-economic burden on society. In Canada, musculoskeletal disorders such as LBP have been ranked second after cardiovascular diseases in terms of total cost, accounting for $16.8 billion in 1998 (2). It is estimated that 50% of all workers are affected by LBP (3), and it is thus a leading cause of all work disability (4).

Several factors may affect return-to-work in workers disabled by LBP. Many studies have dealt with the mechanical aspects of LBP injuries, in order to try to develop effective prevention and treatment strategies. More recently however, there has been increasing attention placed on the role of psychosocial factors in LBP. In his award-winning 1987 article in Spine, Gordon Waddell (5) argued that the current medical model has failed, and if the LBP epidemic were to be stopped, the importance of psychological and social factors must be considered. In such a context, the patient-clinician interaction plays a crucial role. In support of that, Waddell concludes his article by claiming, *"the role of the physician as healer must be accompanied by his or her more ancient role as a counsellor, helping patients to cope with their problems"*.

Medical sociologist David Mechanic (6) observed that humans dislike uncertainty, the fear of unknown and have a need for understanding the meaning of their illness. In one study (7), the highest correlation of any predictor variable for return-to-work in compensated LBP, was the patient's ability to understand their "medical" condition. On the other hand, patients receiving a specific diagnosis for their LBP were 4.9 times more likely to develop chronic back problems compared to those who received a non-specific diagnosis (7).

The current project specifically addresses the case when the patient receives conflicting information from different clinicians. LBP patients are often seen and given advice by both physicians and physical therapists. Both clinicians have the obligation to inform the patient of the diagnosis and proper course of treatment. In this situation, the patient may *perceive* the clinicians to be in agreement or in disagreement with each other. Furthermore, the patient may disagree with the physician or physical therapist in terms of the management of their LBP.

To date, no studies have directly addressed this question, although one study did find that conflict between the clinician and the patients' own illness representation was associated with a negative outcome (8). However, the scale used to measure conflicting beliefs included both pre and post treatment items. If a patient had improved, they would obviously be more likely to agree that a treatment was effective than one who did not improve.

The objectives of the current study were to determine 1) whether patients compensated for LBP perceived the clinicians to be in disagreement with each other with respect to the management and diagnosis of the patient, 2) whether the patient perceived disagreement with either the physician or physical therapist, 3) to explore factors associated with disagreement and 4) whether disagreement is a predictor of return-to-work and disability.

The study design is prospective cohort. We conducted two telephone interviews of compensated LBP patients who have been prescribed physical therapy by their treating physician. The first (baseline) interview was at the beginning of physical therapy treatments and the second (follow-up) was conducted once the patient had returned to work. The baseline interview included demographic data (e.g. age, gender, height, weight, occupation, etc). The patient was then asked a series of questions to describe their back pain injury (e.g. date of accident, what they thought was wrong with their back, etc), their recall of the information provided by the physician (e.g. medications, restriction of activity, etc), their recall of the information provided by the physical therapist (e.g. what treatment modalities were being used, restriction of activity, etc), whether they thought the physician and physical therapist generally agreed on the management and diagnosis. Patients also responded to questionnaires on self-perceived disability (Oswestry Disability questionnaire), patient satisfaction with clinical visits (Patient Satisfaction Subscales), psychological distress (General health Questionnaire), coping strategies (Coping Strategies Questionnaire) and

their job characteristics (Job Content Questionnaire). A similar interview without the demographic and specific injury data was conducted once the worker returned to work.

1.2 Objectives

The specific objectives of the study were:

1. To determine the proportion of compensated patients who perceived the physician and physical therapist to be in disagreement with each other with respect to the clinical management of their LBP.

2. To determine the proportion of patients in disagreement with the physician and the proportion of patients in disagreement with the physical therapist with regards to the clinical management of their LBP.

3. To explore factors associated with perceived disagreement, if present, between the two clinicians, and between the patient and each clinician: physician and physical therapist.

4. To determine whether disagreement, if present, is associated with time to return-to-work and self-perceived disability.

1.3 Hypotheses

Hypothesis 1:

We hypothesize our patients to perceive their physician to be in disagreement with their physical therapist with respect to the clinical management of the LBP. The two health professionals may truly be in disagreement with each other, or it may be that the patient perceived them to be in disagreement. The focus is on the patient's interpretation rather than what the health professional actually said, because it is the interpretation that affects the psychological mindset of the patient and therefore the potential for an effect on return-to-work.

Hypothesis 2:

We hypothesize the proportion of patients in disagreement with the physician to be the same as the proportion of patients in disagreement with the physical therapist.

Hypothesis 3:

Identifying factors associated with disagreement may be of important clinical value. We hypothesize that patients who are less satisfied with their treatment will be those who would tend to perceive disagreement. These factors may be demographic (age, gender, educational level, marital status) or psychosocial (self-perceived disability, psychological distress, pain coping strategies or job-related).

Hypothesis 4:

We hypothesize that disagreement with the clinician may affect the patient negatively. As such, patient compliance with the prescribed treatment regimen would decrease. As a result, patients who disagreed with their clinician would be expected to return-to-work later and report higher self-perceived disability than those who agreed.

CHAPTER 2
LITERATURE REVIEW

2.1 Epidemiology of Low Back Pain

2.1.1 Epidemiological Concepts

Before describing the epidemiology of low back pain (LBP), key terms are described below. Cumulative incidence is defined as the proportion of the population that experiences LBP for the first time within a specified time period. Point prevalence is defined as the proportion of the population that experiences LBP at a specific point in time. Period prevalence is the proportion of the population that experiences LBP during a specific period. Lifetime prevalence, a special case of period prevalence, is the proportion of the population that ever experienced LBP during their life (9).

2.1.2 Classifications of Low Back Pain

LBP can be generally classified as being specific or non-specific. Specific LBP is one caused by a specific patho-physiological mechanism, such as herniated nuclei pulposi, infection, inflammation, osteoporosis, rheumatoid arthritis, fracture or tumour (10). Non-specific LBP constitutes the majority of cases and is defined as symptoms of unknown origin. At present, there exist no reliable and valid way to diagnose non-specific LBP (11;12).

LBP is further classified as being acute, subacute and chronic according to the duration of patient complaints (13). The acute phase refers to symptoms persisting less than 6 weeks, subacute between 6 weeks and 3 months, and chronic more than 3 months (14).

2.1.3 Incidence of Low Back Pain

Studying incidence is important in order to discern risk factors and possible causes in LBP. Only a few studies have investigated the incidence of LBP in a general population.

The South Manchester Back Pain Study recruited 2715 adults from the general population with no LBP in the month prior to the baseline survey (15). New episodes of LBP were determined within the 12 months that followed the baseline survey by prospectively monitoring all primary care consultations in the cohort. The 12-month cumulative incidence of new episodes requiring medical consultation was 3% in males and 5% in females. Furthermore, patients with a history of LBP had twice the rate of new episodes than those with no history of LBP (15).

A more recent study (16) investigated the 6-month incidence of LBP of 1131 individuals from the Saskatchewan adult population. Patients presenting with LBP at baseline were excluded from the study. LBP was assessed using the Chronic Pain Questionnaire (CPQ), a 7-item scale questionnaire measuring

intensity of chronic pain and disability. The 6-month cumulative incidence of LBP was 8%.

In a retrospective analysis of 2523 files of workers who received compensation, Abenhaim and Suissa (17) found the 1-year cumulative incidence of LBP to be 1.37% in the province of Quebec. In another retrospective study in Norway (18) of 89,190 patients from the general population who took at least two weeks of compensated absence from work, the 1-year cumulative incidence was determined to be 2.27%.

2.1.4 Prevalence of Low Back Pain

Most epidemiological studies on LBP describe prevalence. The lifetime prevalence of LBP has been estimated to be 60-85% (1). Period prevalence of low back pain has been shown to vary from 7.6 to 37 percent. Point prevalence has been reported to be 15% to 30% (19).

The variations on the prevalence reported in epidemiological studies may be explained by the different definitions of pain reported, various pain sites, and the wording of questions that involve large time spans some of which could be biased by patient recall (20).

LBP affects men and women equally, and peak prevalence is found in the 45-60 year age group, although back pain has been reported by adolescents and by adults of all ages (21).

2.1.5 Cost of Low Back Pain

Disability from LBP places a significant socio-economic burden on the individual and the community in terms of direct and indirect costs. It is one of the top 10 reasons patients seek a physician (22-25), with average physical therapy visits per episode ranging from 6 to 25 (26-29). In Canada, 2-5 % of the working population receives medical care or loses time from work as a consequence of low-back pain (30). Furthermore, musculoskeletal disorders such as LBP have been ranked second after cardiovascular diseases in terms of total cost, accounting for $16.8 billion in 1998 (2).

Approximately 93% of the total cost for LBP are indirect costs due to work absenteeism and disability (31). Recent statistics in Québec indicate that 28% of compensated conditions were for LBP which involved 33.4% of all indemnizations for lost revenue (32). In Canada, the majority (approximately 75%) of workers return to their usual occupation within one month of injury (33), whereas 5-10% ultimately develop chronic LBP (34).

2.2 Psychosocial Factors

2.2.1 Biopsychosocial Models

In 1987, Waddell et al. (5) described a model in which LBP can no longer be regarded to be just a physical sensation, but that it can be modulated by mental, emotional and sensory mechanisms. In his model, low back *pain* and *disability* are distinguished. Disability depends on the patient's subjective report of the condition. This is influenced by the objective physical abnormality, as well as by the patient's attitudes and beliefs, psychological distress and illness behavior.

In Waddell's et al. (5) biopsychosocial model, the correlations between pain, disability and physical impairment were compared (see Figure 1). They found that distress and illness behavior are secondary to the physical impairment and improve or deteriorate with successful or failed treatment. Furthermore, physical impairment, distress and illness behavior combine to produce disability. The interaction between physical and psychological factors determines the treatment outcome. They conclude that a biopsychosocial model can be used as an operational clinical model.

More recently, fear responses were studied in chronic LBP. It was found that fear of pain, or fear of injury, was more disabling than the pain itself (35). This led to the development of a cognitive-behavioral model of pain-related fear (36). This model postulates several ways in which pain-related fear can lead to

disability. If pain caused by an injury is interpreted as threatening, patients will catastrophize about their pain. The pain-related fear that will evolve will lead to reactivity (psychophysiological reactions that make physical activity more painful), hypervigilence (pain-related fear shifts the patient's attention from other tasks) and avoidance behaviour (reduction in activities that are expected to produce pain). Avoidance behaviour in turn increases the level of disability, disuse and depression. Depression maintains the pain experiences, and exacerbates the increasing fear and avoidance. In contrast, patients who do not catastrophize about their pain have no pain-related fear and rapid participation with daily activities will mostly occur, leading to a more rapid recovery (see Figure 2).

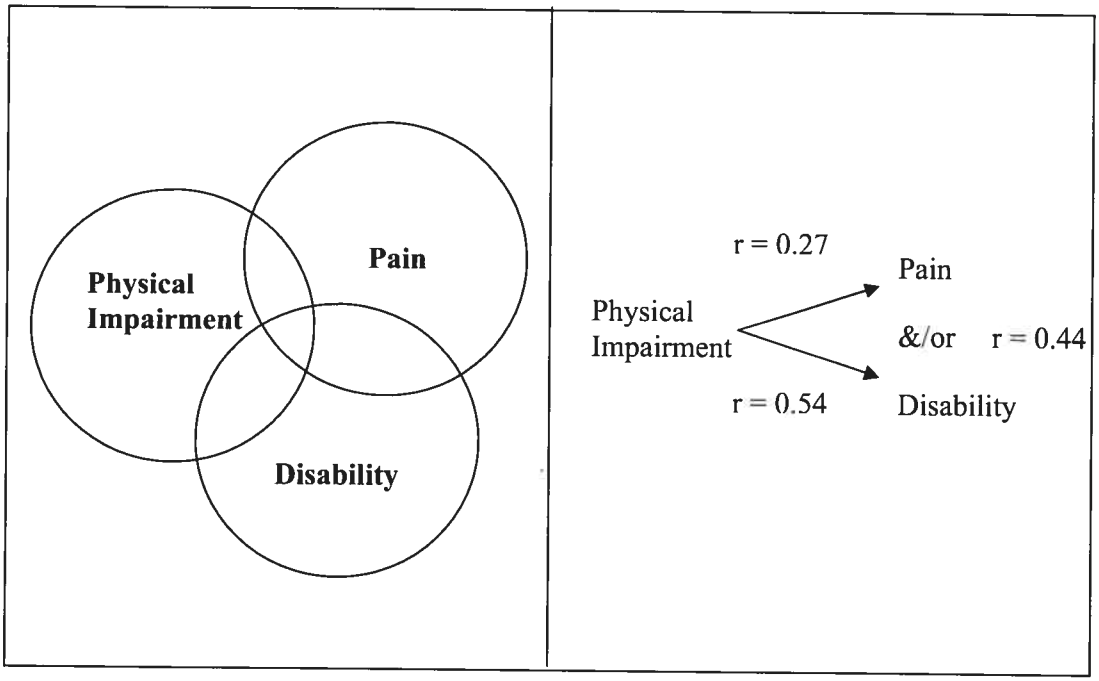
2.2.2 Red and Yellow Flags

Patients with LBP may present with both organic (physical) or non-organic (behavioural) signs. Waddell et al. (37) described criteria to differentiate patients presenting with organic and non-organic signs, which are commonly referred to as red and yellow flags, respectively. Red flag medical conditions that present with acute LBP are those which have been identified as potentially having adverse chronic prognoses and require early recognition in the patient's history to enable prompt intervention. Examples of red flags include fractures, infections and tumours.

Yellow flags refer to psychosocial factors that are risk factors associated with chronicity of LBP. These include attitudes and beliefs about LBP, fear-avoidance with reduced activity, low mood and withdrawal from social activities, expectation that only passive treatment will be beneficial, psychological distress and low job satisfaction.

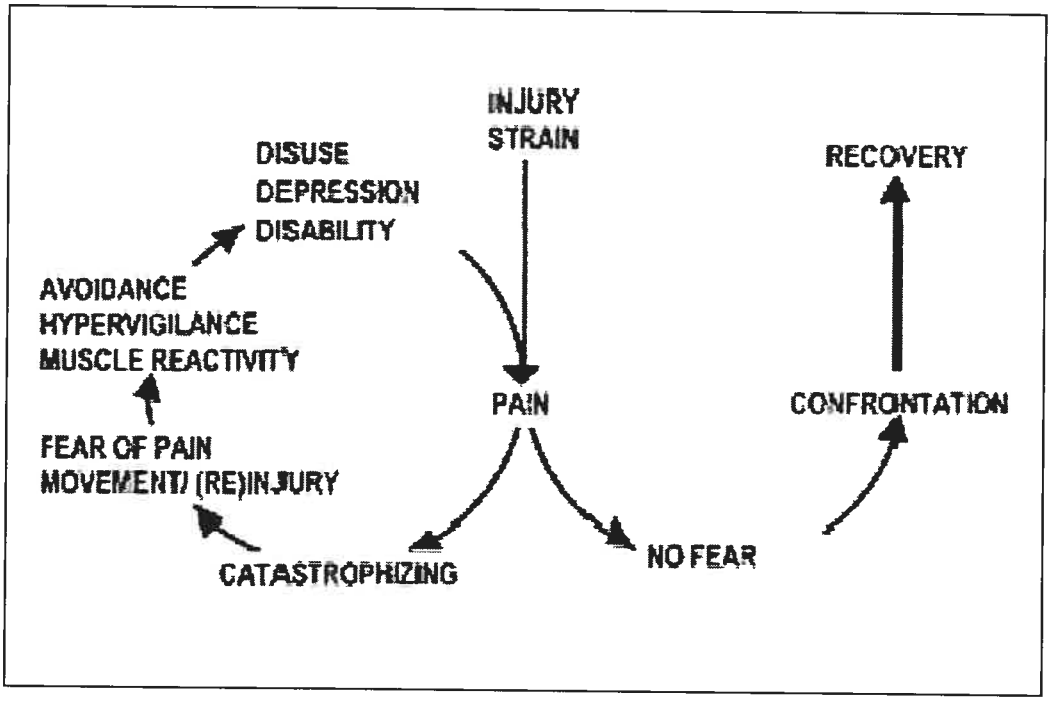
Main and Waddell (38) were cautious to explain that behavioural (non-organic) signs should be understood as responses affected by fear in the context of recovery from injury and the development of chronic pain due to being incapacitated. These do not constitute a complete psychological assessment but rather, function as a yellow flag to caution the healthcare provider that psychosocial issues may need addressing in addition to the physical management of their physical pathology.

Figure 1. Relationship between physical impairment, pain and disability



Quantitative relationship between clinical presentation of pain, disability and objective physical impairment and correlation coefficients (r) between them. A correlation coefficient of 0 is no correlation and 1 is complete correspondence. Adapted from Waddell et al. (5).

Figure 2. Cognitive-behavioral model of pain-related fear



Cognitive-behavioral model of pain-related fear proposed by Vlaeyen et al. (36)

If the pain caused by an injury leads to pain catastrophizing, then fear of pain may result. This in turn leads to avoidance behavior, hypervigilance and muscle reactivity. If avoidance behavior is prolonged, then disuse, depression and disability ensue. This will maintain the pain experiences and further amplify the feelings of fear of pain and avoidance. In contrast, patients that do not catastrophize their pain have no pain-related fear and are more likely to return to their daily activities and thus leading to a faster recovery. Reprinted from Pain, Vlaeyen JW et al., Fear of movement/(re)injury in chronic low back pain and its relation to behavioral, 62:363-72, Copyright (1995), with permission from International Society for the Study of Pain.

2.2.3 Factors Associated with the Onset of Low Back Pain

Several studies have investigated factors associated with the onset of LBP. In a prospective cohort of 1412 individuals who were employed and free of LBP, new episodes were assessed in a 12-month period (39). Baseline information on work-related psychosocial factors and psychological distress were obtained. The authors found that people who were dissatisfied with work at baseline were twice as likely to develop LBP for which they did not consult a physician.

Nahit et al. (40) recruited 1081 newly employed workers in which the General Health Questionnaire (GHQ) was administered to assess the relationship between psychological distress and musculoskeletal pain. Their results suggest that those who perceived their work as stressful most of the time were more likely to report LBP. This finding is consistent with another prospective study of 1186 newly employed workers, where stressful and monotonous work predicted onset of LBP (41).

In addition to work-related factors, psychological distress may predispose new episodes of LBP (42-44). Macfarlane et al. (45) reported that males who had a low GHQ score (low psychological distress) were more likely to have better outcomes (improvement in symptoms). Similarly, Thomas et al. (46) found that patients with high psychological distress (as measured with the GHQ) had over a three-fold increase in odds of persistent symptoms. A more recent prospective

study demonstrated that psychological distress at 23 years of age more than doubled the risk of developing LBP ten years later (47).

2.2.4 The Clinical Visit

The clinical visit may have important implications in LBP. One study concluded that the medical visit for a new episode of LBP is associated with a range of expectations, which are often not met (48). An Israeli study on LBP in primary care demonstrated that patients' perception of worry, coping, limitations, expectations of pain relief and dissatisfaction with the first medical visit were found to predict chronicity (49). The conclusions of both these studies suggested that better patient-physician communication was needed. In contrast, a study evaluating the effects of a physician education program found no significant improvements in any patient outcomes (symptom improvement, amount of disability and satisfaction with care) (50). More research is needed to understand the psychosocial factors associated with the clinical visit.

2.2.5 Factors Associated with Return-to-Work & Chronicity

A number of studies researched psychosocial factors associated with the transition from acute to chronic LBP. In one study (51), 252 LBP patients presenting to primary care were followed for one year. At follow-up, most patients showed improved disability and pain scores. However, those patients who did not recover had a previous history of LBP and significant psychological

distress at presentation. This study was corroborated by another study where good psychosocial indicators predicted prompt return-to-work (52).

Fifty-five patients with acute occupational LBP who exhibited Waddell's non-organic signs (poor coping and increased psychological distress) returned to unrestricted regular work at a rate of four times longer than those who did not display these signs (53). The patients exhibiting Waddell's signs also had a greater use of physical therapy and lumbar CT scans. This is consistent with another study, where it was shown that longer duration of LBP was associated with greater use of physical therapy (26). There is also evidence that mental stress delays return-to-work in acute and subacute episodes (54;55).

A systematic review of prospective cohort studies in LBP indicated that psychological factors such as distress, depressive mood and somatization are implicated in the development of chronic back pain (56). Among chronic LBP patients, the belief that pain is disabling was associated with psychological dysfunction (57). However, this study used a cross-sectional design and therefore it becomes impossible to know if the chronic pain is the cause or result of the "catastrophic pain attitude".

A patient's ability to cope with the pain has also been shown to affect outcomes. Actively coping with psychological stressors, are associated with improved outcomes in LBP (54) and in other diseases (58). In contrast, patients

who were afraid to return-to-work because they believed that they would not be able to cope at work tended to return-to-work later (59). Conversely, workers who judged their recovery as better than expected, those who expected to return to usual activities within 3 weeks, and those who stated that they were recovered or would get better soon, actually returned to work sooner (60).

Job characteristics have been associated with return-to-work (61;62). Higher physical and psychological job demands and low supervisory support are each associated with about 20% lower return-to-work rates during all disability phases (63). Furthermore, the duration of work disability and psychosocial factors were independent of the severity of the injury. On the other hand, high job control, especially control over work and rest periods, was associated with over 30% higher return-to-work rates. Similar results were reached with another study (63), where prolonged duration of work disability in workers compensated for LBP was associated with high job psychological demands and low supervisory support. In a separate study, short tenure on the job was not a predictor of return-to-work in LBP patients (64).

Compensation status has also been shown to be implicated in the development of chronic LBP. Cats-Baril and Frymoyer (65) found that patients with pending compensation claims had lower success rates in rehabilitative programs than patients who did not expect financial remunerations. They also found that placement of blame for the injury and lawyer involvement were

additional predictors of disability. Teasell (66) reviewed 11 observational studies to determine the role of compensation in musculoskeletal pain and disability. Filing a compensation claim, retaining a lawyer, or higher pain intensities were found to be limited predictors of longer claims. As the ratio of compensation to pre-injury wage increases, there is moderate evidence that the duration of the claim increases and that disability is more likely. Finally, compensation status, particularly one combined with higher pain intensities, was found to be associated with poorer prognosis after rehabilitation treatment programs. There is also evidence that compensation in chronic LBP may have an adverse effect on self-reported pain, depression, and disability before and after rehabilitation interventions (67).

