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#### 1. Introduction

Work-related musculoskeletal disorders (MSDs) generate considerable costs (van Tulder et al., 1995). Also, MSDs may have major consequences on the lives of the individuals afflicted, as the latter often experience poor quality of life and may find themselves definitively excluded from work (Baril et al., 1994; Nachemson, 1999). Numerous studies have attempted to identify the prognostic factors for disability or return to work, and most have focused on specific factors such as age (Crook at el., 1998; van der Giezen et al., 2000), gender (Dixon & Gatchel, 1999), civil status (Infante-Rivard & Lortie, 1996; Lehmann et al., 1993), education (Hildebrandt et al., 1997; Tan et al., 1997), the presence of psychological distress (Sewitch et al., 2000), or the presence of radiating pain (Goertz, 1990; Lancourt & Kettelhut, 1992; van der Weide et al., 1999). Other factors associated with the intervention, such as a significant time lapse between the accident and

management by the health-care system (Hunter et al., 1998; Sewitch et al., 2000), medical labelling (Abenhaim et al., 1995) or treatment history (Turner et al., 2000) have been found to influence the return to work. A few isolated studies have examined how work environment determinants influenced the return to work: work schedule flexibility (Baril & Berthelette, 2000; Krause et al., 2001) and company size (Baril & Berthelette, 2000; Oleinick et al., 1996) emerged as major predictors. A review of these studies revealed that work disability is a complex, multidimensional phenomenon involving interactions between the individual and several different systems (Durand et al., 2001; Frank et al., 1998).

To reduce the magnitude of this major health problem, a number of multidisciplinary rehabilitation programmes have been implemented and have been the focus of several systematic reviews (Guzman et al., 2002; Karjalainen et al., 2001; Schonstein et al., 2003). One review showed that these programmes provided strong evidence that intensive multidisciplinary biopsychosocial rehabilitation with functional restoration improved function when compared with non-multidisciplinary inpatient or outpatient treatments (Guzman et al., 2002). Moreover, Karjalainen et al. (2001) found that multidisciplinary rehabilitation involving work-site visits or more comprehensive occupational health care intervention helped patients return to work faster, resulted in fewer sick leaves, and alleviated subjective disability. Although these reviews reflect the researchers' clear interest in the ultimate results of multidisciplinary rehabilitation programmes, little attention has been paid to understanding how clinicians viewed the worker's progression during the intervention. A better understanding of the process behind a worker's return to work would provide a better understanding of the causes of success and failure, ultimately improving the quality of services by identifying the key elements for tailoring a new programme.

#### 2. Study Aim

The goal of this study was to identify the different types of trajectories followed by workers with an MSD participating in a work rehabilitation programme. It also focused on the factors contributing to those trajectories, from the perspective of the interdisciplinary team. The study consisted of secondary analyses of data gathered for a larger study on the decision-making process of an interdisciplinary work rehabilitation team that identified the values underlying the team's decision-making process (Loisel et al., 2005).

#### 3. Methods

4 The research design used a single-case study (Yin, 2003) in which the main unit of analysis was an interdisciplinary work rehabilitation team managing workers' progression in a work rehabilitation programme, from beginning to end.

#### 3.1 Setting

The interdisciplinary work rehabilitation team was comprised of a physician, an occupational therapist, an ergonomist, a psychologist, a kinesiologist and a clinical

coordinator. For each worker, one member of the team was designated as the case manager. The case manager played a pivotal role in facilitating communications between the worker undergoing treatment, the interdisciplinary team, and the stakeholders involved in the case. The team's professionals were chosen to facilitate an intervention requiring development of the worker's physical capabilities (kinesiologist), adjustment to the various facets of the work tasks (occupational therapist), modification of the workstation (ergonomist), and consideration of the injured worker's psychological state (psychologist) and of his or her injury and general health (physician). Table 1 presents some of the characteristics of the clinicians recruited.