2.3 Other Factors Affecting Outcomes

2.3.1 Symptoms

In a prospective study of 134 patients with LBP, Lancourt and Kettelhut (68) reported that a history of leg pain associated with LBP predicted failure to return-to-work. In contrast, Di Fabio et al. (69) found no association between leg symptoms and return-to-work and thus the evidence remains contradictory at this time. There is some evidence that suggests that a high level of self-perceived disability is also predictive of poor outcome (64). Subjects with chronic symptoms had higher disability scores and lower return-to-work rates compared to subjects with acute symptoms (69;70).

2.3.2 Physical Therapy

It has been shown that strict case management, including a comprehensive functional rehabilitation program, optimizes return-to-work (71-77). In general, physical therapy treatment includes four different types of interventions that may or may not be used concurrently.

- Modalities are used to decrease inflammation, increase tissue temperature to affect tissue compliances, and decrease scar tissue
- Manual therapy is often used to increase joint mobility
- Exercises are often prescribed to increase the range of motion of tight muscles, and increase the strength/endurance of weak muscles (includes postural exercises)
- Educate the patient with respect to proper lifting techniques, basic ergonomic approaches to workplaces, and activity prescription/restriction.

Further, once a worker is off work more than 30 days, prompt referral to physical therapy is associated with earlier return-to-work (26). In addition, physical therapy may lead to greater improvements in functional outcome (78) and health status in both the physical and emotional dimensions (79). Despite these findings, psychosocial issues may be as important as physical management in predicting disability at one year (51), and preventing chronicity and favouring prompt return-to-work (52).

2.3.3 Activity/Exercise

Although bed rest used to be the standard treatment for LBP, it is now believed that prolonged inactivity leads to the deterioration of several body functions and thus delays the healing of LBP (80). Currently, studies strongly suggest that activity and exercise within the limits of pain are beneficial (5;81-84). This notion has been further supported by Waddell et al. (85). Staying active for acute LBP, in contrast to bed rest, was found to be effective, resulted in faster return-to-work, less chronic disability and fewer recurrent problems. This is in contrast to a randomized control trial of 281 ambulatory patients with LBP (86). Subjects were randomized into two treatment groups: one instructed to continue normal activity and the other prescribed 4 days of bed rest. The pain intensity reported by the patients was similar in both groups, indicating that 4 days of bed rest is at least equivalent to normal activity in acute LBP. However, the authors cautioned that prescriptions for bed rest should be limited only to those whose physical demands at work resemble their daily life activities.

Current guidelines suggest that increasing the normal daily activities of the patient is as effective as any specific exercise program (81). However, the same standardized exercise program was given to all patients in the exercise group. Because individual patients have different impairments (e.g. some may have weak back extensors, others may have tight hamstring muscles), clinicians should theoretically prescribe exercise programs to correct the underlying cause within the individual (87). This requires individualized programs, albeit using a

standardized *approach* (e.g. stretch hamstrings in patients with limited hamstring range of motion, all exercises should be pain-free or only cause minimal discomfort, etc). By not using individualized programs, the beneficial effects of specific exercise programs would be diluted, and one would expect that "any activity" would be found to be as effective as a "specific exercise program" that ignored individual differences.

2.3.4 Patient Education

Disability associated with LBP may be multifactorial in origin and thus the information and advice given by health care professionals to patients may play a crucial role in treating LBP patients. Several authors (88;89) have determined that the main reasons patients consult a physician is to receive information and reassurance. Bush et al. (89) suggested that patients have a true desire to learn about their LBP, what to expect as well as what course of action must be taken to relieve their pain. However, a couple of qualitative studies (90;91) revealed that there is heterogeneity and complexity in patient's perception of their LBP. Deyo and Diehl (92) and Bush et al. (89) found that the main reason patients were dissatisfied with medical care for LBP was a failure to receive an adequate explanation for their back pain. Those patients who believed they received an inadequate explanation for their LBP demanded more diagnostic tests, were not very compliant with the treatment regimen and had poorer clinical outcomes at three weeks (89).

Clinical guidelines in the U.S. and U.K in 1994 (93;94) recommended that patients receive accurate information about their LBP and its management. In practice however, this is not always the case since there is no valid or reliable way to diagnose non-specific LBP (11;12). More recently, a study by Burton et al. (95) showed that carefully selected information and advice presented in a specific manner are associated with positive clinical outcomes.

2.4 Patient-Clinician Interaction

2.4.1 Adherence to Treatment

Although LBP management has been the subject of many investigations, task forces and debates, relatively few studies have focused on patient adherence to treatment. Although return-to-work was not different between low- and high- adherence to physical therapy groups, mean disability improved by 10% one-month post-treatment in the high adherence group vs. 5% in the low adherence group (69). The addition of a motivation program to a standard exercise program for LBP enhanced attendance at scheduled physical therapy sessions and reduced disability and pain at 12-month follow-up (96). In addition, those adhering to exercise reported significant improvement in disability and pain scores at both three months and 12 months (97). These few studies suggest that adherence to exercise in LBP patients may improve outcomes.

2.4.1.1 Factors Related to Patient Adherence

Patient adherence is associated with a number of factors: the specific condition and corresponding treatment regimen, factors associated with the patient (patient recall, patient understanding and beliefs, patient-specific characteristics), factors associated with the clinician, and the interface between the patient and the clinician (98). Each of these will be discussed briefly below, with the patient-clinician interaction being described in the subsequent section.

2.4.1.2 Condition and Corresponding Treatment Regimen

Severity of illness and complexity of the treatment regimen have been associated with poorer adherence (99;100). In juvenile arthritis, earlier age of disease onset and long treatment duration correlated with poor medication adherence independent of current disease severity (101). In general, patients adhere more to taking prescribed medications than following a restricted diet or exercising (102-105).

2.4.1.3 Patient-Specific Factors

Patients' understanding of their condition is positively related to adherence (100;106-108), as are the patients' beliefs in the benefits of the therapeutic regimen (106;109;110). Tuckett et al. (111) found that 77% of the patients who believed in the physician's diagnosis and treatment plan were committed to following the recommended course of action, compared to 50% of patients who did not concur with the physician. Personality traits do not appear to influence

adherence, although certain psychological states such as depression and anxiety have been associated with poor adherence (112).

2.4.1.4 Physician-Related Factors

Patient adherence to treatment appears to be related to physician job satisfaction, lower volume of patients seen per week, ability of the physician to answer patients' questions, scheduling of follow-up appointments and the ordering of more investigative tests (102). Patients tend to continue seeing physicians who they perceive to be more caring and open to communication (113) as well as those who had more participatory styles (114).

2.4.2 Patient-Physician Relationship

The physician-patient relationship can affect the long-term outcomes for LBP patients. For example, a patient who receives a specific diagnosis for their LBP is 4.9 times more likely to develop chronic back problems compared to a patient who received a non-specific diagnosis (7). However, receiving a specific diagnosis may not necessarily indicate a better understanding of the medical condition (115). This may illustrate the complexity of patient perceptions, and that we do not fully understand all the psychosomatic mechanisms involved. The current project is specifically interested in the case when the patient receives conflicting advice, and under this condition, health outcome could be affected by one of three mechanisms. First, patient satisfaction may decrease, which may affect outcome. Second, patient adherence with prescribed treatment may

decrease. If a patient does not take prescribed treatment, the treatment cannot have its proposed beneficial effect. The following sections describe each of these areas, beginning with studies that looked directly at health outcomes.

2.4.3 Effect of Conflicting Advice on Health Outcomes

Only one study has directly examined the effect of conflicting advice on health outcomes. Cedraschi et al. (8) found that conflicting beliefs between the health care professional and the patient's own illness representation were associated with a negative outcome. However, the scale used to measure conflicting beliefs included both pre and post treatment items. If a patient had not improved, they would obviously be more likely to disagree that a treatment is effective than someone who improved with the treatment. Although not addressing conflicting advice directly, Starfield et al. (116) found that if a physician believed a problem existed but the patient did not, symptoms and signs were less likely to improve.

Other studies have not addressed conflicting beliefs directly, but have investigated the effect of care directed to the patients' emotional state. Spiegel et al. (117) randomized breast cancer patients to a three times per week support group in coping versus usual care, and found that the support group intervention almost doubled survival. Heszen-Klemens et al. (118) found improved symptoms and signs in patients if the physician 1) tried to improve the patient's emotional state, and 2) asked questions and tried to increase the patient's willingness to

cooperate. This effect was independent of adherence (physicians had little effect on adherence), and the development of a healthy lifestyle. In addition, patients with an emotionally supportive physician did develop a healthier lifestyle (e.g. sleep, eat right, etc) even though they were not directly advised to do so. This led to an improvement in symptoms although the objective evaluation did not change. In addition, randomized control trial studies in which patients are encouraged to ask questions found that symptoms decreased to a greater extent in the experimental group, but there was no change in objective findings (119;120).

2.4.4 Effect of Patient-Clinician Interaction on Adherence

Evidence that the physician-patient relationship affects adherence to treatment is contradictory. Adherence to treatment was increased in patients who participated in their own care (121), and decreased among arthritic patients who were irritated over long waits to see the physician, the physician spending too little time with them, or perceived the physician to be more businesslike than personal (106). However, Wartman et al. (108) found that patient satisfaction with the patient-clinician interaction was not related to improved adherence to medications.

Apart from patient satisfaction, effective communication is expected to be a necessary condition for patient adherence (122;123). Patients who believed that their physician's explanations about their back were inadequate were not

satisfied and did not cooperate as well with treatment (84;89;90). Jensen and Lorish (124) suggested a process model for patient-practitioner collaboration, whereby the cooperation with an exercise regimen is mediated by the patient's belief system and requires a therapeutic process of mutual inquiry, problem solving, and negotiation between the therapist and patient.

This last point must be emphasized. Under this paradigm, the clinician's approach should shift from what is the most effective treatment for the condition to what is the most effective treatment that the patient is likely to follow.

2.4.5 Patient-Physician Satisfaction

Patient satisfaction with the patient-physician interaction for non-emergent problems is related to both expectations (what the patient thinks they will receive) and desires (what the patient would like to receive) (122;125;126). However, because a patient is satisfied if the physician helps to further the patients' goals (127), and one of the patients' major goals will include the type of relationship they are seeking (128-131) caring and devotion appear more important than simply accommodating the patients' demands (127;132).

Although patient satisfaction would appear to be an important factor related to adherence or choice of physician, it is only loosely associated with good health outcomes. Of 1761 patients treated for an acute problem, 92% of patients with bad outcomes (i.e. functioning below the usual state) were satisfied

with their *care*, and surprisingly, 65% were satisfied with their *outcome* even though it was suboptimal (123). Expectations remained important with 98% of patients being satisfied with the outcome if expectations were met, and again surprisingly, 65% of patients who did not achieve their expectations were still satisfied with their outcome.

The following sections are therefore divided into those studies looking at patient satisfaction with the patient-physician interaction and outcomes of 1) final health and 2) satisfaction with health status or health care.

2.4.5.1 Patient-Physician Interaction: Final Health

Research suggests there is a link between patient satisfaction with the patient-physician interaction and health outcomes that are subjective. Little et al. (133) found that patients with sore throats who were only slightly satisfied with the patient-physician encounter, were twice as likely to suffer for more than five days compared to those who were very satisfied. In addition, patients who felt they were able to fully discuss their headache problem with their physician were 3.4 times more likely to be cured by 12 months (134), and congestive heart failure patients who were satisfied with their medical visit and practitioner had increased levels of activity (a measure of function in this population) at 6 months follow-up (135).

Although satisfaction may affect subjective outcomes, there is less evidence for its effects on physiology. For example, a patient-centred approach in diabetic patients increased patient satisfaction and improved scores for subjective outcomes (i.e. general health, depression and anxiety), but was unrelated to changes in blood pressure, or long-term glucose control (136). Martin et al. (137) found no effect of patient satisfaction; there was no difference on SF-36 scores for physical function (closer to an objective measure than previously mentioned studies) with a patient-centred approach, even though patient satisfaction was increased.

Together, these findings suggest that patient satisfaction may be related to subjective outcomes but may not be related to physical status. Because back pain can be accompanied by a strong emotional component (fear of permanent disability, inability to work, etc), patient satisfaction with the patient-clinician interaction may be an important confounder in the present study.

2.4.5.2 Patient-Physician Interaction: Satisfaction with Care

Krupat et al. (138) found that satisfaction with care is increased when the physician is as sharing (i.e. involved the patient) or more sharing than the patient expects. Interestingly, these authors distinguished "physician sharing" from "physician caring" (patient feels physician cares about them), which did not predict satisfaction. This may be related to the patient's own illness representation because sharing allows the patient to exert some control over

their situation whereas caring does not (139). Using audiotapes, Stewart also found that satisfaction with care increases when physicians attempt to engage the patient in dialogue, and the patient takes on an active role (140).

The importance of patient-physician dialogue is underscored by one study that found the effectiveness of an educational intervention to increase knowledge for back pain treatment and prevention was dependent on the patients' prior beliefs for the cause of back pain (141). Although not directly related to satisfaction, these results suggest that the effectiveness of any patient-physician interaction depends on the ability of the physician to understand the illness representation (prior beliefs about the condition) of the patient. A lack of such understanding will lead to health professional advice that is conflicting with the patients' illness representation.

2.4.6 Summary

Both physicians and physical therapists often treat workers compensated for LBP. A favourable clinician-patient relationship is associated with improved outcomes (earlier return to work, decreased disability). There is some evidence that conflicting beliefs between the patient and clinician may affect outcome. Similarly, conflicting beliefs between practitioners, in the case of LBP, between physician and physical therapist may influence outcome.

CHAPTER 3
METHODS

3.1 Study Population

This pilot prospective cohort study consisted of telephone interviews of compensated LBP workers recruited from physical therapy clinics across the province of Quebec. In order to be an eligible study subject, the patients had to fit the criteria below.

3.2 Inclusion and Exclusion Criteria

Inclusion Criteria

1. Workers' compensation for a new episode of low back pain. This was defined as not having received compensation within the last year for a low back injury. Selecting compensated patients was necessary for the internal validity of this study, as it ensured that the study subjects were truly off work or were on light duties throughout the study period.
2. The patients must have had a referral for physical therapy by their treating physician. Furthermore, this visit to physical therapy had to be the first for this episode.
3. The study subjects had to have the ability to sign an informed consent.

Exclusion criteria

1. Inability to comprehend or write in French or English.

2. Any concurrent or pre-existing injury or illness that precludes the worker from returning to work even if the low back problem resolves.

3.3 Recruitment of Physical Therapy Clinics

Physical therapy clinics from across the province of Quebec were contacted either by mail or by phone and asked to participate in the study. The clinic administrators were provided with documentation containing the hypotheses and objectives of the study. Those who consented to participate were also provided with instruction sheets pertaining to the recruitment of the study subjects. It was imperative that the physiotherapists fully understood the recruitment process, as they were the recruiting agents.

3.4 Recruitment of Patients

The participating clinics were provided with envelopes containing questionnaires for both the patient and the physiotherapist. The names and phone numbers of the patients who consented to participate (signed the consent form) in the study were faxed to the study coordinator. The patients were given a package containing a copy of all the questionnaires. The research coordinator called the patients, and proceeded with the interview (the patient being able to follow the questions with their own copy of the questionnaire) within one week of referral to physical therapy. The patients were followed until they returned to work, or for a minimum of 3 months from the date of injury if they do not return to

work. We have chosen 3 months because it is an accepted definition of "chronic back pain" (14).

3.5 Interviews

3.5.1 Baseline

The baseline interview was conducted by telephone at the patient's convenience, within one week of their first physical therapy consultation. The interview consisted of nine questionnaires that were administered consecutively. The first questionnaire (Appendix III) was developed for use in this study by a team of researchers that included a physical therapist/epidemiologist, a physician/epidemiologist, a psychologist who specializes in occupational health, and an occupational health physician. This questionnaire included basic demographic information (age, gender, level of education, occupation) for each subject. Respondents were also asked whether they agreed with their treating physician with respect to: management of their LBP, projected date for return-to-work, and medical tests ordered. Similarly, they were asked whether they agreed with the management of their LBP by their physical therapist and whether they believed the physical therapist was providing treatment that the physician thought would be the most appropriate. The rest of the interview was comprised of validated questionnaires such as the Oswestry Disability Questionnaire (self-perceived disability) (142), Patient Satisfaction Subscales (patient satisfaction with health care professional visits) (50), General Health Questionnaire

(psychological distress) (62), Coping Strategies Questionnaire (coping strategies in LBP) (94) and Job Content Questionnaire (psychosocial factors at work) (143).

3.5.2 Follow-up

Similar interviews (Appendix IV) without the demographic and specific injury data were conducted when the worker returned to work. If a patient had to stop work again within this period for LBP, we considered the date for return-to-work to be the end of the recurrence episode rather than the original date of return.

3.6 Physical Therapists' Perspectives

Following the recruitment of each patient, the treating physical therapist responded to a 12-item questionnaire regarding the encounter with the patient (Appendix V). The questions included the physical therapists' diagnosis and how it was described to the patient, types of modalities being used, prescription and restriction of activities and whether they agreed with the way the treating physician managed the patient's LBP. The physical therapists were asked to complete the questionnaire within a week of recruiting the patient. Once completed, the questionnaire was faxed to the study coordinator.

The questions presented to the physical therapist were only a means to validate the patient's answers. It is important to point out that no judgments were being made on the physical therapist's methods of practice.

Further, to limit the burden on these health professionals and maximize their recruitment, we limited any further data collection to one follow-up questionnaire from the physical therapist at the end of treatment (Appendix VI). This 7-item questionnaire was necessary to obtain their perception of the patients' adherence to treatment. Once completed, the follow-up questionnaire was faxed to the study coordinator.

3.7 Measures

3.7.1 Perception of Conflicting Beliefs (Appendices III & IV)

The baseline questionnaire to patients was devised to answer one of the main comparison variables for the analysis. We were interested in determining whether the patient perceived agreement or disagreement between the physician and physical therapist with regards to treatments received. Specifically, we asked the following question: "Do you think the physiotherapist is giving you the treatment the physician thought would be helpful?" (Appendix III, Question 37). Given that it was the physician who prescribed physical therapy, we decided that it would be more appropriate to ask patients if the physical therapist was providing the treatment the physician would have approved. Although this question may seem to infer that the physician is the one providing the "right" treatment, it may be interpreted the opposite way as well. That is, if a patient disagreed with the physician and agreed with the physical therapist, then he/she would answer that the physical therapist *did not* provide the treatment the physician would have approved. Furthermore, to address conflicting beliefs

between the health care professional and the patient's own illness representation, we asked: "Overall, do you think you and your physician agreed about the management of your back pain?" (Appendix III, Question 25), and a similar question with regards to the physical therapist (Appendix III, Question 33).

We also asked specific questions about agreement regarding the diagnoses of the two health professionals, medications prescribed by the physician, treatments received and activity prescriptions and restrictions. There were also open-ended questions asking the patient to describe what the physician/physical therapist said was wrong with their back, and what the patient believed was wrong. The choice of open-ended questions is a deliberate attempt to elucidate patient priorities as is recommended by previous authors (144). These answers were compared with the answer to the "overall questions" above and discrepancies noted in a descriptive analysis. In addition, several of our open-ended questions are very similar to some close-ended questions asked within the Patient Satisfaction Subscales questionnaire (Appendices X and XI), and those responses were also compared. The follow-up questionnaire to patients (Appendix IV) is almost identical to the baseline one (Appendix III), with the addition of questions relating to the date to return-to-work and the type of work the patient returned to. These data were crucial in order to assess the time off work in our cohort and how it correlated with other variables of interest.

3.7.2 Validation of Conflicting Beliefs (Appendices V & VI)

The questionnaires devised for the physical therapist (Appendices V and VI) served as a means of validating what the patients reported. Specifically, the physical therapists were asked to recall what they told the patient with respect to the diagnosis, medications, tests, treatment, activity prescriptions and prohibitions (i.e. what were the approximate words used in discussing these aspects with the patient).

3.7.3 Adherence

Adherence to treatment may be an important factor to consider for a prompt return-to-work. Our population is financially compensated for their LBP injury and time off work, and is required to attend prescribed physical therapy sessions. Therefore, it is a situation in which would report high rates of adherence to prescribed treatment in self-reported measures. Therefore, although we directly asked the patient (Appendix IV, Questions 13c, 14c, 15c, 22c, 23c), we also measured adherence to exercise prescriptions as reported by the treating therapist during the follow-up questionnaire (Appendix VI, Question 7). We recognize that the physical therapists may believe that patients who do not improve are not doing their exercises, which may not necessarily be the case. Therefore, we also asked the physical therapist what was the basis for their assessment of adherence. This was an open-ended question to avoid prompting.

3.7.4 Self-Perceived Disability (Oswestry Disability Questionnaire - Appendix VII)

Disability subsequent to a low back injury has been shown to predict psychological distress (145). Several measurements of self-perceived disability are available, namely, the Oswestry Disability Questionnaire (ODQ), the Roland-Morris Disability Questionnaire (RMDQ) and the Quebec Back Pain Disability Score (QUE). We selected the ODQ for use in this study for the following reasons: 1) the RMDQ requires approximately the same time as the ODQ, but the answers are yes/no instead of a Likert scale. The ODQ and the RMDQ are both acceptable, but we have opted for the Likert scale of the ODQ and 2) The QUE is twice the length of the ODQ (20 versus 10 questions) , and we felt the shorter length of the ODQ (requires 5 min to complete (122) outweighs any additional information that might be obtained with the QUE). Furthermore, Fritz et al. (146) demonstrated that the ODQ displayed higher levels of test-retest reliability and responsiveness compared with the QUE. Given these differences, the ODQ was the most suitable scale for this study.

The ODQ is a well-accepted (147) 10-item valid questionnaire in English (142) and French (148) for LBP. It is also reliable, with a test-retest intraclass correlation coefficient (ICC) of 0.89 (149;150). The ODQ uses a 6-point Likert response scale to questions. Each question has six possible responses that are scored from 0 to 5. All scores are summed and divided by the highest possible score of 50 to produce a percentage disability score. Scores range from 0 % to 100%; 0% to 20% (minimal disability), 20% to 40% (moderate disability), 40% to

60% (severe disability), 60% to 80% (crippling disability) and 80% to 100% (bed-bound or exaggerated symptoms) (142). For missing responses, the total possible score is reduced (e.g. the highest possible score for 9 responses would be 45).

3.7.5 Psychological Distress (General Health Questionnaire - Appendix VIII)

Psychological distress in patients with LBP has been associated with poor outcomes (151;152). We opted for the 12-item General Health Questionnaire (GHQ-12) to assess psychological distress in all patients. The GHQ-12 is a widely-used self-administered screening test, specifically designed to identify short-term changes in psychological distress (depression, anxiety, social dysfunction and somatic symptoms). The subjects respond to how they have been feeling "over the past few weeks".