Table 1. Characteristics of clinicians

Gender	Profession	Experience*
Female	Ergonomist	3
Male	Kinesiologist	2
Female	Occupational therapist	1
Male	Occupational therapist	1
Male	Psychologist	3
Female	Physician	2
Female	Case manager	1
Female	Kinesiologist	1

<sup>\* 1=</sup> between 1 to 8 years; 2= between 9 to 15 years; 3= more than 15 years

The team applied an evidence-based programme consisting of a therapeutic return-towork process that combined a clinical intervention phase, focused mainly on physical reactivation, and a gradual, controlled exposure-to-work phase including an ergonomic intervention centred in the workplace (Durand et al., 2001; Loisel et al., 1997). This programme was adapted from the Sherbrooke model and its efficacy and cost efficacy have been described (Loisel et al., 1997). The team met weekly to discuss each case and made decisions about what it considered to be the best way to help the worker move toward a return to work. To achieve this, each clinician summarized the evolution of the cases during the week in terms of physical and psychological changes, tasks completed at work, and personal and environmental obstacles to the return to work. The level of implementation of ergonomic solutions and the relations with the employer and insurer were also reported. The case manager summarized the progression and proposed the targets for the following week. The case manager also informed the attending physician, employer and insurer about the worker's progression and the progression through the steps of the programme. Multiple communication modes were used: phone calls, work visits, letters, faxes or e-mails.

- This decision-making process that occurs during an interdisciplinary team meeting is complex and is based on various values of the team, as reported in a previous study (Loisel et al., 2005). The team in this study was recruited for its expertise in the field of work rehabilitation, and contributed to training other interdisciplinary teams in Quebec, France and Holland.
- In total, 18 workers who had been absent from work due to an MSD and who had been exposed to their workplace at least once after their absence were selected. Table 2 presents some of the characteristics of the participants recruited. The number of rehabilitation team discussions varied from 10 to 39, depending on the duration of the programme.

#### 3.2 Data collection

The data collection process consisted of recording the interdisciplinary team's weekly discussions on specific workers in the work rehabilitation programme. For the 18 workers who agreed to participate, a total of 255 weekly team discussions on progression in the rehabilitation process were audiotaped and transcribed. Altogether, data collection lasted from January 2000 until July 2001. The injured workers were not present at the meetings.

Table 2. Characteristics of the workers participating in the study

Workers	Gender	Age (years)	Diagnoses	Job type	Duration of absence from work (months)	Duration of intervention (months)
сс	F	between 50 and 59	lumbar strain	mixed	9	5
DD	М	between 30 and 39	lumbar strain	manual	2	2
EE	M	between 50 and 59	thoracic/ lumbar strain	manual	4	4
FF	М	between 30 and 39	sciatica	manual	3	4
нн	M	between 30 and 39	lumbar strain	manual	5	2
II	M	between 40 and 49	lumbar instability	non- manual	11	7
IJ	M	between 50 and 59	hernia	mixed	7	2
KK	М	between 40 and 49	ligament rupture in the hand	manual	11	4

LL	F	between 50 and 59	cervical strain	mixed	13	9
MM	M	between 30 and 39	cervico- brachialgia	manual	18	3
NN	М	between 20 and 29	thoracic/ lumbar contusion	manual	8	3
PP	M	between 30 and 39	disc herniation	manual	6	3
QQ	M	between 20 and 29	laceration to the wrist	manual	7	3
RR	F	between 50 and 59	lumbar strain	mixed	18	2
ss	F	between 30 and 39	lumbar strain	mixed	15	2
TT	М	between 30 and 39	lumbar strain	manual	3	2
ww	F	between 40 and 49	lumbar strain	mixed	10	5
xx	F	between 30 and 39	tendonitis	manual	24	3

#### 3.3 Data analysis

10 The analysis followed a phenomenological approach (Marton, 1986; Marton & Booth, 1997) and the model of analysis of idealtype proposed by Gerhardt and Kirchgässler (1987). The progression of each worker was analyzed in relation to the transcriptions of weekly meetings about their case. In the first step, the entire transcription for each participant was read several times as open-mindedly as possible to obtain an overall impression. In further rereading, statements were identified in accordance with the aim of the study. More specifically, the first statements were sorted into four types of trajectories related to the participants' work status at the end of the programme (returnto-work or non-return-to-work) and to the nature of the progression during the intervention (with or without obstacles to the progression). Two researchers analyzed, separately, all statements for each participant and compared their results. The researchers discussed the results for each participant until consensus was reached. Then, for each trajectory, the data were analyzed from two perspectives: (1) the individual factors pertaining to the worker's situation (e.g., pain tolerance, physical capabilities, psychological state) and (2) the interactional factors, more specifically, the impact of the various stakeholders' attitudes and behaviours on the worker's progression. The identification of factors associated with each of the different trajectories made it possible to build idealtypes. An idealtype was defined as a case history delineating the main characteristics of workers following a given type of clinical progression or « trajectory » (Gerhardt & Kirchgässler, 1987). When the characteristics of the workers were not similar within the same trajectory, more than one idealtype was developed.