The GHQ comes in four different versions, namely, the GHQ-12, the GHQ-28, the GHQ-30 and the GHQ-60. The GHQ-12 is very quick to administer and score as it contains only 12 questions. Despite the small number of questions, the GHQ-12 was shown to be reliable (ICC: 0.72) (153) , valid and extensively used questionnaire in English and French to measure psychological distress (62;153).

The GHQ-12 employs a 4-point Likert scale, with possible answers ranging from 0 to 3. The individual scores are summed to produce a composite score, ranging from 0 to 36. Higher scores indicate higher psychological distress.

3.7.6 Coping Strategies (Coping Strategies Questionnaire - Appendix IX)

Coping strategies employed by patients with LBP are associated with pain intensity, physical and psychosocial impairment (154). It was therefore important to asses which coping strategies were employed by our cohort.

We used the disease-specific Coping Strategies Questionnaire (CSQ) that has been shown to be a reliable (ICC: 0.86) (155;156) and valid questionnaire in English (157) and French (158). Although this questionnaire was designed for chronic populations, it has been used to predict the development of chronic pain in patients similar to ours (159).

The original version of the CSQ was composed of 48 items (157). However, factor structure analyses of the individual items revealed a 5-factor structure (160). The five subscales are: *Distraction*, *Catastrophizing*, *Re-interpreting Pain Sensations*, *Ignoring Pain Sensations*, and *Prayer and Hoping*. Although catastrophizing is included in the CSQ, it should be noted that it is considered a maladaptive coping strategy. The CSQ is based on a 4-point Likert scale, where scores range from 1 to 4. A score is generated by calculating a

mean of the individual answers for each subscale. Higher scores for each of subscale indicate greater utilization of the coping strategy.

3.7.7 Patient-Clinician Interaction (Patient Satisfaction Subscales - Appendices X & XI)

Patient satisfaction with the clinical visit has been shown to be a potentially important confounder (144), and thus could affect our outcome variables. We selected the Patient Satisfaction Subscales (PSS) (50) for this study. The PSS is an example of a questionnaire that assesses satisfaction with care as well as with treatment outcome. For example, it includes a question on the effectiveness of prescribed treatment for low back pain. Therefore, the PSS is a good measure in determining both care and treatment outcome. It is a measure composed of four dimensions of the clinical encounter; information provided by the physician, effectiveness of the treatment, satisfaction with the care, and technical quality.

The PSS utilizes direct measures in which the patient is directly asked about the care received, as opposed to indirect measures about attitudes. Direct measures are considered to be of greater clinical value for investigating satisfaction with specific medical encounters (161).

In summary, the PSS was selected due to its multidimensional scale, its enquiring of both care and treatment satisfaction, its specificity to LBP and its use of direct measures.

For the satisfaction with the therapist (Appendix XI), we replaced the word "physician" with "therapist" and removed the question asking about ordering more tests, which is inappropriate in the Canadian context.

The PSS is composed of 4 subscales: *Information*, *Caring, Effectiveness*, and *Technical Quality*. It is based on a 5-point Likert scale, where scores range from 1 to 5 for each subscale. For analysis, strongly favourable responses were recoded "1" and strongly unfavourable responses were recoded "5". Scores were calculated by generating means for each subscale. Higher scores indicate greater dissatisfaction with the clinical visit. The subscales of *Information*, *Caring* and *Effectiveness* were found to be reliable with Cronbach's alphas of 0.75, 0.84 and 0.71, respectively (50).

3.7.8 Job-Related Characteristics (Appendices XII and XIII)

Job-related characteristics and job content may be important factors affecting return to work and disability (40;42;63;162). We used the Job Content Questionnaire (JCQ), a widely used questionnaire to measure psychosocial factors at work. The validity of the JCQ has been mainly studied in its English, Dutch and Japanese versions (143). With regards to the French version, two scales of decision latitude and psychological demands were validated in two

studies conducted in the province of Quebec (143;163;164). The JCQ was shown to be highly reliable, with ICCs above 0.90 for all scales of the questionnaire (165).

In the present study, four dimensions of work were evaluated using four scales of the JCQ: *Supervisor Support*, *Co-worker Support*, *Decision Latitude* and *Psychological Demands*. The *Supervisor Support* scale includes four items: supervisor is concerned about welfare, pays attention, helpful, and gets people to work together. The *Co-worker Support* scale includes four items: competent co-workers, take a personal interest, friendly, and helpful. The *Decision Latitude* scale includes nine items: learn new things, high level of skill, creative, repetitive work, making decisions on my own, a lot of say about what happens on my job, do a variety of different things, very little freedom to decide how to do work, and opportunity to develop own special abilities. Finally, the *Psychological Demands* scale includes nine items: working fast, working very hard, excessive amount of work, enough time to get the job done, free from conflicting demands, requires long periods of intense concentration, often interrupted before task is completed, hectic job, waiting on others to finish their tasks.

The JCQ uses a 4-point Likert scale, where scores range from 1 to 4 for each individual question. For the *Supervisor Support* scale, four items are summed to produce a composite score, ranging from 1 to a maximum of 16. The same algorithm is used for the *Co-Worker Support* scale. The *Decision Latitude*

scale is scored by adding nine items to produce a composite score, but inverting the question *"little freedom to decide how to do work"*. The *Psychological Demands* scale is scored by adding nine items to produce a composite score, however the following questions are inverted; *excessive amount of work*, *enough time to get the job done*, *free from conflicting demands*.

3.8 Return- to-Work

The physical therapist was asked to call or fax the research coordinator once the patient had returned to work. The research coordinator then contacted the patient and proceeded with a follow-up interview. At the interview, the patient was directly asked for the date of "return-to-work" (see Appendix IV). This is also recorded on the official forms that the patient must submit to the Quebec Workman's Compensation Board (Conseil de Securité en Santé du Travail, CSST). In addition, the interview included questionnaires on the actual self-perceived disability of the patient (Appendix VII), psychological distress (Appendix VIII), coping strategies (Appendix IX), the patient-clinician interaction (Appendices X and XI) as well as the job content questionnaires (Appendices XII and XIII). For a summary of the timetable of the questionnaires, refer to Appendix XIV.

3.9 Agreement versus Satisfaction

We made the distinction between the terms agreement and satisfaction. Patient satisfaction is a broad term encompassing several aspects of the clinical

management. As such, one may be satisfied with overall clinical management but disagree with specific aspects of it. Identifying disagreement with regards to specific components of the clinical management may potentially have greater clinical value that than just measuring overall patient satisfaction.

3.10 Statistical Analysis

Description of the Cohort

The cohort was described demographically by the following variables; age, gender, sex, educational level, and marital status. Descriptive statistics were also used for psychosocial variables: mean self-perceived disability score (ODQ), psychological distress score (GHQ-12), mean scores for the coping strategies subscales (CSQ), mean scores for the subscales of the Patient Satisfaction Subscales questionnaire (PSS) and mean scores for the subscales of the Job Content Questionnaire (JCQ).

One-way ANOVA was used to determine which coping strategies (i.e. subscales) of the CSQ were the most employed by the cohort. The same analysis was performed to assess which components of the medical visit resulted in greater patient satisfaction (PSS).

Objective 1: Agreement with the clinicians

In order to assess agreement or disagreement with the physician, the following algorithm was formulated: whether the patients agreed with the way

their treating physician managed their LBP, whether they agreed with the date set for return-to-work and whether they agreed with the medical tests ordered. Disagreement was defined as not agreeing to any one of the factors mentioned above. Descriptive statistics were performed to assess the proportion of those who agree with the physician to those who disagreed.

Agreement with the physical therapist was assessed by asking patients whether they agreed with management of their LBP by their treating therapist. Descriptive statistics were performed to assess the proportion of those who agree with the physical therapist to those who disagreed.

Objective 2: Agreement between the Two Clinicians

Agreement between the two clinicians was determined by whether the patient perceived the physical therapist was providing the treatment the physician thought would be the most appropriate. Descriptive statistics were performed to assess the proportion of those who perceived the two clinicians to be in agreement with each other to those who perceived them to be in disagreement.

Objective 3: Factors Associated with Disagreement

Unpaired t-tests were used for continuous variables comparing those who agreed with the clinician to those who disagreed. The following variables were compared in the two groups: mean self-perceived disability score (ODQ), psychological distress score (GHQ-12), mean scores for the coping strategies

subscales (CSQ), mean scores for the subscales of the Patient Satisfaction Subscales questionnaire (PSS) and mean scores for the subscales of the Job Content Questionnaire (JCQ). Chi-square analyses were performed for categorical variables: gender, marital status and educational level.

Multiple logistic regression was used to determine which factors were associated with disagreement. The independent variables included in the model were selected on the basis of their statistical significance in the univariate analysis. The independent variables, disability and psychological distress, were dichotomized as to whether a patient had a self-perceived disability score (ODQ) greater or equal to 60% (severe to crippling disability (142)) and whether they had a psychological distress score (GHQ) greater or equal to the median of 16. P-values were two-tailed and a $P<0.05$ was considered significant.

Objective 4: Return-to-Work

Kaplan-Meier survival analysis was performed to compare return-to-work times of those who agreed with those who disagreed with their physician. Multiple logistic regression was used to determine which factors were associated with chronicity and self-perceived disability. The independent variables were disagreement, being married, low education (defined as high school or less), self-perceived disability (ODQ) and psychological distress (GHQ-12). Self-perceived disability was dichotomized as to whether a patient had a baseline self-perceived disability score greater or equal to 60% (severe to crippling disability (142)). Follow-up self-perceived disability was dichotomized as to whether a patient had

a score greater or equal to 20% (minimal disability (142)). This cut-off was chosen as we would expect patients who have undergone treatment to have improved. Psychological distress was dichotomized using the GHQ bimodal scoring response scale, where scores greater or equal to 6 indicated "cases" (166).

CHAPTER 4
MANUSCRIPTS

The results of this research project are presented in the following manuscripts:

4.1 Patient-Clinician Disagreement in Low Back Pain: A Pilot Study

Laurent Azoulay, Debbie Ehrmann-Feldman, Manon Truchon, Michel Rossignol and Ian Shrier (submitted to the journal Spine)

4.2 Effects of Patient-Physician Disagreement in Low Back Pain: A Pilot Study

Laurent Azoulay, Debbie Ehrmann-Feldman, Manon Truchon, and Michel Rossignol (To be submitted to the journal Spine in fall 2003)

The principal author confirms his original contribution to the data collection, statistical analyses and interpretation of the results as well as in the writing of the research articles.

Patient-Clinician Disagreement in Low Back Pain:

A Pilot Study

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4.1.1 Abstract

Study Design. A cross-sectional pilot study of workers compensated for low back pain (LBP) referred to physical therapy by their treating physician.

Objectives. 1) To determine patient disagreement with the physical therapist and the physician, 2) to determine whether the patient perceived any disagreement between the two clinicians and 3) to explore whether patient-clinician disagreement is associated with: self-perceived disability, age, gender, education, psychological distress, coping strategies, patient satisfaction and job satisfaction.

Summary of Background Data. Several studies have highlighted the importance of psychosocial factors in LBP, but few have documented the role of these factors in the patient-clinician interaction.

Methods. 35 workers compensated for LBP responded to a telephone interview within one week of referral to physical therapy regarding agreement with the clinical management of their LBP. They also completed validated questionnaires on self-perceived disability, psychological distress, coping strategies, satisfaction with the medical visit and job satisfaction.

Results. Nearly all patients (97.1%) agreed with the physical therapist and all believed the physical therapist was providing the treatment the physician would have approved. However, only 71% agreed with the physician. Those who disagreed with their physician were dissatisfied with the care provided (P=.05) and technical quality of the visit (P=.01). Although not statistically significant,

those who disagreed had higher self-perceived disability (P=.07), were more psychologically distressed (P=.13), catastrophized more about their pain (P=.11) and did not ignore their pain as much (P=.09) compared with those who agreed.

Conclusion. Disagreement with physician management of LBP is associated with dissatisfaction with care and technical quality of the visit, and possibly with higher self-perceived disability, psychological distress and decreased pain coping skills. The impact of these factors on return-to-work and disability is potentially important to recognize in clinical practice and need to be evaluated.

Key words: Low back pain; agreement; satisfaction; psychosocial; psychological distress; disability

Key Points:

- 29% of patients compensated for LBP disagreed with their treating physician with respect to the management of their LBP.
- Disagreement with the physician was associated with dissatisfaction with care and technical quality of the visit.
- Future research to address the association between disagreement with the clinician and outcome is underway.

4.1.2 Introduction

Low back pain (LBP) is a problem of epidemic proportions in industrialized countries, affecting 60-85% of the population at least once in their life.[1] LBP is also among the top 10 reasons patients visit a physician.[2-5] In Canada, 2-5 % of the population receives medical care or loses time from work as a consequence of LBP.[6]

The magnitude and impact of LBP has led to much research in the field. Many studies have dealt with the mechanical aspects of LBP injuries, in order to try to develop effective prevention and treatment strategies. More recently, there has been interest in psychosocial factors with respect to their role in the onset and outcome of LBP.[7;8;9;10;11;12;13]

Psychosocial aspects related to the patient-clinician interface may have an effect on the course and outcome of LBP. Cedraschi et al. [14] found that conflicting beliefs between the clinician and the patient's own illness representation were associated with a negative outcome, whereas confidence in one's clinician was associated with an improved short-term outcome. Stewart et al. [15] concluded that patient dissatisfaction with the physician is related to poor communication and not technical competency issues. Dissatisfaction with medical care is associated with a failure to receive an adequate explanation of the LBP.[16;17] These studies underscore the importance of good communication in the patient-clinician interaction. However to date, patient-clinician and inter-

clinician agreement are not that well documented in LBP. Furthermore, it is possible that the patient-clinician interaction may be associated with psychosocial factors such as self-perceived disability, psychological distress, coping strategies and job satisfaction.

LBP patients are often seen by several different health care professionals, such as physical therapists, primary care physicians, and specialists. As such, patients may be seen and given different advice or diagnoses by clinicians with different professional backgrounds. Perceiving the clinicians to be in disagreement with each other may potentially confuse patients and thus undermine the credibility of one or all clinicians, or may be a source of dissatisfaction with care. Patient disagreement with one or all clinicians may potentially lead to negative consequences.

The objectives of the present study were three-fold; 1) to determine patient disagreement with the physical therapist, and with the physician in a cohort of workers compensated for LBP, 2) to determine whether the patient-perceived any disagreement between the two clinicians and 3) to explore whether patient-clinician disagreement is associated with factors such as: age, gender, education, prior LBP, and psychosocial factors such as level of self-perceived disability, psychological distress, coping strategies, patient-clinician satisfaction and job satisfaction.

4.1.3 Materials and Methods

4.1.3.1 Population Studied

This exploratory pilot study examined patients with acute and sub-acute LBP referred to physical therapy by their treating physicians. To be eligible subjects had to have been compensated for a new episode of LBP, defined as not having received compensation within the last year for a lower back injury.

Exclusion criteria were the inability to comprehend or write in French or English, and any concurrent or pre-existing injury or illness that precluded the worker from returning to work even if the low back problem resolved. The protocol was approved by the ethics committee of the Université de Montréal and all subjects signed an informed consent form prior to participating.

4.1.3.2 Study Procedure

Physical therapy clinics (both private and public) from across the province of Quebec were contacted by the study coordinator either by mail or by phone and invited to participate in the study. Those who consented to participate were provided with instruction sheets pertaining to the recruitment of the study subjects.

The participating clinics were supplied with envelopes containing a series of questionnaires to be distributed to eligible patients who agreed to participate. The names and phone numbers of the patients who consented to participate

(signed the consent form) in the study were faxed to the study coordinator. All study subjects were given a package containing a copy of all questionnaires. A research assistant telephoned the study subjects, and proceeded with the interview (the patient being able to follow the questions with their own copy of the questionnaires). Patients were recruited into the study within one week of referral to physical therapy by their treating physician (general practitioners).

4.1.3.3 Agreement

A patient questionnaire was developed for use in this study by a team of researchers that included a physical therapist/epidemiologist, a physician/epidemiologist, a psychologist who specializes in occupational health, and an occupational health physician. This questionnaire included basic demographic information (age, gender, level of education, occupation, prior LBP) for each subject. To measure patient-clinician agreement, respondents were asked whether they agreed with their treating physician with respect to: management of their LBP, projected date for return-to-work, and medical tests ordered. Similarly, they were asked whether they agreed with the management of their LBP by their physical therapist. To measure inter-clinician agreement, patients were asked whether they believed the physical therapist was providing the treatment that the physician thought would be the most appropriate.

4.1.3.4 Psychosocial Variables

The Oswestry Disability Questionnaire (ODQ) was used to assess self-perceived disability at the time of referral to physical therapy. This questionnaire is composed of 10 items and is answered on a 6-point Likert scale. A percent disability score is generated by dividing the composite score by the maximum score and multiplying by 100 percent. Scores range from 0 % to 100%; 0% to 20% (minimal disability), 20% to 40% (moderate disability), 40% to 60% (severe disability), 60% to 80% (crippling disability) and 80% to 100% (Bed-bound or exaggerated symptoms).[18] The ODQ is well-accepted,[19] reliable [20;21] and has been validated in both English [18] and French.[22]

The 12-item General Health Questionnaire (GHQ-12) was used to assess psychological distress in all study subjects. The GHQ-12 items are answered using a 4-point Likert scale and a composite score is obtained by the addition of the individual questions. Scores range from 0-36, where higher scores indicate higher psychological distress. The GHQ-12 has been shown to be reliable and valid.[23;24]

The Coping Strategies Questionnaire (CSQ) was also administered. This questionnaire includes 5 subscales: *Distraction*, *Catastrophizing*, *Re-interpreting Pain Sensations*, *Ignoring Pain Sensations*, and *Prayer and Hoping*. The CSQ is based on a 4-point Likert scale, and is scored by generating a mean for each subscale. The CSQ has been shown to be a reliable [25] and valid questionnaire in

English [26] and French.[27] Although this questionnaire was designed for chronic populations, it has been used to predict the development of chronic pain in patients similar to ours.[28]

Job satisfaction was measured with the validated Job Satisfaction questionnaire (JSQ).[29] The JSQ is an 8-item questionnaire based on a 4-point Likert scale and is scored by generating a weighted mean of responses.

Satisfaction with the physician was assessed using the LBP-specific Patient Satisfaction Subscales (PSS) questionnaire, a validated questionnaire pertaining to the patient's satisfaction with medical visit.[30] The PSS is composed of 4 subscales: Information, Caring, Effectiveness, and Technical Quality. Scores range from 1 to 5 for each subscale, and higher scores indicate greater dissatisfaction with the clinical visit.

4.1.3.5 Agreement and Satisfaction

We made the distinction between the terms agreement and satisfaction. Patient satisfaction is a broad term encompassing several aspects of the clinical management. As such, one may be satisfied with overall clinical management but disagree with specific aspects of it. Identifying disagreement with regards to specific components of the clinical management may potentially have greater clinical value that than just measuring overall patient satisfaction.

4.1.3.6 Statistical Analysis

Disagreement with the physical therapist was assessed by asking patients whether they agreed with management of their LBP by their treating therapist. Similarly, agreement between the two clinicians was determined by whether the patient perceived the physical therapist was providing the treatment the physician thought would be the most appropriate.

In order to assess agreement or disagreement with the physician, the following algorithm was formulated: whether the patients agreed with the way their treating physician managed their LBP, whether they agreed with the date set for return-to-work and whether they agreed with the medical tests ordered. Disagreement was defined as not agreeing to any one of the factors mentioned above.

Analysis included descriptive statistics, univariate comparisons, and logistic regression. The Student's t-test and chi-square analysis were used to assess statistical significance for continuous and categorical variables between the two groups respectively.

One-way ANOVA was used to determine which coping strategies (i.e. subscales) of the CSQ were the most employed by the cohort. The same analysis was performed to assess which components of the medical visit resulted in greater patient satisfaction (PSS).

Multiple logistic regression was used to determine which factors were associated with disagreement. The independent variables included in the model were selected on the basis of their statistical significance in the univariate analysis. The independent variables, disability and psychological distress, were dichotomized as to whether a patient had a self-perceived disability score (ODQ) greater or equal to 60% (severe to crippling disability [18]) and whether they had a psychological distress score (GHQ) greater or equal to the median of 16.

4.1.4 Results

4.1.4.1 Study Population

Thirty-eight patients were recruited over a one-year period (2002-2003). Three patients were not included; one not being able to understand French or English, one still working at the time of the referral and one patient dropped out of the study, leaving a study population of 35 patients.

The mean age of the entire study population was 38.9 years (SD: 11.6); 29 (82.9%) were males and 22 (62.9%) were single. Twenty-four (68.6%) subjects had an educational level of high school or below and 13 (37.1%) were married.

The mean self-perceived disability score for the cohort was 47.3% (SD: 22.6) and the mean psychological distress score was 16.2 (SD: 6.8). Patients mostly used coping strategies of distraction, catastrophization and prayer

(p=0.03). Most patients were satisfied with treatment and there were no differences among the subscales of the PSS (p=0.32). Means for the subscales of the CSQ and PSS questionnaires are presented in Tables 1 and 2 respectively.

4.1.4.2 Agreement vs. Disagreement

All but one patient agreed with the management of their LBP by their treating physical therapist, and all believed the physical therapist was providing the treatment the physician suggested. Interestingly, there were 10 (28.6%) subjects who disagreed with their physician versus 25 (71.4%) who agreed. Differences in demographic data between these two groups are given in Figure 1. Although not statistically significant, patients who disagreed with their physican had higher self-perceived disability scores (57.8% (SD: 17.7) vs. 43.1% (SD: 22.5), p=.07), were more psychologically distressed (19.0 (SD: 5.6) vs. 15.1 (SD: 7.0), p=.13), catastrophized more about their pain (2.6 (SD: 0.81) vs. 2.2 (SD: 0.65), p=.11) and did not ignore their pain as much (1.6 (SD: 0.47) vs. 2.1 (SD: 0.78), p=.09) compared with those who agreed.

Patients in the disagreement group were less satisfied with respect to two out of the four subscales of the PSS questionnaire. Those who disagreed were less satisfied with the care provided by the physician (2.8 (SD: 0.97) vs. 2.1 (SD: 0.72), p=.05). They were also less satisfied with the technical quality of the visit, which included the following: tests ordered by the physician, referral to a back

specialist, whether the physician attentively listened to the patient's description of the LBP and whether the physician understood the LBP problem (3.0 (SD: 0.91) vs. 2.3 (SD: 0.63), p=.01). No differences were found for the *information* and *effectiveness* subscales of the questionnaire. For a summary of all questionnaires see Table 3.

Multiple logistic regression revealed no statistically significant associations between disagreement and various factors. However, the estimated odds ratios were high for psychological distress (OR: 5.6, 95%CI: 0.89-35.0, P=0.07) and self-perceived disability (OR: 5.3, 95%CI: 0.85-32.9, P=0.07).

4.1.5 Discussion

We found that all but one worker compensated for LBP agreed with their physical therapist with regards to the management of their LBP, and all agreed that the physical therapist was providing the treatment the physician would have approved. However, 29% of workers disagreed with their physician - which was associated with dissatisfaction with medical care and technical quality of the visit, and possibly higher self-perceived disability, higher psychological distress and pain catastrophization.

4.1.5.1 Agreement with the Clinician

The present study is the first to evaluate agreement with the clinician at the start of a physical therapy treatment regimen. Previous studies [14;31] have only

looked at satisfaction during or at the end of the treatment. This could potentially bias the results since a patient who does not improve may be more dissatisfied with the treatments than one who improved. Although our variable of interest was patient-perceived agreement and not satisfaction, we did find an association between patient satisfaction with the clinician and agreement. That is, those who disagreed were less satisfied with the medical care and technical quality of the visit than those who agreed.

All but one of the study subjects agreed with the treating physical therapist, whereas disagreement with the physician was more pronounced. This could be explained by the differences that exist between the physiotherapeutic and medical encounters. First, physical therapy treatments usually involve more frequent consultations as compared to medical encounters. Second, physical therapy consultations tend to be longer than medical consultations. Third, part of physical therapy treatment is concerned with patients' active participation in carrying out exercises at home. These factors may explain the high agreement observed between patients and physical therapists.

Disagreement with the physician may be due to the range of expectations associated with the medical visit, which are often not met.[32] An Israeli study on LBP in primary care demonstrated that patients' perception of worry, coping, limitations, expectations of pain relief and dissatisfaction with the first medical visit were found to predict chronicity.[33]

4.1.5.2 Self-perceived Disability

Although not statistically significant, we found higher self-perceived disability in the disagreement group versus the agreement group. Due to the cross-sectional design of this study, we could not assess whether self-perceived disability predicts disagreement or vice versa. However, self-perceived disability has been previously associated with the medical visit. Patients with higher self-perceived disability sought more types of diagnostic and therapeutic measures from their physicians.[34] In our study, it may be that those who perceived greater disability of their condition expected more from the medical visit, and thus were more likely to be in disagreement with the physician.

4.1.5.3 Psychological Distress

Psychological distress is a pre-morbid state that could potentially have clinical implications. In our cohort, we found that those in the disagreement group were more psychologically distressed than those who agreed, although this finding was not statistically significant. Macfarlane et al. [35] were the first to evaluate such a pre-morbid state in LBP as part of the South Manchester Low Back Pain Study and reported that males who had a low GHQ score (low psychological distress) were more likely to have better outcomes (improvement in symptoms). Similarly, Thomas et al. [36] found that patients with high psychological distress (as measured with the GHQ) had over a three-fold increase in odds of persistent symptoms. A more recent prospective study

demonstrated that psychological distress at 23 years of age more than doubled the risk of developing LBP ten years later.[37]

Although identification of pre-morbid conditions such as high psychological distress within the context of a consultation may be difficult, primary care clinicians who are able to recognize these may adjust their management accordingly in order to optimize outcomes. It may be instructive to detect factors that are related to high psychological distress. Future research may focus on new ways to identify psychological distress within a clinical visit so as to integrate such findings in clinical practice.

4.1.5.4 Coping Strategies & Job Satisfaction

Recently, Reis et al. [38] described a model by which a negative patient-physician encounter may result in aggressive or defensive behavior which, among other things would lead to catastrophizing attitudes. Our results may support this model as patients in the disagreement group tended to catastrophize more about their pain than those in the agreement group. In contrast, a positive patient-physician encounter may lead to containment of the pain. Job satisfaction was not found be different between those who agreed and those who disagreed with their physician. Possibly, job satisfaction does not affect the patient-physician relationship although it may impact on outcomes such as return-to-work.[10;39]

4.1.5.5 Factors associated with Disagreement

Although not statistically significant, multiple logistic regression showed that patients with higher self-perceived disability and psychological distress are respectively, 5.3 and 5.6 times more likely to be in disagreement with their treating physician than patients with less self-perceived disability and low psychological distress. The identification of such factors may prove to be important elements to consider within the complex patient-physician interaction. The predictive power of such factors should be investigated in studies with larger sample sizes.

4.1.5.6 Limitations

A limitation of this study was the small sample size. Another limitation was the cross-sectional nature of this study. As such, we are only able to describe associations between disagreement and other factors as opposed to causal or precipitating factors. Finally, there is a possibility of selection bias. It may be that those who agreed to participate in the study may be those who are more co-operative and more satisfied with services, or on the hand, those who tend to complain more about the services. Even though patients were assured that all responses in the interviews were strictly confidential, there is a possibility of social desirability bias. In that event, the true proportion of those in disagreement with the physician would be an underestimate.

4.1.6 Conclusion

The present study indicates that there is good agreement between patients and physical therapists with respect to the management of their LBP. All patients agreed the physical therapist was providing the treatment the physician would have approved. Twenty-nine percent of patients disagreed with the medical management of their condition. Such disagreement was associated with dissatisfaction with medical care and technical quality of the visit, and possibly higher self-perceived disability, high psychological distress and pain catastrophization. Identifying such baseline factors may potentially assist clinicians in screening patients with poorer prognostics. The impact of these factors on outcome will be determined within the context of a follow-up study.

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Table 1. Scores for the Coping Strategies Questionnaire (n=35)

	Mean (SD)	Range
Distraction	2.3 (0.83)	1.0 – 3.8
†Catastrophizing	2.3 (0.72)	1.2 – 4.0
Re-interpreting Pain Sensations	1.8 (0.74)	1.0 – 4.0
Ignoring Pain Sensations	1.9 (0.73)	1.0 – 3.5
Prayer and Hoping	2.1 (1.0)	1.0 – 4.0

Scores range from 1 to 4; higher scores imply patients employ such strategies to cope with their pain
†Catastrophization is considered a maladaptive coping strategy

Table 2. Patient Satisfaction Subscales Questionnaire & Job Satisfaction Questionnaire (n=35)

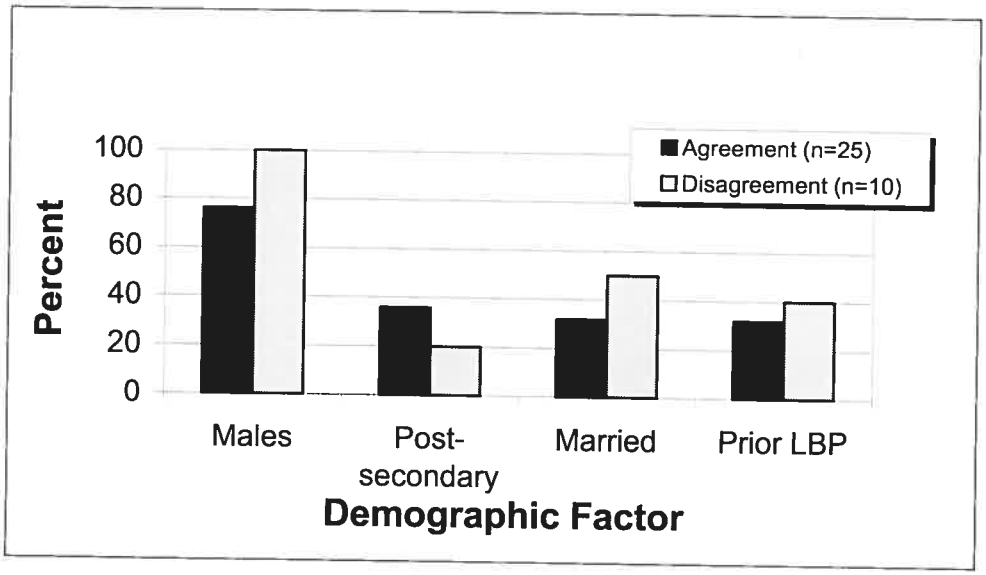
	Mean (SD)	Range
†Patient Satisfaction Subscales:		
Information	2.6 (0.85)	1.0 – 5.0
Caring	2.3 (0.83)	1.0 – 4.8
Effectiveness	2.3 (0.66)	1.0 – 3.7
Technical Quality	2.5 (0.78)	1.0 – 5.0
*Job Satisfaction	2.9 (0.38)	2.1 – 3.9

† Scores range from 1 to 5; higher scores indicate dissatisfaction with physician
*Scores range from 1 to 4; higher scores indicate greater satisfaction with work

Table 3. Age, disability, psychological distress, coping and satisfaction in workers who agreed and disagreed with their physician's management of their LBP

	Agreed (n=25) Mean (SD)	**Disagreed (n=10) Mean (SD)**	**P-Value**
Age (years)	38.2 (11.9)	40.8 (11.4)	0.56
Percentage disability (ODQ)	43.1 (22.5)	57.8 (17.7)	0.07
Psychological distress (GHQ-12)	15.1 (7.0)	19.0 (5.6)	0.13
Coping Strategies Questionnaire:			
Distraction	2.3 (0.78)	2.4 (0.98)	0.64
Catastrophizing	2.2 (0.65)	2.6 (0.81)	0.11
Reinterpreting Pain Sensations	1.7 (0.76)	1.9 (0.71)	0.57
Ignoring Pain Sensations	2.1 (0.78)	1.6 (0.47)	0.09
Prayer and Hoping	1.9 (1.2)	2.4 (0.95)	0.24
Patient Satisfaction Subscales:			
Information	2.5 (0.71)	2.9 (1.1)	0.17
Caring	2.1 (0.72)	2.8 (0.97)	0.05
Effectiveness	2.3 (0.59)	2.5 (0.80)	0.29
Technical Quality	2.3 (0.63)	3.0 (0.91)	0.01
Job Satisfaction	3.0 (0.38)	2.8 (0.38)	0.34

Figure 1. Demographic characteristics of Agreement and Disagreement Groups



No statistically significant differences were found among the two study groups

Effects of Patient-Physician Disagreement in Low Back Pain: A Pilot Study

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4.2.1 Abstract

Study Design. A longitudinal pilot study of workers compensated for low back pain (LBP) referred to physical therapy by their treating physician.

Objective. To determine whether agreement with the physician is associated with less time off-work and higher self-perceived disability.

Summary of Background Data. Several studies have documented the association of psychosocial variables with chronicity and self-perceived disability. However, few studies have investigated the role of the patient-physician interaction in these outcomes

Methods. 35 workers compensated for LBP responded to a telephone interview within one week of referral to physical therapy regarding agreement with the medical management of their LBP. They were followed until they returned to work or for a minimum of 3 months. They completed validated questionnaires on self-perceived disability, psychological distress, coping strategies, and job satisfaction at both baseline and follow-up. Estimated odds ratios were calculated to determine the association of disagreement, high psychological distress, high self-perceived disability, being married, and low education with chronicity and self-perceived disability.

Results. Patient-physician disagreement was not found to be associated with chronicity and self-perceived disability. Although not statistically significant, the estimated odds ratios associated with chronicity were high for elevated psychological distress, and being married. Estimated odds ratios associated with

self-perceived disability were high for elevated psychological distress and low educational level, although not statistically significant.

Conclusion. Patient-physician disagreement is not associated to chronicity and self-perceived disability. Studies with larger sample sizes should investigate the role of other factors, such as patient expectations, in the transition to chronicity and self-perceived disability in LBP.

Key words: Low back pain; agreement; psychosocial; chronicity; outcomes; psychological distress;

Key Points:

- Disagreement with the physician was not associated to chronicity
- Disagreement with the physician was not associated to higher self-perceived disability
- Future research is needed to explore the role of other factors, such as patient expectations, in the transition to chronicity and self-perceived disability in low back pain.

Mini Abstract:

Patient-physician disagreement and its association with chronicity and self-perceived disability are not well understood in low back pain. We determined in a pilot prospective cohort study, that patient-physician disagreement was not associated with chronicity and self-perceived disability. Larger studies need to investigate other factors involved with these outcomes.

4.2.2 Introduction

Low back pain (LBP) is a leading cause of all work disability [1], affecting 50% of all workers. [2] As a result, research has focused on trying to reduce work-related disability in LBP. Among these studies, several have identified psychosocial factors that may affect return-to-work and disability in workers disabled by LBP. [3-5]

A lower ability to cope with pain and increased psychological distress were associated with approximately a four-fold increase in time-off work [6]. Also, patients who were more distressed had a greater use of physical therapy services and lumbar CT scans. Even in acute and sub-acute episodes, mental stress delayed return-to-work. [7;8]

High physical and psychological job demands and low supervisory support were each associated with about 20% lower return-to-work rates. [9] Furthermore, the duration of work disability and psychosocial factors were independent of the severity of the injury. On the other hand, high job control, especially control over work and rest periods, was associated with over 30% higher return-to-work rates.

Although factors such as coping, psychological distress and job characteristics have been studied with respect to effects on outcomes, little is known about the effects of the patient-clinician relationship in LBP. Cedraschi et al. [10] found that conflicting beliefs between the clinician and the patient's own

illness representation were associated with a negative outcome, whereas confidence in one's clinician was associated with an improved short-term outcome. This study was limited by the fact that it was measured cross-sectionally, as part of the exposure was measured after the outcome. In a study of 200 patients who presented to general practice, Thomas et al. [11] reported that patients who received a "positive" consultation improved compared to those who received a "negative" consultation. However, this study measured improvement two weeks after the consultation and included patients with various conditions. The LBP literature is scare on the effects of a negative patient-physician interaction on outcomes.

The objective of the present study was to determine whether agreement with the physician is associated with improved outcomes, such as less time off-work and lower self-perceived disability at follow-up.

4.2.3 Materials and Methods

4.2.3.1 Population Studied

This exploratory study examined patients with acute and sub-acute LBP referred to physical therapy by their treating physicians. To be eligible subjects had to have been compensated for a new episode of LBP, defined as not having received compensation within the last year for a lower back injury.

Exclusion criteria were the inability to comprehend or write in French or English, and any concurrent or pre-existing injury or illness that precluded the worker from returning to work even if the low back problem resolved. The protocol was approved by the ethics committee of the Université de Montréal and all subjects signed an informed consent form prior to participating.

4.2.3.2 Study Procedure

Physical therapy clinics from across the province of Quebec were contacted by the study coordinator either by mail or by phone and invited to participate in the study. Those who consented to participate were provided with instruction sheets pertaining to the recruitment of the study subjects. The participating clinics were supplied with envelopes containing a series of questionnaires to be distributed to eligible patients who agreed to participate. The names and phone numbers of the patients who consented to participate (signed the consent form) in the study were faxed to the study coordinator. All study subjects were given a package containing a copy of all questionnaires.

4.2.3.3 Interviews

A research assistant telephoned the study subjects for a baseline interview, within one week of referral to physical therapy by their treating physician. A series of questionnaires were administered consecutively, all of which are described below. The patients were followed until they returned to work, or for a minimum of 3 months from the date of injury if they did not return to

work. We have chosen 3 months because it is an accepted definition of chronic back pain. [12]

4.2.3.4 Agreement

A patient questionnaire was developed for use in this study by a team of researchers that included a physical therapist/epidemiologist, a sport medicine physician/epidemiologist, a psychologist who specializes in occupational health, and an occupational health physician.

The questionnaire was administered at baseline and included basic demographic data (age, gender, level of education and occupation (classified according to Statistics Canada Job Classification system [13]) for each subject. Respondents were also asked whether they agreed with their treating physician with respect to: management of their LBP, projected date for return-to-work, and medical tests ordered. The response scale of the questions mentioned above was dichotomous (yes/no).

4.2.3.5 Psychosocial Measures

A series of questionnaires were administered at the time of referral to physical therapy and at follow-up. The questionnaires used are described below.

The Oswestry Disability Questionnaire (ODQ) was used to assess self-perceived disability. This questionnaire is composed of 10 items and is answered

on a 6-point Likert scale. A percent disability score is generated by dividing the composite score by the maximum score and multiplying by 100 percent. Scores range from 0 % to 100%; 0% to 20% (minimal disability), 20% to 40% (moderate disability), 40% to 60% (severe disability), 60% to 80% (crippling disability) and 80% to 100% (Bed-bound or exaggerated symptoms).[14] The ODQ is well-accepted [15] reliable [16;17] and has been validated in both English [14] and French.[18]

The 12-item General Health Questionnaire (GHQ-12) was used to assess psychological distress in all study subjects. The GHQ-12 items are answered using a 4-point Likert scale and a composite score is obtained by the addition of the individual questions. Scores range from 0-36, where higher scores indicate higher psychological distress. The GHQ responses were also calculated as bimodal scores, where responses were either scored 0 or 1 resulting in a score ranging from 0 to 12. A cut-off score greater or equal to 6 was chosen to discriminate between "cases" and "non-cases".[19] The GHQ-12 has been shown to be reliable and valid. [20;21]

The Coping Strategies Questionnaire (CSQ) was also administered. This questionnaire includes 5 subscales: *Distraction*, *Catastrophizing*, *Re-interpreting Pain Sensations*, *Ignoring Pain Sensations*, and *Prayer and Hoping*. The CSQ is based on a 4-point Likert scale, and is scored by generating a mean for each subscale. The CSQ has been shown to be a reliable [22] and valid questionnaire in English [23] and French.[24] Although this questionnaire was designed for chronic

populations, it has been used to predict the development of chronic pain in patients similar to ours. [25]

Job satisfaction was measured with the validated Job Satisfaction questionnaire (JSQ).[26] The JSQ is an 8-item questionnaire based on a 4-point Likert scale and is scored by generating a weighted mean of responses.

4.2.3.6 Statistical Analysis

In order to assess agreement or disagreement with the physician, the following algorithm was formulated: whether the patients agreed with the way their treating physician managed their LBP, whether they agreed with the date set for return-to-work and whether they agreed with the medical tests ordered. Disagreement was defined as not agreeing to any one of the factors mentioned above.

Analysis included descriptive statistics, univariate comparisons, and logistic regression. We used paired and independent sample t-tests to assess statistical significance for continuous variables between the two groups. Chi-square analyses were used to assess statistical significance for categorical variables between the two groups.

Kaplan-Meier survival analysis was performed to compare return-to-work times of those who agreed with those who disagreed with their physician.

Multiple logistic regressions were used to determine which factors were associated with chronicity and self-perceived disability. The independent variables were disagreement, being married, low education (defined as high school or less), self-perceived disability (ODQ) and psychological distress (GHQ-12). Self-perceived disability was dichotomized as to whether a patient had a baseline self-perceived disability score greater or equal to 60% (severe to crippling disability [14]). Follow-up self-perceived disability was dichotomized as to whether a patient had a score greater or equal to 20% (minimal disability [14]). This cut-off was chosen as we would expect patients who have undergone treatment to have improved. Psychological distress was dichotomized using the GHQ bimodal scoring response scale, where scores greater or equal to 6 indicated "cases".[19]

4.2.4 Results

4.2.4.1 Study Population

Thirty-eight patients were recruited over a one-year period (2002-2003). Three patients were not included; one not being able to understand French or English, one still working at the time of the referral and one patient dropped out of the study, leaving a study population of 35 patients.

The mean age of the 35 patients was 38.9 years (SD: 11.6); 29 (82.9%) were males and 22 (62.9%) were single. Twenty-four (68.6%) subjects had an educational level of high school or below. Twenty-nine patients (82.8%) worked

in "manual" jobs, 3 (8.6%) had "mixed" jobs (included two nurses and one firefighter), and 3 (8.6%) had "non-manual" jobs.

Three patients (8.6%) were lost to follow-up, all of whom were no longer reachable by telephone at the time of the final interview. For one of those three, we were able to ascertain return-to-work from the treating physical therapist. Those patients lost to follow-up did not differ from the rest of the cohort according to age, gender, disagreement, self-perceived disability and psychological distress.

Nine patients (28.1%) disagreed with their treating physician with respect to the management of their LBP, projected date for return-to-work, and medical tests ordered. The average time off work for the remaining 33 patients was 93 days (SD: 63.8). Fourteen patients (42.4%) were off work for at least 3 months.

There were several changes between baseline and follow-up with respect to improvement in self-perceived disability, psychological distress and decreased use of certain pain coping strategies. Differences between baseline and follow-up mean scores (paired t-tests) for all questionnaires are presented in Table 1.

4.2.4.2 Agreement vs. Disagreement

Those who disagreed with their physician did not return-to-work later than those who agreed (Figure 1). Furthermore, those who disagreed did not have

higher self-perceived disability or higher psychological distress. However, we did observe that patients who disagreed with their physician catastrophized more about their pain than those who agreed. Differences in mean scores between those who agreed versus those who disagreed with the physician are presented in Table 2. Relative risks of being chronic, having higher self-perceived disability, psychological distress and catastrophization at follow-up among those who disagreed with their physician are presented in Table 3. Patients who disagreed with their physicians had a 3.3 relative risk of having a catastrophization score greater than two (p=0.03) at follow-up.

4.2.4.3 Models

None of the logistic regression models produced statistically significant results. However, high baseline psychological distress and being married produced high estimated odds ratios for chronicity (defined as being off work for at least 3 months). Higher baseline psychological distress and a low level of education produced high estimated odds ratios for self-perceived disability at follow-up (Table 4).

4.2.5 Discussion

Our sample of workers with compensated LBP who were recruited from physical therapy clinics presented with improved self-perceived disability and lower psychological distress at follow-up. Such patients also decreased the use of coping strategies such as distraction and catastrophization. Nine patients

disagreed with their physician with respect to the management of their LBP. At follow-up, those who disagreed with their physician catastrophized more about their pain than those who agreed. Disagreement with the physician was not found to be associated with chronicity and self-perceived disability at follow-up. Multiple logistic regression analyses revealed no statistically significant associations. Estimated odds ratios exceeded 2 for baseline psychological distress, being married, and level of education, but these were not statistically significant.

4.2.5.1 Baseline vs. Follow-up

In the present study, 19 (57.8%) patients returned to work within 3 months. This figure is similar to one reached in another study, where 54.5% of patients with LBP returned to work within 3 months.[27] However, Spitzer et al. reported that 90% of compensable LBP resolved within that same time period.[28] This difference can be accounted by the fact that our cohort is a group that was referred to physical therapy and not one extracted from the general LBP population. In Quebec, the referral rate of patients with occupational LBP to physical therapy is approximately 18%.[29] Those referred to physical therapy may be patients who have higher disability and tend to be off work longer.

We determined that most patients in the cohort had improved self-perceived disability and lower psychological distress at follow-up compared to at baseline. This might be expected after a physical therapy treatment regimen, as

improvement in symptoms is likely to have a positive effect on the patient's perception of the LBP.

4.2.5.2 Agreement vs. Disagreement

We found no differences at follow-up between those who agreed versus those who disagreed with the physician in terms of psychosocial variables: self-perceived disability, psychological distress and job satisfaction. Interestingly, patients who disagreed with the physician catastrophized more about their pain at follow-up than those agreed. Catastrophization was previously defined as the tendency to ruminate, magnify or feel helpless about pain.[23;30] Although our study indicates an association between pain catastrophization and disagreement with the physician, we did not find any effects on outcomes of return-to-work and self-perceived disability.

4.2.5.3 Chronicity and Self-perceived Disability

Disagreement with the physician was not found to be associated with chronicity in any of the models presented in the results. Carey et al. [31] measured patient satisfaction (not agreement) in patients who received care from chiropractors, primary care practitioners, or orthopedic surgeons. There were no differences in outcomes (functional recovery, return-to-work, complete recovery) in any of the 3 groups, although satisfaction was higher for chiropractors suggesting that satisfaction does not affect outcomes.

Clinical outcomes may be affected by patient expectations of a treatment, more than the treatment itself. In a randomized trial of patients with chronic LBP receiving acupuncture or massage therapy, Kalauokalani et al. [32] found that patients with high expectations for the treatment they received were more likely to have improved function versus those with lower expectations. We did not measure patient expectations in this study, and perhaps this factor is involved in chronicity and self-perceived disability.

Estimated odds ratios for chronicity were approximately 2 for baseline psychological distress, and being married. The confidence intervals were extremely wide due to the small sample size in our study. Although not statistically significant, these estimates concur with the literature. Psychological distress has a confirmed role in the progression to chronicity in LBP.[33] A high Oswestry score (self-perceived disability) at baseline predicted chronicity.[34] Lehman et al. [27] found that those who were single returned to work at a faster rate than those who were married. Specifically, patients who have supportive spouses (those are sympathetic and accept the patient's disability status) reported more pain than patients whose spouses were not supportive.[35-37] As such, patients with supportive spouses may be more likely to become chronic.

Disagreement with the physician was not found to be associated with self-perceived disability at follow-up. We found high estimated odds ratios of greater baseline psychological distress and a lower educational level in relation to self-

perceived disability at follow-up, although not statistically significant. In a study of 681 subjects, Hurwitz et al. [38] found that baseline psychological distress increased the odds of subsequent pain and disability. In addition, they found that baseline pain and disability increased the odds of subsequent psychological distress, suggesting that that pain/disability and psychological distress may be causes and consequences of each other. In a review of studies that have documented an association between education and LBP, Dionne et al. [39] found that there exists a strong association between low education with longer duration and/or recurrence of LBP.

Limitations

A limitation of this study was the small sample size. There is a possibility of selection bias: perhaps those who agreed to participate in the study were more co-operative and more satisfied with services. We do not expect recall bias to have been a problem, since data collection was performed within one week of referral to physical therapy. Even though patients were assured that all responses in the interviews were strictly confidential, there is a possibility of social desirability bias. In that event, the true proportion of those in disagreement with the physician would be an underestimate.

4.2.6 Conclusion

Patients with LBP who disagreed with their physician with regards to the management of their LBP did not return-to-work later than those who agreed.

Furthermore, disagreement with the physician was not associated with greater self-perceived disability at the end of treatments. Other factors such as baseline psychological distress, being married and low education may be associated to these outcomes. There is a need for larger studies to investigate the role of patient expectations in the transition to chronicity, and self-perceived disability.

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Figure 1. Time-Off Work Among those who Agreed (n=24) versus Disagreed (n=9) with their Physician

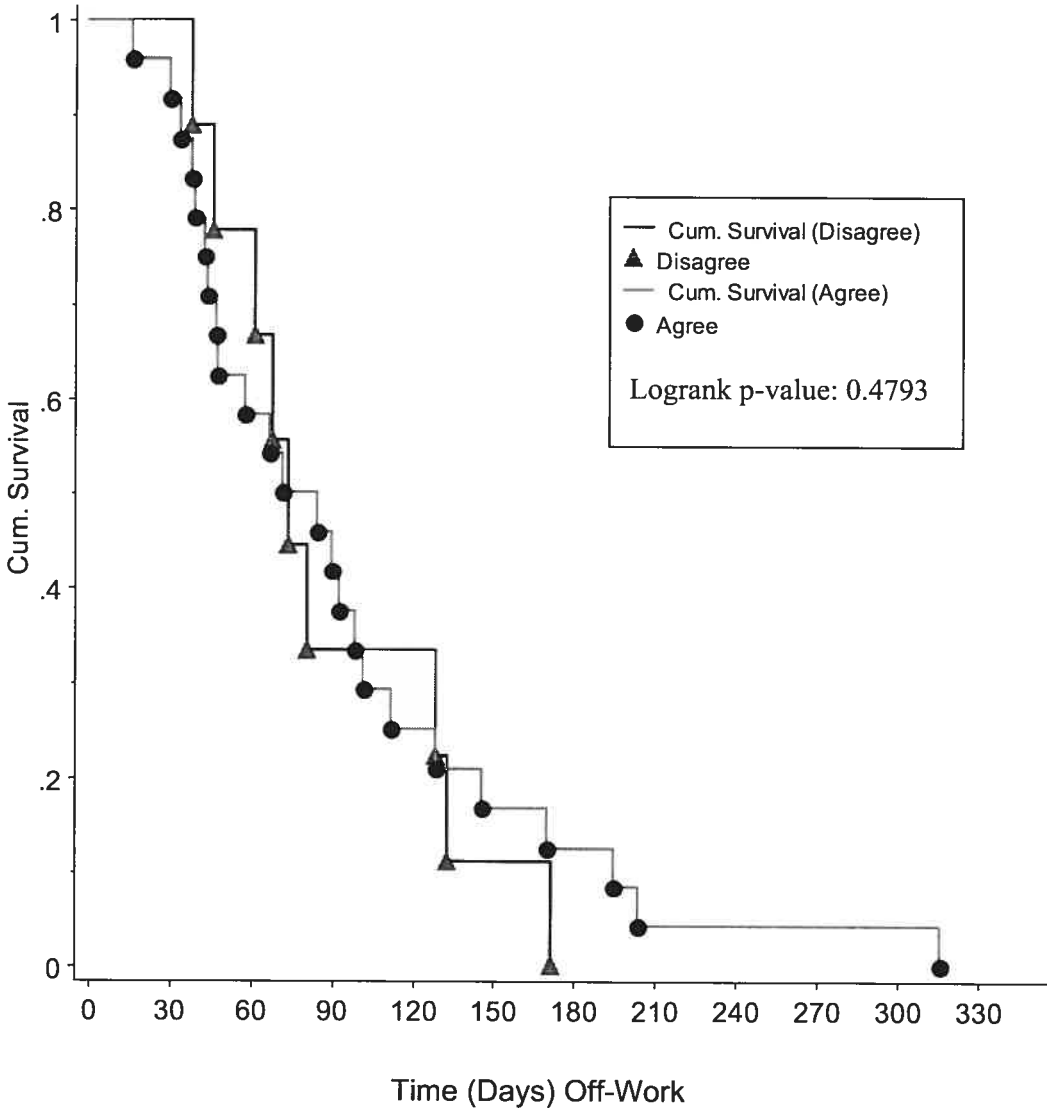

Table 1. Differences in Mean Scores between Baseline (n=35) and Follow-up (n=32) for all Questionnaires

	Baseline (n=35) Mean (SD)	**Follow-up (n=32) Mean (SD)**	**P-Value**
Self-perceived disability (ODQ)	47.3 (22.0)	17.3 (15.8)	<.0001
Psychological distress (GHQ-12)	16.2 (6.8)	11.4 (5.2)	<.0001
†Coping Strategies Questionnaire:			
Distraction	2.3 (0.83)	2.2 (0.79)	0.03
*Catastrophizing	2.3 (0.72)	2.1 (0.80)	0.01
Reinterpreting Pain Sensations	1.8 (0.74)	1.8 (0.77)	0.79
Ignoring Pain Sensations	1.9 (0.73)	1.9 (0.70)	0.60
Prayer and Hoping	2.1 (1.0)	1.9 (0.95)	0.22
**Job Satisfaction	2.9 (0.38)	2.8 (0.62)	0.30

P-values generated by paired t-tests

†Scores range from 1 to 4; higher scores imply patients employ such strategies to cope with their pain

* Catastrophization is considered a maladaptive coping strategy

** Scores range from 1 to 4; higher scores indicate greater satisfaction with work

Table 2. Differences at Follow-up between those who Agreed (n=23) versus Disagreed (n=9) with their Physician

	Agreed (n=23) Mean (SD)	**Disagreed (n=9) Mean (SD)**	**P-Value**
Time-off work (days)	94.9 (70.3)	89.2 (45.2)	0.82
Self-perceived disability (ODQ)	16.9 (16.2)	18.2 (15.5)	0.83
Psychological distress (GHQ-12)	11.3 (5.6)	11.7 (4.0)	0.86
†Coping Strategies Questionnaire:			
Distraction	2.1 (0.77)	2.4 (0.84)	0.29
*Catastrophizing	1.9 (0.76)	2.5 (0.73)	0.03
Reinterpreting Pain Sensations	1.7 (0.79)	1.9 (0.77)	0.54
Ignoring Pain Sensations	1.9 (0.77)	1.7 (0.51)	0.52
Prayer and Hoping	18 (1.0)	2.1 (0.87)	0.25
‡Job Satisfaction	2.8 (0.71)	2.8 (0.29)	0.76

†Scores range from 1 to 4; higher scores imply patients employ such strategies to cope with their pain

* Catastrophization is considered a maladaptive coping strategy

‡Scores range from 1 to 4; higher scores indicate greater satisfaction with work

Table 3. Relative Risks among Patients who Disagreed with their Physician for Chronicity, Self-perceived Disability, and Pain Catastrophization measured at Follow-up (n=32)

	Relative Risk (95% CI)	**P-Value**
Chronicity (>3 months)	0.68 (0.20-2.3)	0.52
Self-perceived disability (ODQ>20)	0.55 (0.14-2.2)	0.37
Psychological Distress (GHQ ≥ 6)	0.74 (0.12-4.8)	0.75
Catastrophization (CSQ>2)	3.3 (1.1-10.9)	0.03

Table 4. Multiple Logistic Regression Models for Chronicity and Self-perceived Disability (n=32)

	Chronicity (>3 months) OR (95% CI)	**Self-perceived Disability (>20) OR (95% CI)**
Model 1		
Disagreement	0.39 (0.06-2.4)	0.33 (0.05-2.4)
High Psychological Distress (GHQ ≥ 6)	2.3 (0.49-11.1)	1.9 (0.37-9.9)
High Self-perceived disability (>60%)	1.6 (0.29-8.3)	1.3 (0.22-7.2)
Model 2		
Disagreement	0.33 (0.05-2.2)	0.33 (0.04-2.5)
High Psychological Distress (GHQ ≥ 6)	2.3 (0.47-11.1)	1.9 (0.37-9.7)
Being Married	2.7 (0.58-12.5)	1.2 (0.24-5.9)
Model 3		
Disagreement	0.42 (0.07-2.4)	0.30 (0.04-2.2)
High Psychological Distress (GHQ ≥ 6)	2.1 (0.47-9.8)	1.7 (0.33-9.1)
Low Education	1.6 (0.33-7.3)	3.0 (0.49-18.9)

CHAPTER 5
ADDITIONAL RESULTS

The previous chapter presented patient-clinician disagreement and its effects on outcomes, such as chronicity and self-perceived disability. Although the focus of this study was disagreement, we collected information regarding patient satisfaction with the physical therapist and the physician, physical activity prescription and restriction by each professional and patient adherence to treatment. These additional results are presented in this chapter.

Patient Satisfaction

Patient satisfaction was measured for both the physical therapist and physician. Patients were more satisfied with the physical therapist than with the physician with regards to information provided by the clinician, the clinical care and effectiveness of the treatments. Mean scores of the subscales of the PSS for each clinician are presented in Table 1.

Prescriptions and Restrictions of Physical Activity

From the patient's perspective, physicians prescribed physical activity restrictions in 25 (73.5%) cases. At baseline, those patients did not report higher self-perceived disability, higher psychological distress, and higher use of coping strategies than those who were not prescribed restrictions. The same was found at follow-up for all these factors. There was higher satisfaction with the

Table 1. Mean scores of the Patient Satisfaction Subscales Questionnaire for Physical therapists and Physicians (n=32)

	Physical Therapist Mean (SD)	**Physician Mean (SD)**	**P-Value**
Information	2.0 (0.85)	2.6 (0.61)	0.0003
Medical Care	2.0 (0.52)	2.3 (0.83)	0.004
Effectiveness	2.0 (0.54)	2.3 (0.66)	0.0004
Technical Quality	2.3 (0.41)	2.5 (0.80)	0.15

Scores range from 1 to 5; higher scores indicate greater dissatisfaction

information provided by the physician among those prescribed restrictions (2.4 (0.60) vs. 3.3 (1.1), P=0.003). There were no differences in time off-work between the two groups (97.5 days (70.4) vs. 81.6 days (39.8), P=0.57).

Patients reported that physicians prescribed physical activity in 11 (31.4%) cases. Those prescribed activities tended to have lower self-perceived disability (37.5% (25.2) vs. 51.8 % (19.3), P=0.07). The same trend was observed at follow-up (10.2% (12.7) vs. 21.0 % (16.3), P=0.07). There were no differences among those prescribed activities in terms of psychological distress, coping strategies, patient satisfaction with physician at both baseline and follow-up. There were no differences in time off-work between those who were prescribed versus not prescribed activities by their physician (93 days (60.5) vs. 93.5 days (66.7), P=0.98).

According to patients, physical therapists prescribed physical activity restrictions in 22 (62.9%) cases. Those patients tended to have higher psychological distress (17.8 (7.3) vs. 13.6 (5.1), P=0.08) at baseline. They also tended to catastrophize more about their pain at follow-up (2.2 (0.86) vs. 1.7 (0.52), P=0.07), although the difference at baseline was less marked (2.5 (0.76) vs. 2.0 (0.57), P=0.10). No differences were found in terms of other coping strategies, patient satisfaction with physical therapist at both baseline and follow-up. Time off-work was similar for both those who said they were and were not prescribed restrictions.

According to patients, physical therapists prescribed physical activity in 22 (62.9%) cases. At baseline, no differences were found among those prescribed physical activity for the following: self-perceived disability, psychological distress, coping strategies, patient satisfaction with the physical therapist. No differences were found for psychological distress, and coping strategies at follow-up either. However, those patients who said that they were prescribed activities by their physical therapist had lower self-perceived disability (11.4 % (11.3) vs. 27.0% (17.8), P=0.005) at follow-up and tended to return-to-work sooner than those not prescribed physical activities (77.9 days (40.5) vs. 120.3 days (87.2), P=0.07).

Physical therapist reported Patient Adherence

Physical therapists were asked to rate patient adherence to treatment according to the following scheme: "yes, most of the time", "uncertain", "no, most of the time". Thirty (93.8%) patients were judged as adherent to treatments "most of the time", whereas, physical therapists were "uncertain" for 2 (6.2%) patients. We found no statistically significant differences at both baseline and follow-up between those who were considered as adherent "most of the time" versus those who were "uncertain" for the following: self-perceived disability, psychological distress, and coping strategies. However, those whose adherence to treatment was "uncertain" were younger and less satisfied with the information and care provided by the physician. Similarly, these patients were also less satisfied with the information provided by the physical therapist. There were no statistical

differences in time to return-to-work between those whose adherence to treatment was “most of the time” versus “uncertain” (Table 2).

Table 2. Differences in Age, Mean Patient Satisfaction Scores and Time off-work between the Adherence Groups

	"Most of the time" (n=30) Mean (SD)	**"Uncertain" (n=2) Mean (SD)**	**P-Value**
Age (years)	18 (2.8)	40.1 (10.5)	0.007
*Satisfaction with Physician			
Information	2.5 (0.69)	3.8 (1.7)	0.02
Caring	2.2 (0.73)	4.1 (0.88)	0.001
Effectiveness	2.3 (0.68)	2.8 (0.71)	0.31
Technical Quality	2.4 (0.69)	3.4 (2.3)	0.13
*Satisfaction with Physical Therapist			
Information	2.0 (0.52)	3.0 (1.4)	0.02
Caring	1.9 (0.54)	2.4 (0.53)	0.25
Effectiveness	1.9 (0.55)	2.5 (0.24)	0.16
Technical Quality	2.3 (0.43)	2.3 (0.0)	0.83
Time off-work (days)	94.2 (64.8)	38.0 (11.3)	0.24

* Scores range from 1 to 5; higher scores indicate greater dissatisfaction

CHAPTER 6
DISCUSSION

The main results of this study were discussed in the two manuscripts presented in Chapter 4. The present chapter will include a general discussion of the results presented with an emphasis on the mechanisms involved in patient-clinician disagreement. A discussion of the additional results presented in Chapter 5 will follow.

Patient-Clinician Disagreement

In the present study, we determined that all but one worker compensated for LBP agreed with their physical therapist with regards to the management of their LBP, and all agreed that the physical therapist was providing the treatment the physician would have approved. With regards to the medical care of their LBP, 29% of workers disagreed with their physician. This disagreement was associated with dissatisfaction with medical care and technical quality of the visit, and possibly higher self-perceived disability, higher psychological distress and pain catastrophization. However, disagreement was not found to be associated with chronicity and self-perceived disability.

Patient disagreement with the physician may be due to differences that exist in that interaction, which differs in several ways from that with a physical therapist. Touch is an important component of the clinical encounter, which

serves two purposes. The most obvious purpose of touch is to examine the patient. The second purpose of touch is to provide reassurance (167). The high agreement observed with the physical therapist may be partly explained by the amount of touch involved in such an encounter. As such, patients may agree more with the management of their LBP by the physical therapist than with the physician as they may feel more reassured with the former.

Another factor that may be affecting agreement with the clinician is the amount of time spent by the clinician with a patient. Physical therapy treatments are typically of longer duration than medical encounters. Furthermore, patients are seen more frequently by physical therapists within a certain period of time than by physicians for a given condition. These factors may enable the patient to build a stronger relationship with the physical therapist than with the physician. This is in turn could lead to greater agreement with the physical therapist. We also determined that patient satisfaction was higher for the physical therapist than with the physician with respect to the information provided by the clinician, the clinical care and the effectiveness of treatments.

Clinical Guidelines

In 1996, Sullivan (168) summarized key practice recommendations for Canadian family physicians. The key guidelines were as follow:

- Look for red flags during history and examination

- In the absence of red flags, no referral to specialists is warranted
- Educate patients about the natural history of LBP and reassure them that quick recovery is likely
- Encourage exercise and activity (at levels tolerable for the patient)
- Avoid bed rest
- Keep use of medication minimal

Despite these guidelines, discrepancies have been documented between LBP guidelines and physicians' practices in Canada (169;170). In our study, physicians prescribed physical activity restrictions for 25 (73.5%) patients. In a recent Manitoban study, Guzman et al. (171) reported that 34.8% of physicians prescribed physical activity restrictions to workers with injury claims. This figure is more than double the one found in this study, and may be accounted by the fact that we asked patients and not physicians whether restrictions of activity was prescribed. Patient's perception of what was said by the physician was the variable of interest, which may have been affected by patient recall. Interestingly, these patients were more satisfied with the information provided by the physician than those who were not prescribed physical activity restrictions.

Based on our patients' responses, physicians prescribed physical activity to only 11 (31.4%) patients. This figure does not conform to what is accepted in current guidelines (168). Physicians are advised to encourage patients to exercise and do physical activity (within the limits of pain). In support of such

advice, we found that those who were prescribed activities tended to report lower self-perceived disability at both baseline and follow-up. Similarly, patients whose physical therapists prescribed physical activity had lower self-perceived disability at follow-up. Furthermore, such patients returned to work sooner than those not prescribed physical activity, although this was not statistically significant. This may indicate that activity prescription may be beneficial in patients with LBP.

Adherence to treatment

The present study indicates that the majority of patients compensated for LBP (93.8%) adhered to treatments prescribed by their physical therapist. However, these patients did not return-to-work sooner. This finding concurs with those of a study on patients with LBP receiving workers' compensation in which adherence was not related to earlier return-to-work (69).

Those whose adherence to treatment was rated "uncertain" by the physical therapist were younger, less satisfied with the information and care provided by the physician, and less satisfied with the information provided by the physical therapist. Research shows that patients' understanding of their condition is positively related to adherence (100;106-108). In our cohort, it may be that those whose adherence was "uncertain" did not fully understand their condition, and as such, did not fully follow the prescribed treatment regimen.

Adherence to treatment has also been associated with patient satisfaction with the clinician. One study found that patient adherence was related to

physician job satisfaction, lower volume of patients seen per week, ability of the physician to answer patients' questions, scheduling of follow-up appointments and the ordering of more investigative tests (102). Our study concurs with such findings, as those patients whose adherence to treatment was "uncertain" were less satisfied with the information and care provided by the physician and less satisfied with the information provided by the physical therapist.

CHAPTER 7
CLINICAL IMPLICATIONS

This study indicates that patients with LBP are in high agreement with their treating physical therapist with respect to the management of their LBP. Furthermore, all patients believed the physical therapist was providing the treatment the physician would have approved. Twenty-nine percent of patients reported some disagreement with their treating physician. Such disagreement was associated with dissatisfaction with the medical care and technical quality of the visit, and possibly higher self-perceived disability, high psychological distress and pain catastrophization. However, disagreement with the physician was not found to be associated with chronicity and self-perceived disability.

The role of clinicians is not only to provide physical treatment, but to fulfil the psychological needs of patients. Clinicians should reassure and increase patients' understanding of their condition. High agreement with physical therapists may be due to the nature itself of the visit, which is more involved than a standard medical visit. The amount of time spent with a patient, the frequency of visits, and the use of touch are all factors that are implicated in the clinical encounter.

Increased psychological distress, self-perceived disability, and pain catastrophization may be important indicators of patients likely to disagree with

their treating physician. As such, patients presenting with these indicators may require more attention and explanation from the physician. Although disagreement was not associated with chronicity and self-perceived disability, other factors such as patient expectations may be implicated. Future research is warranted to address these issues.

CHAPTER 8

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APPENDIX I

Ethics Committee Approval Certificate

Université de Montréal

Faculté de médecine
Vice-décanat
Recherche et études supérieures

APPROBATION DU COMITÉ D'ÉTHIQUE DE LA RECHERCHE DE LA FACULTÉ DE MÉDECINE

Le Comité d'éthique a étudié le projet intitulé : **L'effet de l'avis contradictoire sur le retour au travail auprès de patients lombalgiques.**

présenté par : **Dre Debbie Feldman**

et considère que la recherche proposée sur des humains est conforme à l'éthique.

[redacted]

Date d'étude : 20 novembre 2001

Date d'approbation : **Modifié et approuvé le 17 décembre 2001**

Numéro de référence : **« CERFM 35 (01) 4#30»**

N.B. Veuillez utiliser le numéro de référence dans toute correspondance avec le Comité d'éthique relativement à ce projet.

Le Comité comprend que le chercheur se conformera à l'article 19 de la Loi sur les services de santé et services sociaux.

C.P. 6128, succursale Centre-ville
Montréal QC H3C 3J7 Télécopieur : (514) 343-5751 www.med.umontreal.ca/recherche

APPENDIX II
CONSENT FORMS

Consent Form

Project: The effect of conflicting advice in the return to work in low back pain patients

Investigators:

Dr. Debbie Feldman	University of Montreal
Dr. Ian Shrier	SMBD-Jewish General Hospital
Dr. Michel Rossignol	Direction de la Santé Publique – Montreal
Dr. Manon Truchon	Institut de recherche en santé et en sécurité du travail
Dr. Luc Marcoux	Comission de la santé et de la sécurité du travail
Dr. K. Looper	McGill University
Dr. L. Kirmayer	McGill University
Dr. A. Vandal	McGill University

Reason for study

Low back pain (LBP) affects approximately 50% of workers and is a leading cause of all work disability. This study will investigate the effects of receiving conflicting advice from different health professionals on return to work in low back pain patients.

Description of Study

If you participate in this study, the following procedures will take place:

1. We will conduct a telephone survey in order to gather information on your back pain injury and evaluate the diagnostic and treatment prescribed by your physician and physiotherapist.

2. If you do not return to work 3 weeks after entering the study, we will contact you for a follow-up telephone survey.

3. A final telephone survey will be conducted once you return to work

Voluntary Participation/Withdrawal

You are under no obligation to take part in this study, and the care you receive at the hospital and by your physician will in no way suffer if you decide not to participate. Moreover, even if you do agree to participate, you may decide to withdraw from participation at any time without affecting your care.

Confidentiality

Confidentiality will be maintained throughout the study within the limits of the law. All of the information obtained in the study will remain in our confidential files, and the name of no study patient will be released to anyone outside of the research team. Nominative information will only be made available to the study team staff on a need-to-know basis. All patients will be identified by a number only (no name will be attached) in our databases for our future analyses. These

data will not be available to any other person. Moreover, the doctor and the physiotherapist will not have an access to the data.

Risks
This study poses no risks to patients.

Benefits
Your participation will help better understanding the patient-doctor-physiotherapist relationship and thus could improve the return to work.

Understanding
You understand that by signing this document you have read and clearly understood all the information provided. You do not give up any legal rights by signing this form. If you have a problem with any part of this study you may contact Dr. Debbie Feldman at (514) 343-6111 ext. 11252.

Thank you for considering participation in this study. A copy of this signed consent form will be given to you.

Consent to Participate
I have read and understood this consent form and have been given the opportunity to ask questions about the study. I hereby give my consent to participate.

Name (block letters) Signature Date witness

Formulaire de Consentement

Projet Pilote: L'Effet de l'avis contradictoire sur le retour au travail auprès de patients lombalgiques.

Noms des chercheurs:

Dr. Debbie Feldman	Université de Montréal
Dr. Ian Shrier	SMBD-Hôpital Général Juif
Dr. Michel Rossignol	Direction de la Santé Publique – Montréal
Dr. Manon Truchon	Institut de recherche en santé et en sécurité du travail
Dr. Luc Marcoux	Comission de la santé et de la sécurité du travail
Dr. K. Looper	McGill University
Dr. L. Kirmayer	McGill University
Dr. A. Vandal	McGill University

Raison de l'étude

La lombalgie qui affecte approximativement 50% des ouvriers, est une cause principale de toute incapacité au travail. Cette étude portera sur les effets entrainés par des avis de différents professionnels de la santé, sur le retour au travail auprès de patients lombalgiques.

Description de l'étude

Si vous acceptez de collaborer à cette étude, les procédures suivantes seront mises en place:

1. A votre entrée dans l'étude, nous procéderons à une entrevue téléphonique pour recueillir des données concernant votre accident lombalgique et évaluer le diagnostic et le traitement proposés par le médecin et le physiothérapeute.

2. Si, vous ne retournez pas au travail 3 semaines après votre entrée dans l'étude, nous vous contacterons pour une entrevue tétléphonique de suivi.

3. Une dernière entrevue téléphonique sera éffectuée à votre retour au travail.

Participation volontaire/retrait

Vous n'êtes pas dans l'obligation de prendre part à cette étude, et les soins que vous recevez de votre médecin ou physiothérapeute, n'en souffriront pas si vous décidez de ne pas y participer. De plus, même si vous acceptez de participer, vous pouvez décider de vous retirer à tout moment sans que cela n'affecte vos soins.

Confidentialité
La confidentialité sera maintenue tout au long de l'étude conformément à la loi. Toutes les informations obtenues dans l'étude resteront dans nos dossiers confidentiels, et le nom d'aucun patient de l'étude ne sera divulgué à personne en dehors de l'équipe de recherche. Toute information nominative sera disponible seulement à l'équipe de l'étude selon leur besoin de savoir. Tous les patients seront identifiés par un code numérique seulement (aucun nom n'y sera rattaché) dans nos bandes de données pour nos futurs analyses. Ces données ne seront disponibles à aucune autre personne. De plus, le médecin et le physiothérapeute n'auront pas d'accès aux données.

Risques
Cette étude ne comporte aucun risque pour les patients.

Bénéfices
Votre participation aidera à mieux comprendre les rapports patient-médecin-physiothérapeute et ainsi pourrait améliorer le retour au travail.

Entente
Vous comprenez qu'en signant ce formulaire, vous avez lu et compris clairement toutes les informations fournises. Vous ne perdez aucun droit légal en signant ce formulaire. Si vous avez un problème avec n'importe quelle partie de l'étude, vous pouvez contacter Laurent Azoulay au [redacted] ou Dr. Debbie Feldman au (514) 343-6111 poste 11252.

Merci pour votre participation à cette étude. Une copie du formulaire de consentement signé vous sera remis.

Consentement à participer
J'ai lu et compris ce formulaire de consentement et j'ai eu la possibilité de poser des questions sur cette étude. J'accepte de donner mon consentement à y participer.

Nom	Signature	Date	Témoin

APPENDIX III

Baseline Questionnaire to Patients

Baseline Questionnaire to Patients

1. Patient Name: _____
2. Patient number: _____
3. Date of the interview: (year/month/day) ___ /___/_____
4. **Time started the interview: (hr/mn)** ____ /____
5. **Time ended interview: (hr/mn)** ____ /____
6. Date of the first physician visit: (year/month/day) ___ /___/_____
7. Date of the first physiotherapists visit: (year/month/day) ___ /___/_____

Demographic data:

8. Age:_____
9. Sex: male ❑ female ❑
10. Status:

single	married	separated	Divorced	widow	living together

11. Height: _____in or _____cm (2.54 cm/in)
12. Weight:_____lb or _____kg (2.2 lb/kg)
13. Last year of education completed:

Primary	Secondary	CEGEP	University

14. Occupation: _____
15. Number of hours worked per week: _____
16. Job Description: _____
    _____
17. How many times a week do you participate in moderate physical activity for more than 15 min (e.g. brisk walking, gardening, bicycling, in-line skating, jogging, etc)? _____
18. Do you have any other medical conditions (e.g. diabetes, heart disease, etc)?_____
    _____
19. How many times a week are you going to attend physiotherapy? _____

Past History

20. Did you have an accident of low back pain prior to this one? ..... ❑Yes ..... ❑No
    a. When? (year/month/day) ___ /___/_____
    b. Was it compensated by CSST? ..... ❑Yes ..... ❑No
    c. Did you have physiotherapy? ..... ❑Yes ..... ❑No

The compensated accident of low back pain:

21. What was the date of the accident that caused your low back pain?
    (year/month/day) ___ /___/_____
22. What was the cause of the accident (e.g. fall, lifting, gradual onset, etc)? _____
23. What do you think is wrong with your back? _____

_____

24. What do you expect from your treatment? _____
_____

Information regarding health care professional visits:

Physician Specific

25. Overall, do you think you and your physician agreed about the management of your back pain? ..... ❑Yes ..... ❑No
26. What did your physician tell you was wrong with your back? _____
_____
27. Is this different from what you think is wrong with your back? ..... ❑Yes ..... ❑No
    a. If yes, specify how? _____
    _____
28. Did your physician order any tests? ..... ❑Yes ..... ❑No
    a. Do you agree with this? ..... ❑Yes ..... ❑No
    b. If not, which tests do you think you need at this time? _____
    _____
29. Did your physician prescribe any medications for you? ..... ❑Yes ..... ❑No
    a. If yes, please specify. _____
    b. Do you agree that you should be taking these medications (y/n)? ... ❑Yes ..... ❑No
    c. Are you taking the medications?

as prescribed	less than prescribed	No

    d. Do you think you should be taking medications that your physician did not prescribe? ..... ❑Yes ..... ❑No
    e. Specify. _____
    _____
30. Did your physician tell you to avoid any activities at this time? ..... ❑Yes ..... ❑No
    a. If yes, please specify. _____
    _____
    b. Do you agree that you should avoid these activities? ..... ❑Yes ..... ❑No
    c. Are you avoiding these activities? ..... ❑Yes ..... ❑No
    d. Do you think you should be avoiding some activities at this time that your physician thought were okay to do? ..... ❑Yes ..... ❑No
    e. Please specify. _____
    _____
31. Did your physician tell you to take part any activities at this time? ..... ❑Yes ..... ❑No
    a. If yes, please specify. _____
    _____
    b. Do you agree that you should partake in these activities? ..... ❑Yes ..... ❑No
    c. Are you partaking in these activities? ..... ❑Yes ..... ❑No
    d. Do you think you should be partaking in some activities at this time that your physician did not think were important? ..... ❑Yes ..... ❑No
    e. Please specify. _____

32. ..... Did your physician tell you when you will be able to return to work? ..... ❑Yes ..... ❑No
    a. If yes, what date will that be (year/month/day)? ___ /___/_____
    b. Do you agree that you will be able to return to work by that date? . ❑Yes ..... ❑No

Physiotherapist Specific

33. Overall, do you think you and your physiotherapist agreed about the management of your back pain? ..... ❑Yes ..... ❑No

34. What did your physiotherapist tell you was wrong with your back? _____

35. Is this different from what you think is wrong with your back (specify which ones)? _____

36. What kinds of treatment are you receiving from your physiotherapist?

_____ _____ _____ _____

_____ _____ _____ _____

    a. Rank them in the order that you believe they are important for you to get better by placing a number in front of each one.

37. Do you think the physiotherapist is giving you the treatment the physician thought would be helpful? ..... ❑Yes ..... ❑No
    a. If no, how is it different?_____

38. Did your physiotherapist tell you to avoid any activities at this time? ..... ❑Yes ..... ❑No
    a. If yes, please specify. _____
    b. Do you agree that you should avoid these activities? ..... ❑Yes ..... ❑No
    c. Are you avoiding these activities? ..... ❑Yes ..... ❑No
    d. Do you think you should be avoiding some activities at this time that your physiotherapist thought were okay to do? ..... ❑Yes ..... ❑No
    e. If yes to (d), please specify._____

39. Did your physiotherapist tell you to take part any activities at this time? ... ❑Yes ..... ❑No
    a. If yes, please specify. _____
    b. Do you agree that you should partake in these activities? ..... ❑Yes ..... ❑No
    c. Are you partaking in these activities? ..... ❑Yes ..... ❑No
    d. Do you think you should be partaking in some activities at this time that your physiotherapist did not think were important? ..... ❑Yes ..... ❑No

    if yes to (d), please specify._____

Questionnaire initial aux patients

1. Nom du patient: _____

2. Numéro du patient: _____

3. Date de l'entrevue: (année/mois/jour)_____/_____/_____

4. Temps du début de l'entrevue: (hr/min)_____/_____

5. Temps de la fin de l'entrevue: (hr/min)_____/_____

6. Date de la première visite chez le médecin: (année/mois/jour) _____/_____/_____

7. Date de la première visite chez le physiothérapeute: (année/mois/jour)
_____/_____/_____

Données démographiques:

8. Age:_____

9. Sexe: mâle ❑ femelle ❑

10. Statut:

Célibataire	Marié	Séparé	Divorcé	Veuf/Veuve	Vie Ensemble

11. Taille: _____pouce ou _____cm (2.54 cm/pouce)

12. Poids: _____lb ou_____ kg (2.2 lb/kg)

13. Dernière année de scolarité:

Primaire	Secondaire	CEGEP	Université

14. Occupation: _____

15. Nombre d'heures de travail par semaine: _____

16. Description du travail: _____

_____

17. Combien de fois par semaine participez-vous à de l'activité physique modérée pendant plus de 15 minutes (par exemple marche, jardinage, vélo, patin à roues alignés, jogging, etc.)?_____

_____

18. Avez-vous d'autres conditions médicales (ex. Diabète, maladies de coeur, etc.)?_____

_____

19. Combien de fois par semaine allez-vous faire de la physiothérapie?_____

Historique:

20. Avez-vous eu un incident lombalgique avant celui-ci?.....❑Oui ❑Non

a. Quand? (année/mois/jour)_____/_____/_____

b. Avez-vous été Indemnisé par la CSST?.....❑Oui ❑Non ❑n/a

c. Avez-vous fait de la physiothérapie? ?.....❑Oui ❑Non ❑n/a

L'accident lombalgique Indemnisé:

21. a) Quelle été la date de l'accident qui a causé votre lombalgie?

(année/mois/jour)_____/_____/_____

b) Quelle été la date de votre arrêt de travail?

(année/mois/jour)_____/_____/_____

22. Quelle été la cause de votre accident (ex. chute, se soulevant, début progressif, etc.)?_____

23. Que pensez-vous est la cause de votre problème de dos?_____

_____

24. Qu'attendez-vous de votre traitement?_____

_____

25. En générale, pensez-vous que vous et votre médecin êtes d'accord sur la gestion de votre douleur dorsale?..... .....❑Oui ❑Non

26. Qu'est-ce votre médecin pense de la cause de votre problème de dos?_____

_____

27. Est-ce différent de ce que vous pensez être le problème de votre dos?...❑Oui ❑Non

a. Si oui, indiquez comment?_____

_____

28. Est-ce que votre médecin a fait des analyses?.....❑Oui ❑Non

a. Êtes-vous d'accord avec ça? .....❑Oui ❑Non

b. Si non, de quelles analyses pensez-vous avoir besoin maintenant?_____

29. Est-ce que votre médecin vous a prescrit des médicaments?.....❑Oui ❑Non

a. Si oui, indiquez lesquels._____

b. Êtes-vous d'accord pour prendre ces médicaments?.....❑Oui ❑Non

c. Prenez-vous les médicaments?

Tel que prescrit	Moins que prescrit	Non

d. Pensez-vous que devriez prendre des médicaments que votre médecin n'a pas prescrits?.....❑Oui ❑Non

e. Si oui, indiquez. _____

30. Est-ce que votre médecin vous a dit d'éviter toutes sortes d'activités en ce moment?

.....❑Oui ❑Non

a. Si oui, indiquez._____

_____

b. Êtes-vous d'accord que vous devriez éviter ces activités?.....❑Oui ❑Non ❑n/a

c. Évitez-vous ces activités? .....❑Oui ❑Non ❑n/a

d. Pensez-vous que vous devriez en ce moment éviter des activités que votre médecin vous a demandé de faire?.....❑Oui ❑Non

e. Indiquez. _____

_____

31. Est-ce que votre médecin vous a dit de faire de l'activité en ce moment?❑Oui ❑Non

a. Si oui, indiquez._____

_____

b. Êtes-vous d'accord de faire ces activités?.....❑Oui ❑Non ❑n/a

c. Faites-vous ces activités?.....❑Oui ❑Non ❑n/a

d. Pensez-vous que vous devriez participer à des activités auxquelles votre médecin n'a pas donné d'importance?.....❑Oui ❑Non ❑n/a

e. Indiquez._____

32. Est-ce que votre médecin vous a dit quand vous pourrez retourner au travail?❑Oui ❑Non

a. Si oui, à quelle date? (année/mois/jour)_____/_____/_____

b. Êtes-vous d'accord que vous pourriez retourner au travail à cette date? ❑Oui ❑Non ❑n/a

33. En générale, pensez-vous que vous et votre physiothérapeute êtes d'accord sur la gestion de votre douleur dorsale?..... .....❑Oui ❑Non

34. Qu'est-ce votre physiothérapeute a dit de la cause de votre problème de dos?_____

_____

35. Est-ce différent de ce que vous pensez être la cause de votre problème dos (spécifiez lesquels)?_____

36. Quel genre de traitements avez-vous reçu de votre physiothérapeute?

_____ _____ _____ _____

_____ _____ _____ _____

Placez-les dans en ordre d'importance en plaçant un numéro devant chacun.

37. Croyez-vous que le physiothérapeute vous donne le traitement que votre médecin pensait être le plus approprié pour vous?..... .....❑Oui ❑Non

38. Est-ce que votre physiothérapeute vous a dit d'éviter toutes sortes d'activités en ce moment?.....❑Oui ❑Non

a. Si oui, indiquez._____

_____

b. Êtes-vous d'accord que vous devriez éviter ces activités?.....❑Oui ❑Non ❑n/a

c. Évitez-vous ces activités? .....❑Oui ❑Non ❑n/a

d. Pensez-vous que vous devriez éviter quelques activités en ce moment que votre thérapeute a dit que vous pouviez faire?.....❑Oui ❑Non

e. Si oui, indiquez. _____

_____

39. Est-ce que votre physiothérapeute vous a dit de faire de l'activité en ce moment?.....❑Oui ❑Non

a. Si oui, indiquez._____

_____

b. Êtes-vous d'accord de faire ces activités?.....❑Oui ❑Non ❑n/a

c. Faites-vous ces activités?.....❑Oui ❑Non ❑n/a

d. Pensez-vous que vous devriez participer à des activités auxquelles votre thérapeute n'a pas donné d'importance?.....❑Oui ❑Non

e. Indiquez._____

APPENDIX IV

Follow-up Questionnaire to Patients

Follow-up Questionnaire to Patients

1. Patient Name: _____
2. Patient number: _____
3. Date of the interview: (year/month/day) ____ /___/_____
4. **Time started the interview: (hr/mn)** _____ /_____
5. **Time ended interview: (hr/mn)** _____ /_____

The compensated accident of low back pain:

6. What do you think is wrong with your back? _____
   _____
7. What do you expect from your treatment? _____
   _____

Information regarding health care professional visits:

Physician Specific

8. Have you seen your physician since the last interview (if no, skip to question 17)? ..... ❑Yes .....❑No
9. Overall, do you think you and your physician agreed about the management of your back pain? ..... ❑Yes .....❑No
10. What did your physician tell you was wrong with your back? _____
    _____
11. Is this different from what you think is wrong with your back (specify)? _____
    _____
12. Did your physician order any new tests? ..... ❑Yes .....❑No
    a. Do you agree with this? ..... ❑Yes .....❑No
    b. If not, which tests do you think you need at this time?_____
    _____
13. Did your physician prescribe any new medications for you? ..... ❑Yes .....❑No
    a. If yes, please specify. _____
    b. Do you agree that you should be taking these medications (y/n)? ... ❑Yes .....❑No
    c. Are you taking the medications?

as prescribed	less than prescribed	No

    d. Do you think you should be taking medications that your physician did not prescribe? ..... ❑Yes .....❑No
    e. Specify. _____
    _____
14. Did your physician tell you to avoid any activities at this time? ..... ❑Yes .....❑No
    a. If yes, please specify. _____
    _____
    b. Do you agree that you should avoid these activities? ..... ❑Yes .....❑No
    c. Are you avoiding these activities? ..... ❑Yes .....❑No
    d. Do you think you should be avoiding some activities at this time that your physician thought were okay to do? ..... ❑Yes .....❑No
    e. Please specify. _____

15. Did your physician tell you to take part in any activities (including a home exercise program) at this time? ..... ❑Yes ..... ❑No
    a. If yes, please specify. _____
    b. Do you agree that you should partake in these activities? ..... ❑Yes ..... ❑No
    c. Are you partaking in these activities? ..... ❑Yes ..... ❑No
    d. Do you think you should be partaking in some activities at this time that your physician did not think were important? ..... ❑Yes ..... ❑No
    e. Please specify. _____

16. Did your physician tell you when you will be able to return to work? ..... ❑Yes ..... ❑No
    a. If yes, what date will that be (year/month/day)? ___ /___/_____
    b. Do you agree that you will be able to return to work by that date? . ❑Yes ..... ❑No

Physiotherapist Specific

17. Overall, do you think you and your physiotherapist agreed about the management of your back pain? ..... ❑Yes ..... ❑No

18. What did your physiotherapist tell you was wrong with your back? _____

19. Is this different from what you think is wrong with your back (specify which ones)? _____

20. What kinds of treatment are you receiving from your physiotherapist?

_____ _____ _____
_____ _____ _____ _____

Rank them in the order that you believe they are important for you to get better.

21. Do you think the physiotherapist is giving you the treatment the physician thought would be helpful? ..... ❑Yes ..... ❑No
    a. If no, how is it different? _____

22. Did your physiotherapist tell you to avoid any activities at this time? ..... ❑Yes ..... ❑No
    a. If yes, please specify. _____
    b. Do you agree that you should avoid these activities? ..... ❑Yes ..... ❑No
    c. Are you avoiding these activities? ..... ❑Yes ..... ❑No
    d. Do you think you should be avoiding some activities at this time that your physiotherapist thought were okay to do? ..... ❑Yes ..... ❑No
    e. Please specify. _____

23. Did your physiotherapist tell you to take part in any activities (including a home exercise program) at this time? ..... ❑Yes ..... ❑No

a. If yes, please specify. _____

_____

b. Do you agree that you should partake in these activities? ..... ❑Yes .....❑No
c. Are you partaking in these activities? ..... ❑Yes .....❑No
d. Do you think you should be partaking in some activities at this time that your physiotherapist did not think were important? ..... ❑Yes .....❑No
e. Please specify. _____

Return to work:

24. Are you ready to return to work (if no, go to question 26)? ..... ❑Yes .....❑No

25. Date of return to work (year/month/day) ___ /___/_____

26. Would you return to the:

same job	modified job	new job	stay off-work	continued to work throughout physio

Questionnaire de suivi aux patients

1. Nom du patient:_____

2. Numéro du patient:_____

3. Date de l'entrevue: (année/mois/jour)_____/_____/_____

4. Temps du début de l'entrevue: (hr/min)_____/_____

5. Temps de la fin de l'entrevue: (hr/min)_____/_____

L'accident lombalgique Indemnisé:

6. Que pensez-vous est la cause de votre problème de dos?_____

_____

7. Qu'attendez-vous de votre traitement?_____

_____

L'information concernant les visites avec les professionnels de la santé:

8. Avez-vous vu votre médecin depuis la dernière entrevue (si non, sauter à la question 17)?
.....❑Oui ❑Non

9. En générale, pensez-vous que vous et votre médecin êtes d'accord sur la gestion de votre douleur dorsale?..... .....❑Oui ❑Non

10. Qu'est-ce votre médecin a dit de la cause de votre problème de dos?_____

_____

11. Est-ce différent de ce que vous pensez être la cause de votre problème dos?

_____

_____

12. Est-ce que votre médecin a fait des analyses?.....❑Oui ❑Non

a. Êtes-vous d'accord avec ça? .....❑Oui ❑Non

b. Si non, de quelles analyses pensez-vous avoir besoin maintenant?_____

_____

13. Est-ce que votre médecin vous a prescrit des médicaments?.....❑Oui ❑Non

a. Si oui, indiquez lesquels._____

b. Êtes-vous d'accord que vous devriez prendre ces médicaments?❑Oui ❑Non ❑n/a

c. Prenez-vous les médicaments?

Tel que prescrit	Moins que prescrit	Non

d. Pensez-vous que devriez prendre les médicaments que votre médecin n'a pas prescrits?.....❑Oui ❑Non

e. Si oui, indiquez._____

14. Est-ce que votre médecin vous a dit d'éviter toutes sortes d'activités en ce moment?
.....❑Oui ❑Non

a. Si oui, indiquez._____

_____

b. Êtes-vous d'accord que vous devriez éviter ces activités?.....❑Oui ❑Non ❑n/a

c. Évitez-vous ces activités? .....❑Oui ❑Non ❑n/a

d. Pensez-vous que vous devriez éviter des activités en ce moment de l'année que votre médecin a dit que vous pouviez faire?.....❑Oui ❑Non

e. Indiquez. _____

_____

15. Est-ce que votre médecin vous a dit de faire de l'activité en ce moment?❑Oui ❑Non

b. Si oui, indiquez._____

_____

b. Êtes-vous d'accord de faire ces activités?.....❑Oui ❑Non ❑n/a

c. Faites-vous ces activités?.....❑Oui ❑Non ❑n/a

d. Pensez-vous que vous devriez participer à quelques activités en ce moment que votre médecin n'a pas pensé étaient importante

e. Indiquez._____

16. Est-ce que votre médecin vous a dit quand vous pourrez retourner au travail?❑Oui ❑Non

a. Si oui, a quelle date? (année/mois/jour)_____/_____/_____

b. Êtes-vous d'accord que vous pourriez retourner au travail à cette date? ❑Oui ❑Non

17. En générale, pensez-vous que vous et votre physiothérapeute êtes d'accord sur la gestion de votre douleur dorsale?..... .....❑Oui ❑Non

18. Qu'est-ce votre physiothérapeute a dit de la raison de votre problème de dos?_____

_____

19. Est-ce différent de ce que vous pensez être le problème de votre dos (spécifié lesquels)?_____

20. Quel genre de traitements avez-vous reçu de votre physiothérapeute?

_____ _____ _____ _____

_____ _____ _____ _____

Placez-les dans en ordre d'importance pour vous en plaçant un numéro devant chacun.

21. Croyez-vous que le physiothérapeute vous donne le traitement que votre médecin pensait être le plus approprié pour vous?..... .....❑Oui ❑Non

22. Est-ce que votre physiothérapeute vous a dit d'éviter toutes sortes d'activités en ce moment?.....❑Oui ❑Non

a. Si oui, indiquez._____

_____

b. Êtes-vous d'accord que vous devriez éviter ces activités?.....❑Oui ❑Non ❑n/a

c. Évitez-vous ces activités? .....❑Oui ❑Non ❑n/a

d. Pensez-vous que vous devriez éviter des activités en ce moment que votre médecin vous a permis de faire?.....❑Oui ❑Non

e. Indiquez. _____

_____

23. Pensez-vous que vous devriez éviter des activités en ce moment que votre physiothérapeute vous a permis de faire?.....❑Oui ❑Non

a. Si oui, indiquez._____

_____

b. Êtes-vous d'accord de faire ces activités?.....❑Oui ❑Non ❑n/a

c. Faites-vous ces activités?.....❑Oui ❑Non ❑n/a

d. Pensez-vous que vous devriez participer à des activités auxquelles votre physiothérapeute n'a pas donné d'importance?

e. Indiquez._____

Retour au travail:

24. Êtes-vous prêt à retourner au travail (si non, voir question 26).....❑Oui ❑Non

25. Date du retour au travail (année/mois/jour) _____/_____/_____

26. Vous retourneriez au

même travail	travail modifié	nouveau travail	arrêteriez de travailler	avez continué de travailler avec la physiothérapie

APPENDIX V

Baseline Questionnaire to Physical Therapists

Baseline Questionnaire to Physical Therapists

1. Patient Name: _____
2. Patient number: _____
3. Date of the visit: (year/month/day) ___ /___/_____
4. **Time started the interview: (hr/mn)** ____ /____
5. **Time ended interview: (hr/mn)** ____ /____
6. What was the patient's diagnosis? _____
7. How did you describe this to the patient? _____
   _____
8. Which of the following modalities do you plan to use on this patient?

Ultrasound	Interferential	Tens
Laser	Heat	Ice
Manual therapy	McConnell Taping	Stretching
Abdominal Strengthening	Back Extensor Strengthening	Other (describe)_____

   Rank them in the order that you believe are important for the patient to get better.

9. Have you given the patient a home exercise program? ..... ❑Yes .....❑No
   a. If yes, please describe? _____
   _____
   _____
10. Have you prescribed any activities for this patient? ..... ❑Yes .....❑No
    b. If yes, please describe? _____
    _____
11. Have you prescribed any restrictions of activity for this patient? ..... ❑Yes .....❑No
    c. If yes, please describe? _____
    _____
12. Do you disagree with the treating physician's management of this patient? ❑Yes .....❑No
    If yes, please describe _____
    _____
    _____

    If yes, have you communicated this to the patient? ..... ❑Yes .....❑No

    If yes, have you or do you plan to communicate this to the physician?..... ❑Yes .....❑No

Questionnaire initial au thérapeute

1. Nom du patient:_____
2. Numéro du patient:_____
3. Date de la **première** visite (année/mois/jour) _____/_____/_____
4. Heure du début de l'entrevue (hr/min): _____/_____
5. Heure de la fin de l'entrevue (hr/min): _____/_____
6. Quel était le diagnostic du patient? _____
7. Comment avez-vous décrit cela au patient? _____
   _____

8. Lesquelles des modalités suivantes avez-vous utilisé sur ce patient?

Ultrasons	Interférentiel	TENS
Laser	La chaleur	Glaçons
Thérapie manuelle	McConnell Taping	Étirement
Renforcement abdominal	Renforcement des extenseurs du dos	Autre décrire) _____ _____

Placez-les dans en ordre d'importance pour vous en plaçant un numéro devant chacun.

9. Avez-vous donné au patient un programme d'exercice à suivre à la maison?
   ❑Oui……❑Non
   Si oui, veuillez décrire._____
   _____

10. Avez-vous prescrit de l'activité pour ce patient?.....❑Oui ❑Non

    Si oui, veuillez décrire._____
    _____

11. Avez-vous prescrit des restrictions dans des activités pour ce patient?...❑Oui ❑Non

    Si oui, veuillez décrire._____
    _____

12. Êtes-vous d'accord avec la façon le médecin a traité le patient?……...❑Oui ❑Non

    Si non, veuillez décrire _____
    _____
    _____

Si non, avez-vous communiqué cela au patient?.....❑Oui ❑Non

Si non, avez-vous déjà ou avez-vous l'intention de communiquer cela au médecin?

❑Oui ❑Non

APPENDIX VI

Follow-up Questionnaire to Physical Therapists

Université de Montréal
Faculté de médecine
École de réadaptation

Follow-up Questionnaire to Physical Therapists

1. Name of the patient: _____ _____
2. Date of the visit: (year/month/day) ___ /___/_____
3. What was the patient's diagnosis? _____
4. Have you actively discussed (i.e. exchanged ideas, not simply read/written an official CSST report) this patient's management with the treating physician? ❑Yes ... ❑No
5. Which of the following modalities did you use on this patient?

Ultrasound	Interferential	Tens
Laser	Heat	Ice
Manual therapy	McConnell Taping	Stretching
Abdominal Strengthening	Back Extensor Strengthening	Other describe) _____ _____

6. Did you give the patient a home exercise program? ..... ❑Yes ..... ❑No
   a. If yes, please describe? _____
   _____
7. Was the patient adherent to this exercise program?

yes for the most part	unsure	no for the most part

Please describe what your reasons are for believing the patient adhered or did not adhere to the exercise program._____
_____
_____
_____
_____

Université de Montréal
Faculté de médecine
École de réadaptation

Questionnaire de suivi pour le/a thérapeute

1. Nom du patient _____ _____
2. Date de la **dernière** visite (année/mois/jour) _____/_____/_____
3. Quel était le diagnostic du patient? _____
4. Avez-vous activement discuté (c.-à-d. échangé des idées, n'a pas simplement lu/écrit un document de la CSST) la gestion de ce patient avec le médecin traitant? _____
5. Lesquelles des modalités suivantes avez-vous utilisé sur ce patient?

Ultrasons	Interférentiel	TENS
Laser	La chaleur	Glaçons
Thérapie manuelle	McConnell Taping	Étirement
Renforcement abdominal	Renforcement des extenseurs du dos	Autre décrire) _____ _____

Placez-les dans en ordre d'importance pour vous en plaçant un numéro devant chacun.

6. Avez-vous donné au patient un programme d'exercice à suivre?.....❑Oui ❑Non
   a. Si oui, veuillez décrire._____

7. Est-ce que le patient a respecté le programme d'exercice?

Oui, la plupart du temps	Incertain	Non, la plupart du temps

Veuillez décrire quelle sont vos raisons pour croire que le patient s'est adhéré ou pas au programme d'exercice ?_____
_____
_____
_____

APPENDIX VII

Oswestry Disability Questionnaire (ODQ)

Oswestry Disability Questionnaire

Please read:

This questionnaire has been designed to give the doctor information as to how your back pain has affected your ability to manage in everyday life. Please answer every section, and mark in each section only the *one box* which applies to you. We realize you may consider that two of the statements in any one section relate to you, but please just *mark the box which most closely describes your problem.*

Section 1 – Pain Intensity

- ❑ I have no pain at the moment.
- ❑ The pain is very mild at the moment.
- ❑ The pain is moderate at the moment.
- ❑ The pain is fairly severe at the moment.
- ❑ The pain is very severe at the moment.
- ❑ The pain is the worst imaginable at the moment.

Section 2 – Personal Care (Washing, Dressing, etc)

- ❑ I can look after myself normally without causing extra pain.
- ❑ I can look after myself normally but it is very painful.
- ❑ It is painful to look after myself and I am slow and careful.
- ❑ I need some help but manage most of my personal care.
- ❑ I need help every day in most aspects of self care.
- ❑ I do not get dressed, wash with difficulty and stay in bed.

Section 3 – Lifting

- ❑ I can lift heavy weights without extra pain.
- ❑ I can lift heavy weights but it gives extra pain.
- ❑ Pain prevents me from lifting heavy weights off the floor, but I can mange if they are conveniently positioned, eg. on a table.
- ❑ Pain prevents me from lifting heavy weights but I can mange light to medium weights if they are conveniently positioned.
- ❑ I can lift only very light weights.
- ❑ I cannot lift or carry anything at all.

Section 4 – Walking

- ❑ Pain does not prevent me walking any distance.
- ❑ Pain prevents me walking more than 1 mile.
- ❑ Pain prevents me walking more than ¼ mile
- ❑ Pain prevents me walking more than 100 yards.
- ❑ I can only walk using a stick or crutches.
- ❑ I am in bed most of the time and have to crawl to the toilet.

Section 5 – Sitting

- ❑ I can sit in any chair as long as I like.
- ❑ I can sit in my favorite chair as long as I like.
- ❑ Pain prevents me sitting more than 1 hour.
- ❑ Pain prevents me from sitting more than ½ hour.
- ❑ Pain prevents me from sitting more than 10 mins.
- ❑ Pain prevents me from sitting at all.

Section 6 – Standing

- ❑ I can stand as long as I want without extra pain.
- ❑ I can stand as long as I want but it gives me extra pain.
- ❑ Pain prevents me standing for more than 1 hour.
- ❑ Pain prevents me from standing more than ½ hour.
- ❑ Pain prevents me from standing more than 10 mins.
- ❑ Pain prevents me from standing at all.

Section 7 – Sleeping

- ❑ My sleep is never disturbed by pain.
- ❑ My sleep is occasionally disturbed by pain.
- ❑ Because of pain I have less than 6 hours' sleep.
- ❑ Because of pain I have less than 4 hours' sleep.
- ❑ Because of pain I have less than 2 hours' sleep.
- ❑ Pain prevents me from sleeping at all.

Section 8 – Sex Life

- ❑ My sex life is normal and causes no extra pain.
- ❑ My sex life is normal but causes some extra pain.
- ❑ My sex life is nearly normal but is very painful.
- ❑ My sex life is severely restricted by pain.
- ❑ My sex life is nearly absent because of pain.
- ❑ Pain prevents any sex life at all.

Section 9 – Social Life

- ❑ My social life is normal and gives me no extra pain.
- ❑ My social life is normal but increases the degree of pain.
- ❑ Pain has no significant effect on my social life apart from liming my more energetic interests, e.g. sports, etc.
- ❑ Pain has restricted my social life and I do not go out as often.
- ❑ Pain has restricted my social life to my home.
- ❑ I have no social life because of pain.

Section 10 – Travelling

- ❑ I can travel anywhere without extra pain.
- ❑ I can travel anywhere but it gives me extra pain.
- ❑ Pain is bad but I manage journeys over two hours.
- ❑ Pain restricts me to journeys of less than one hour.
- ❑ Pain restricts me to short necessary journeys under 30 minutes.
- ❑ Pain prevents me from travelling except to receive treatment.

Comments: _____

_____

Questionnaire Oswestry

Ce questionnaire a été préparé pour recueillir l'information concernant la manière dont la douleur nuit au fonctionnement dans la vie quotidienne. Complétez chaque section, et cochez seulement une case. Nous réalisons que deux énoncés dans chacune des sections peuvent s'appliquer, mais cochez celui qui décrit le mieux votre condition.

Section 1 - Intensité de la douleur

- ❑0 Je n'ai pas de douleur en ce moment.
- ❑1 La douleur est très légère en ce moment.
- ❑2 La douleur est légère en ce moment.
- ❑3 La douleur est plutôt intense en ce moment.
- ❑4 La douleur est très intense en ce moment.
- ❑5 La douleur est pire que vous pourriez l'imaginer en ce moment.

Section 2 - Soins personnels (hygiène personnelle - habillage, etc.)

- ❑0 Je peux m'occuper de mes soins personnels normalement sans avoir une augmentation de la douleur
- ❑1 Je peux m'occuper de mes soins personnels normalement mais cela provoque une augmentation de la douleur
- ❑2 C'est douloureux de m'occuper de mes soins personnels et je suis lent et prudent
- ❑3 J'ai besoin d'un peu d'aide mais je me débrouille pour la plupart de mes soins personnels
- ❑4 J'ai besoin d'aide chaque jour pour la plupart des aspects de mes soins personnels
- ❑5 Je ne m'habille pas, je me lave avec difficulté et je reste au lit

Section 3 - Soulever

- ❑0 Je peux soulever des poids lourds sans augmentation de la douleur
- ❑1 Je peux soulever des poids lourds mais cela provoque une augmentation de la douleur
- ❑2 La douleur m'empêche de soulever des poids lourds du plancher, mais je peux me débrouiller s'ils sont en position convenable, comme sur une table
- ❑3 La douleur m'empêche de soulever des poids lourds mais je peux me débrouiller avec des poids légers à modérés, si c'est en position convenable
- ❑4 Je peux soulever des poids très légers seulement
- ❑5 Je ne peux soulever ou transporter quoi que ce soit

Section 4 - Marche

- ❑0 Je n'ai pas d'empêchement à marcher.
- ❑1 La douleur m'empêche de marcher plus d'un mille (1.56km).
- ❑2 La douleur m'empêche de marcher plus d'un quart de mille (0.4km).
- ❑3 La douleur m'empêche de marcher plus de 100 verges (90m).
- ❑4 Je ne suis capable de marcher qu'avec une canne ou des béquilles.
- ❑5 Je reste au lit la plupart du temps et je dois me traîner pour aller aux toilettes.

Section 5 - Position assise

- ❑0 Je peux m'asseoir sur n'importe quelle chaise aussi longtemps que je le veux
- ❑1 Je peux m'asseoir sur ma chaise favorite aussi longtemps que je le veux
- ❑2 La douleur m'empêche de rester assis plus d'une heure
- ❑3 La douleur m'empêche de rester assis plus de 30 minutes
- ❑4 La douleur m'empêche de rester assis plus de 10 minutes
- ❑5 La douleur m'empêche complètement de m'asseoir

Section 6 - Position debout

- ❑0 Je peux me tenir debout aussi longtemps que je le veux sans augmentation de la douleur
- ❑1 Je peux me tenir debout aussi longtemps que je le veux mais cela provoque une augmentation de la douleur
- ❑2 La douleur m'empêche de me tenir debout plus d'une heure
- ❑3 La douleur m'empêche de me tenir debout plus de 30 minutes
- ❑4 La douleur m'empêche de me tenir debout plus de 10 minutes
- ❑5 La douleur m'empêche complètement de me tenir debout

Section 7 - Dormir

- ❑0 Je dors sans médicament
- ❑1 Je peux dormir confortablement seulement en utilisant des médicaments
- ❑2 Même quand je prends des médicaments, je dors moins que 6 heures
- ❑3 Même quand je prends des médicaments, je dors moins que 4 heures
- ❑4 Même quant je prends des médicaments, je dors mois que 2 heures
- ❑5 La douleur m'empêche complètement de dormir

Section 8 - Vie sexuelle

- ❑0 Ma vie sexuelle est normale et ne me cause pas d'augmentation de douleur
- ❑1 Ma vie sexuelle est normale mais elle me cause une augmentation légère de la douleur
- ❑2 Ma vie sexuelle est presque normale mais c'est douloureux
- ❑3 Ma vie sexuelle est sévèrement limitée par la douleur
- ❑4 Ma vie sexuelle est presque absente à cause de la douleur
- ❑5 La douleur empêche toute vie sexuelle

Section 9 - Vie sociale

- ❑0 Ma vie sociale est normale et ne me cause pas d'augmentation de douleur
- ❑1 Ma vie sociale est normale mais augmente le degré de douleur
- ❑2 La douleur n'a pas d'effet significatif sur ma vie sociale sauf de limiter mon intérêt pour les activités plus énergiques, comme sport, etc.
- ❑3 La douleur a limité ma vie sociale et je ne sors pas aussi souvent
- ❑4 La douleur a limité ma vie sociale à la maison
- ❑5 Je n'ai pas de vie sociale à cause de la douleur

Section 10 - Voyager (déplacements, sortie, voyage par véhicules)

- ❑0 Je peux me déplacer n'importe où sans augmentation de douleur
- ❑1 Je peux me déplacer n'importe où mais cela provoque une augmentation de douleur
- ❑2 La douleur est forte mais je peux faire un trajet de plus de 2 heures
- ❑3 La douleur me limite à moins d'une heure de trajet
- ❑4 La douleur me limite à raccourcir un trajet nécessaire à moins de 30 minutes
- ❑5 La douleur m'empêche de me déplacer sauf pour me rendre chez le médecin ou à l'hôpital

Autres commentaires: _____

_____

APPENDIX VIII

General Health Questionnaire (GHQ-12)

General Health Questionnaire

Please read very carefully.
We should like to know if you have had any medical complaints, and how your health has been in general, over the past few weeks. Please answer all the questions on the following page simply by underlining the answer which you think most nearly applies to you. Remember that we want to know about present and recent complaints, not those that you had in the past.

It is important that you try to answer all of the questions. Thank you very much for your cooperation.

Have you recently

1) been able to concentrate on what you are doing?

- ❑ Better than usual
- ❑ Same as usual
- ❑ Less than usual
- ❑ Much less than usual

2) lost much sleep over worry?

- ❑ Not at all
- ❑ No more than usual
- ❑ Rather more than usual
- ❑ Much more than usual

3) felt that you were playing a useful part in things?

- ❑ More so than usual
- ❑ Same as usual
- ❑ Less useful than usual
- ❑ Much less useful than usual

4) felt capable about making decisions about things

- ❑ More so than usual
- ❑ Same as usual
- ❑ Less so than usual
- ❑ Much less capable

5) felt constantly under strain

- ❑ Not at all
- ❑ No more than usual
- ❑ Rather more than usual
- ❑ Much more than usual

6) felt you couldn't overcome your difficulties

- ❑ Not at all
- ❑ No more than usual
- ❑ Rather more than usual
- ❑ Much more than usual

7) been able to enjoy your normal day to day activities

- ❑ More so than usual
- ❑ Same as usual
- ❑ Less useful than usual
- ❑ Much less useful than usual

8) have been able to face up to your problems

- ❑ More so than usual
- ❑ Same as usual
- ❑ Less able than usual
- ❑ Much less able than usual

9) been feeling unhappy and depressed

- ❑ Not at all
- ❑ No more than usual
- ❑ Rather more than usual
- ❑ Much more than usual

10) been losing confidence in yourself

- ❑ Not at all
- ❑ No more than usual
- ❑ Rather more than usual
- ❑ Much more than usual

11) been thinking of yourself as a worthless person

- ❑ Not at all
- ❑ No more than usual
- ❑ Rather more than usual
- ❑ Much more than usual

12) been feeling reasonably happy, all things considered

- ❑ More so than usual
- ❑ About same as usual
- ❑ Less so than usual
- ❑ Much less than usual

Questionnaire Général sur la Santé

Veuillez lire ce qui suit avec attention:

Nous aimerions savoir si vous avez eu des problèmes médicaux et comment, d'une manière générale, vous vous êtes porté CES DERNIÈRES SEMAINES. Veuillez répondre à TOUTES les questions, en entourant la réponse qui vous semble correspondre le mieux à ce que vous ressentez. Rappelez-vous que nous désirons obtenir des renseignements sur les problèmes actuels et récents, et non pas ceux que vous avez pu avoir dans le passé. Il est important que vous essayiez de répondre à TOUTES les questions. Merci beaucoup de votre aide.

Récemment et en particulier ces dernières semaines

1) Avez-vous été capable de vous concentrez sur tout ce que vous faites?

- ❑$_0$ Mieux que d'habitude
- ❑$_1$ Comme d'habitude
- ❑$_2$ Moins bien que d'habitude
- ❑$_3$ Beaucoup moins que d'habitude

2) Avez-vous manqué de sommeil à cause de vos soucis?

- ❑$_0$ Pas du tout
- ❑$_1$ Pas plus que d'habitude
- ❑$_2$ Un peu plus que d'habitude
- ❑$_3$ Beaucoup plus de d'habitude

3) Vous êtes vous senti(e) capable de prendre des décisions?

- ❑$_0$ Plus que d'habitude
- ❑$_1$ Comme d'habitude
- ❑$_2$ Moins bien que d'habitude
- ❑$_3$ Beaucoup moins que d'habitude

4) Vous êtes senti(e) constamment tendu ou <<stressé>>?

- ❑$_0$ Pas du tout
- ❑$_1$ Pas plus que d'habitude
- ❑$_2$ Un peu plus que d'habitude
- ❑$_3$ Beaucoup plus que d'habitude

5) Avez-vous eu le sentiment de jouer un rôle utile dans la vie?

- ❑$_0$ Plus que d'habitude
- ❑$_1$ Comme d'habitude
- ❑$_2$ Moins utile que d'habitude
- ❑$_3$ Beaucoup moins utile que d'habitude

6) Avez-vous eu le sentiment que vous ne pourriez pas surmonter vos difficultés?

- ❑$_0$ Pas du tout
- ❑$_1$ Pas plus que d'habitude
- ❑$_2$ Un peu plus que d'habitude
- ❑$_3$ Beaucoup plus que d'habitude

7) Avez-vous été capable d'apprécier vos activités quotidiennes normales?

- ❑$_0$ Plus que d'habitude
- ❑$_1$ Comme d'habitude
- ❑$_2$ Un peu moins que d'habitude
- ❑$_3$ Beaucoup moins que d'habitude

8) Avez-vous été capable de faire face à vos problèmes?

- ❑$_0$ Mieux que d'habitude
- ❑$_1$ Comme que d'habitude
- ❑$_2$ Un peu moins que d'habitude
- ❑$_3$ Beaucoup moins que d'habitude

9) Avez-vous été malheureux (se) et déprimé(e)?

- ❑$_0$ Pas du tout
- ❑$_1$ Pas plus que d'habitude
- ❑$_2$ Un peu plus que d'habitude
- ❑$_3$ Beaucoup plus que d'habitude

10) Avez-vous perdu confiance en vous-même?

- ❑$_0$ Pas du tout
- ❑$_1$ Pas plus que d'habitude
- ❑$_2$ Un peu plus que d'habitude
- ❑$_3$ Beaucoup plus que d'habitude

11) Vous êtes-vous considéré(e) comme quelqu'un qui ne valait rien?

- ❑$_0$ Pas du tout
- ❑$_1$ Pas plus que d'habitude
- ❑$_2$ Un peu plus que d'habitude
- ❑$_3$ Beaucoup plus que d'habitude

12) Vous êtes-vous senti(e) raisonnablement heureux (se), tout bien considéré?

- ❑$_0$ Plus que d'habitude
- ❑$_1$ Comme d'habitude
- ❑$_2$ Un peu moins que d'habitude
- ❑$_3$ Beaucoup moins que d'habitude

APPENDIX IX

Coping Strategies Questionnaire (CSQ)

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Coping Strategies Questionnaire (CSQ)

Instructions : When you are in pain, you may react in different ways. Please indicate for each of the following strategies, if you use it to cope with your pain

When I have back pain,	Not	Somewhat Not	Somewhat Yes	Yes
1. I try to distance myself from the pain, as if it were in someone else's body.				
I try to think about something pleasant.				
3. I think that it's very bad and I have the impression that it will never be better.				
4. I think that it's awful and I have the impression the pain taking over.				
5. I pray to God or faith that the pain doesn't last.				
6. I try to think of the pain as if it were separated from my body.				
7. I do not pay attention to the pain.				
8. I do as if I wasn't suffering.				
9. I am afraid that the pain won't stop.				
10. I think of pleasant moments from the past.				
11. I think of people I like doing stuff with.				
12. I pray that the pain disappears.				
13. I imagine that the pain is outside my body.				
14. Although I am in pain, I continue doing activities.				
15. I have the impression that I can no longer endure the pain.				
16. I try to be in others company, so as to not be alone.				
17. I ignore the pain.				
18. I rely on my faith in God or destiny.				
19. I have the impression of no longer being able to go forward.				
20. I think of doing things I like to do.				
21. I do as if the pain wasn't part of me.				

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Questionnaire pour faire face à la douleur

Consigne : Quand vous avez mal, vous réagissez de diverses manières. Indiquez, pour chacune des stratégies suivantes, si vous l'utilisez pour faire face à votre douleur, en sachant que: non, plutôt non, plutôt oui ou oui

Quand j'ai mal au dos,	Non	Plutôt Non	Plutôt Oui	Oui
1. J'essaie de prendre de la distance par rapport à la douleur, comme si elle était dans le corps de quelqu'un d'autre.				
2. J'essaie de penser à quelque chose d'agréable.				
3. Je trouve que c'est terrible et j'ai l'impression que ça n'ira jamais mieux.				
4. Je trouve que c'est affreux et j'ai l'impression que la douleur m'écrase.				
5. Je prie Dieu ou le destin pour que ma douleur ne dure pas.				
6. J'essaie de penser à la douleur comme si elle était séparée de mon corps.				
7. Je ne prête pas attention à la douleur.				
8. Je fais comme si je ne souffrais pas.				
9. J'ai peur que la douleur ne cesse pas.				
10. Je repense à des moments agréables du passé.				
11. Je pense à des personnes avec lesquelles j'aime faire des choses.				
12. Je prie pour que la douleur disparaisse.				
13. J'imagine que la douleur est en dehors de mon corps.				
14. Bien que j'ai mal, je continue mes activités.				
15. J'ai l'impression que je ne peux plus supporter la douleur.				
16. Je recherche la compagnie des autres, j'essaie de ne pas rester seul(e).				
17. J'ignore la douleur.				
18. Je compte sur ma foi en Dieu ou dans le destin.				
19. J'ai l'impression de ne plus pouvoir aller de l'avant.				
20. Je pense à des choses que j'aime faire.				
21. Je fais comme si la douleur ne faisait pas partie de moi.				

APPENDIX X

Physician: Patient Satisfaction Subscales (PSS)

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Faculté de médecine
École de réadaptation

Physician: Patient Satisfaction Subscales Questionnaire (PSS)

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Information Subscale (3)					
The physician gave me enough information about the cause of my back pain.	☐	☐	☐	☐	☐
The physician did not give me a clear explanation of the cause of my back pain.	☐	☐	☐	☐	☐
The physician told me what to do to prevent future back problems.	☐	☐	☐	☐	☐
Caring Subscale (4)					
The physician seemed to believe that my pain was real.	☐	☐	☐	☐	☐
The physician did not understand the concerns I had about my back problem.	☐	☐	☐	☐	☐
The physician did not seem comfortable dealing with my back pain.	☐	☐	☐	☐	☐
The physician was not concerned about what happened with my pain after I left the office.	☐	☐	☐	☐	☐
Effectiveness Subscale (4)					
The treatment the physician prescribed for my back was effective.	☐	☐	☐	☐	☐
The physician seemed confident that the treatment she/he recommended would work.	☐	☐	☐	☐	☐
The physician gave me a clear idea of how long it might take for my back to get better.	☐	☐	☐	☐	☐
After seeing the physician I did not know what I needed to do for my back pain.	☐	☐	☐	☐	☐
Not Included in Any Subscale (4)					
The physician did not listen carefully to my description of my back problem.	☐	☐	☐	☐	☐
The physician made me feel less worried about my back problem.	☐	☐	☐	☐	☐
The physician performed a thorough examination of my back.	☐	☐	☐	☐	☐
The physician did not understand what was wrong with my back.	☐	☐	☐	☐	☐
The physician should have ordered more tests or radiographs.	☐	☐	☐	☐	☐
The physician should have referred me to a back specialist.	☐	☐	☐	☐	☐

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Satisfaction du patient de l'entrevue avec le médecin

	Fortement en accord	En accord	Ni en accord ou en désaccord	En désaccord	Fortement en désaccord
Informations (3)					
1. Le médecin m'a fourni assez d'informations sur la cause de ma douleur dorsale.	☐	☐	☐	☐	☐
2. Le médecin ne m'a pas donné une explication claire de la cause de ma douleur dorsale.	☐	☐	☐	☐	☐
3. Le médecin m'a dit quoi faire pour prévenir de futurs problèmes dorsaux.	☐	☐	☐	☐	☐
Traitement (4)					
4. Le médecin a semblé croire que ma douleur était vraie.	☐	☐	☐	☐	☐
5. Le médecin n'a pas compris les soucis que j'ai eu au sujet de mon problème dorsal.	☐	☐	☐	☐	☐
6. Le médecin n'a pas semblé être à l'aise en traitant ma douleur dorsale.	☐	☐	☐	☐	☐
7. Le médecin n'e s'est pas préoccupé de ma douleur après avoir quitté son bureau.	☐	☐	☐	☐	☐
Efficacité (4)					
8. Le traitement que le médecin a prescrit pour mon dos était efficace.	☐	☐	☐	☐	☐
9. Le médecin a semblé être confiant que le traitement qu'il a recommandé fonctionnerait.	☐	☐	☐	☐	☐
10. Le médecin m'a donné une idée claire du temps que ça puisse prendre pour une amélioration de mon dos.	☐	☐	☐	☐	☐
11. Après avoir vu le médecin je n'ai pas su ce que je devais faire pour ma douleur dorsale.	☐	☐	☐	☐	☐
Pas inclus dans les sections au-dessus (4)					
12. Le médecin n'a pas écouté attentivement ma description de ma douleur dorsale.	☐	☐	☐	☐	☐
13. Le médecin m'a fait sentir moins inquiet de mon problème dorsal.	☐	☐	☐	☐	☐
14. Le médecin a exécuté un examen complet de mon dos.	☐	☐	☐	☐	☐
15. Le médecin n'a pas compris ce qui était la cause de ma douleur.	☐	☐	☐	☐	☐
16. Le médecin aurait dû faire plus de tests ou de radiographies.	☐	☐	☐	☐	☐
17. Le médecin aurait dû me referer à un spécialiste du dos.	☐	☐	☐	☐	☐

APPENDIX XI

Therapists: Patient Satisfaction Subscales (PSS)

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Physical Therapist: Patient Satisfaction Subscales Questionnaire (PSS)

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Information Subscale (3)					
The therapist gave me enough information about the cause of my back pain.	☐	☐	☐	☐	☐
The therapist did not give me a clear explanation of the cause of my back pain.	☐	☐	☐	☐	☐
The therapist told me what to do to prevent future back problems.	☐	☐	☐	☐	☐
Caring Subscale (4)					
The therapist seemed to believe that my pain was real.	☐	☐	☐	☐	☐
The therapist did not understand the concerns I had about my back problem.	☐	☐	☐	☐	☐
The therapist did not seem comfortable dealing with my back pain.	☐	☐	☐	☐	☐
The therapist was not concerned about what happened with my pain after I left the office.	☐	☐	☐	☐	☐
Effectiveness Subscale (4)					
The treatment the therapist prescribed for my back was effective.	☐	☐	☐	☐	☐
The therapist seemed confident that the treatment she/he recommended would work.	☐	☐	☐	☐	☐
The therapist gave me a clear idea of how long it might take for my back to get better.	☐	☐	☐	☐	☐
After seeing the therapist I did not know what I needed to do for my back pain.	☐	☐	☐	☐	☐
Not Included in Any Subscale (4)					
The therapist did not listen carefully to my description of my back problem.	☐	☐	☐	☐	☐
The therapist made me feel less worried about my back problem.	☐	☐	☐	☐	☐
The therapist performed a thorough examination of my back.	☐	☐	☐	☐	☐
The therapist did not understand what was wrong with my back.	☐	☐	☐	☐	☐
The therapist should have referred me to a back specialist.	☐	☐	☐	☐	☐

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Satisfaction du patient de l'entrevue avec le thérapeute

	Fortement en accord	En accord	Ni en accord ou en désaccord	En désaccord	Fortement en désaccord
Informations (3)					
1. Le thérapeute m'a fourni assez d'informations sur la cause de ma douleur dorsale.	☐	☐	☐	☐	☐
2. Le thérapeute ne m'a pas donné une explication claire de la cause de ma douleur dorsale.	☐	☐	☐	☐	☐
3. Le thérapeute m'a dit quoi faire pour prévenir de futurs problèmes dorsaux.	☐	☐	☐	☐	☐
Traitement (4)					
4. Le thérapeute a semblé croire que ma douleur était vraie.	☐	☐	☐	☐	☐
5. Le thérapeute n'a pas compris les soucis que j'ai eu au sujet de mon problème dorsal.	☐	☐	☐	☐	☐
6. Le thérapeute n'a pas semblé être à l'aise en traitant ma douleur dorsale.	☐	☐	☐	☐	☐
7. Le thérapeute n'e s'est pas préoccupé de ma douleur après avoir quitté son bureau.	☐	☐	☐	☐	☐
Efficacité (4)					
8. Le traitement que le thérapeute a prescrit pour mon dos était efficace.	☐	☐	☐	☐	☐
9. Le thérapeute a semblé être confiant que le traitement qu'il a recommandé fonctionnerait.	☐	☐	☐	☐	☐
10. Le thérapeute m'a donné une idée claire du temps que ça puisse prendre pour une amélioration de mon dos.	☐	☐	☐	☐	☐
11. Après avoir vu le thérapeute je n'ai pas su ce que je devais faire pour ma douleur dorsale.	☐	☐	☐	☐	☐
Pas inclus dans les sections au-dessus (4)					
12. Le thérapeute n'a pas écouté attentivement ma description de ma douleur dorsale.	☐	☐	☐	☐	☐
13. Le thérapeute m'a fait sentir moins inquiet de mon problème dorsal.	☐	☐	☐	☐	☐
14. Le thérapeute a exécuté un examen complet de mon dos.	☐	☐	☐	☐	☐
15. Le thérapeute n'a pas compris ce qui était la cause de ma douleur.	☐	☐	☐	☐	☐
16. Le thérapeute aurait dû me referer à un spécialiste du dos.	☐	☐	☐	☐	☐

APPENDIX XII

Job Satisfaction Questionnaire

Université de Montréal
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Job Satisfaction Questionnaire

	Strongly Disagree	Disagree	Agree	Strongly Agree	NSP NRP
My immediate superior is concerned of the well-being of the people under his/her supervision.	☐	☐	☐	☐	☐
My immediate superior pays attention to what I say.	☐	☐	☐	☐	☐
My immediate superior facilitates the realization of the work.	☐	☐	☐	☐	☐
My immediate superior succeeds in getting everyone to work together.	☐	☐	☐	☐	☐
The people who work are qualified for the tasks their assigned to.	☐	☐	☐	☐	☐
The people with whom I work are personally interested in me.	☐	☐	☐	☐	☐
The people with whom I work are amicable.	☐	☐	☐	☐	☐
The people with whom I work facilitate the realization of the work.	☐	☐	☐	☐	☐

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Questionnaire sur la satisfaction du travail

	Fortement en désaccord	En désaccord	D'accord	Fortement en accord	NSP NRP
1. Mon supérieur immédiat se soucie du bien-être des personnes qui sont sous sa supervision.	☐	☐	☐	☐	☐
2. Mon supérieur immédiat prête attention à ce que je dis.	☐	☐	☐	☐	☐
3. Mon supérieur immédiat facilite la réalisation du travail.	☐	☐	☐	☐	☐
4. Mon supérieur immédiat réussit à faire travailler les gens ensemble.	☐	☐	☐	☐	☐
5. Les gens avec qui je travaille sont qualifiés pour les tâches qu'ils accomplissent.	☐	☐	☐	☐	☐
6. Les gens avec qui je travaille s'intéressent personnellement à moi.	☐	☐	☐	☐	☐
7. Les gens avec qui je travaille sont amicaux.	☐	☐	☐	☐	☐
8. Les gens avec qui je travaille facilitent la réalisation du travail.	☐	☐	☐	☐	☐

APENDIX XIII

Job Content Questionnaire (JCQ)

Job Content Questionnaire (JCQ)

	Strongly Agree	Agree	Disagree	Strongly Disagree
My job requires that I learn new things	☐	☐	☐	☐
My job requires a high level of skill	☐	☐	☐	☐
My job requires me to be creative	☐	☐	☐	☐
My job involves a lot of repetitive work	☐	☐	☐	☐
On my job, I have very little freedom to decide how I do my work	☐	☐	☐	☐
My job allows me to make a lot of decisions on my own	☐	☐	☐	☐
I get to do a variety of different things on my job	☐	☐	☐	☐
I have a lot of say about what happens on my job	☐	☐	☐	☐
I have an opportunity to develop my own special abilities	☐	☐	☐	☐
My job requires working very fast	☐	☐	☐	☐
My job requires working very hard	☐	☐	☐	☐
I am not asked to do an excessive amount or work	☐	☐	☐	☐
I have enough time to get the job done	☐	☐	☐	☐
I am free from conflicting demands that others make	☐	☐	☐	☐
My job requires long periods of intense concentration on the task	☐	☐	☐	☐
My tasks are often interrupted before they can be completed, requiring attention at a later time	☐	☐	☐	☐
My job is very hectic	☐	☐	☐	☐
Waiting on work from other people or departments often slows me down on my job	☐	☐	☐	☐

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Questionnaire sur le travail

	Très D'accord	En accord	En désaccord	Très en Désaccord
1. Mon travail exige que j'apprenne des choses nouvelles	☐	☐	☐	☐
2. Mon travail exige un niveau élevé de qualifications	☐	☐	☐	☐
3. Dans mon travail, je dois faire preuve de créativité	☐	☐	☐	☐
4. Mon travail consiste à refaire toujours les mêmes choses	☐	☐	☐	☐
5. J'ai la liberté de décider comment je fais mon travail	☐	☐	☐	☐
6. Mon travail me permet de prendre des décisions de façon autonome	☐	☐	☐	☐
7. Au travail, j'ai l'opportunité de faire plusieurs choses différentes	☐	☐	☐	☐
8. J'ai passablement d'influence sur la façon dont les choses se passent à mon travail	☐	☐	☐	☐
9. Au travail, j'ai la possibilité de développer mes habiletés personnelles	☐	☐	☐	☐
10. Mon travail exige d'aller très vite	☐	☐	☐	☐
11. Mon travail exige de travailler très fort mentalement	☐	☐	☐	☐
12. On ne me demande pas de faire une quantité excessive de travail	☐	☐	☐	☐
13. J'ai suffisamment de temps pour faire mon travail	☐	☐	☐	☐
14. Je ne reçois pas de demandes contradictoires de la part des autres	☐	☐	☐	☐
15. Mon travail m'oblige à me concentrer intensément pendant de longues périodes	☐	☐	☐	☐
16. Ma tâche est souvent interrompue avant que je ne l'aie terminée, je dois alors y revenir plus tard	☐	☐	☐	☐
17. Mon travail est très mouvementé	☐	☐	☐	☐
18. Je suis souvent ralenti dans mon travail parce que je dois attendre que les autres aient terminé le leur	☐	☐	☐	☐

APPENDIX XIV

Questionnaires Timeline

Questionnaire	Entry	Exit (Return-to-Work)
Baseline Patient Questionnaire	▲	
Follow-up Patient Questionnaire		▲
Oswestry Disability Questionnaire (ODQ)	▲	▲
General health Questionnaire (GHQ-12)	▲	▲
Coping Strategies Questionnaire (CSQ)	▲	▲
Physician: Patient Satisfaction Subscales Questionnaire (PSS)	▲	
Physical Therapist: Patient Satisfaction Subscales Questionnaire (PSS)		▲
Job Satisfaction Questionnaire	▲	▲
Job Content Questionnaire (JCQ)	▲	▲

APPENDIX XV

Abstract presented to the International Forum VI for Primary Care Research on Low Back Pain. Linköping, Sweden 2003.

PATIENT-PHYSICIAN DISAGREEMENT IN LOW BACK PAIN AND ASSOCIATED FACTORS

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Background: Low back pain (LBP) is a leading cause of all work disability and costs society tens of millions of dollars per year. One of the factors that may affect disability is patient-physician communication.

Objectives: 1) to determine patient-physician disagreement in a cohort of workers compensated for LBP 2) to determine whether disagreement between the patient and the physician is associated with level of disability, and with other factors (mental health status, age, gender and education).

Methods: Compensated LBP patients from physiotherapy clinics across the province of Quebec responded to a telephone interview as to whether they agreed with their treating physician with respect to: management of their LBP, date set for return-to-work and medical tests ordered. They also completed the Oswestry Disability Questionnaire (ODQ) and the 12-item General Health Questionnaire (GHQ-12).

Findings: This study is ongoing and preliminary results are presented for the first 26 patients (23 males and 3 females), mean age of 39.5 (12.1), mean percentage Oswestry disability score of 44.5% (23.1) and a GHQ-12 score of 16.0 (7.6). Seven (26.9%) patients were in disagreement with their treating physician whereas 19 (73.1%) were in agreement. Those who were in agreement with the physician had a mean percentage disability score of 40.6% (23.3) versus 55.1% (20.2) for those who disagreed (95% CI: -35.1 – 6.1, p = 0.1587). Patients who agreed also tended to have a better mental health status than those who disagreed (14.7 (7.9) vs. 19.4 (6.1); 95% CI: -11.5 – 2.2, p = 0.1699). No significant differences were found for age, gender and level of education between the two groups.

Conclusions: Our preliminary results indicate a trend towards worse disability and mental health status in the disagreement group, suggesting that these may be factors associated with the patient-physician interaction. We are continuing to recruit patients and will be able to address these issues more definitively once we have achieved our target sample size.

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Éducation

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Conférences

Azoulay L, Feldman D, Shrier I, Truchon M. Patient-Physician disagreement in Low Back Pain and associated factors. International Forum VI on Low Back Pain. Linköping, Sweden. May 22-24, 2003.

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