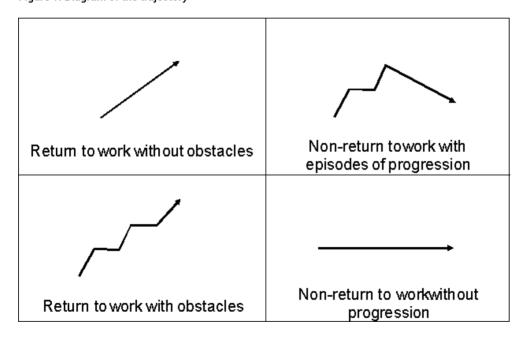
#### 3.4 Ethical considerations

11 All injured workers signed an informed consent form agreeing that the interdisciplinary team's discussions about their cases would be audiotaped and analyzed. The members of the interdisciplinary team also gave their written consent authorizing the audiotaping of their weekly discussions. The research and the consent forms were approved by the research ethics committee of Charles LeMoyne Hospital.

#### 4. Results

Based on the data analyzed, four types of trajectories emerged: (1) return-to-work trajectories without obstacles; (2) return-to-work trajectories with obstacles; (3) non-return-to-work trajectories with episodes of progression; and (4) non-return-to-work trajectories without progression (Figure 1). We will illustrate the typical patterns of each trajectory, from the team's perspective, by presenting, below, up to two idealtypes per trajectory and by analyzing the important factors for each trajectory.

Figure 1. Diagram of the trajectory



## 4.1 Return-to-work trajectory without obstacles (n=3) (subjects JJ, PP, TT)

Due to important differences in the workers' characteristics, analyzing the return-towork trajectory without obstacles led us to identify two idealtypes. These idealtypes were differentiated mainly in terms of the workers' ages, accident histories and physical capacities.

#### 4.1.1 Idealtype 1

14 The worker involved here was a 30-year-old blue-collar worker suffering from back pain. He had a history of similar problems that had resulted in previous work absences and had received physiotherapy treatments and taken anti-inflammatory medications. He had suffered from persistent incapacitating pain for a long time, which had led to physical deconditioning. His work was physically demanding, involving handling loads and working in awkward positions. This worker had more than 5 years of seniority in his company. According to the team's diagnosis, he liked his work, found it fulfilling, and hoped to return to his regular job. The worker adhered to the programme. His physician approved the programme and readily consented to the actions taken. Ongoing communication between the team and the attending physician was reported. The first few weeks were devoted to the worker's physical reconditioning and he made rapid progress. Despite some initial resistance from the employer, the team sensed open-mindedness in the workplace and a degree of flexibility that made work opportunities possible. The gradual return to work was a success in that the worker resumed his regular work schedule. The team reported that it communicated with the employer on a regular basis. Also, the insurer cooperated well, according to the team, by supporting the actions proposed to the employer and the worker.

#### 4.1.2 Idealtype 2

This person was a manual labourer in his fifties who had a back problem with no prior history. He had received physiotherapy treatments and taken anti-inflammatory medication. Prior to this relatively recent injury, he had always led a very active lifestyle that kept him physically fit and free of any psychological distress. His work was physically demanding, involving the handling of loads and working in awkward positions. He also had considerable seniority in his company. According to the team, he liked his work and wanted to return to his regular job. At the time of the initial evaluation, the team did not see the worker as complying with the programme; like his physician, he believed he could return to work without the team's intervention. However, once the worker began the programme, his participation was qualified as excellent by the team and he regained excellent physical capacity. His physician decided to withdraw from the case because he did not share the programme's objectives. The workplace was seen as being very open to the gradual return-to-work process, which took place quickly.

## 4.1.3 Analysis of the characteristics associated with the gradual return-to-work trajectory without obstacles

These two idealtypes highlighted the workers' close compliance with the intervention plan proposed. The workers also made rapid clinical progress. Despite the presence of some psychological difficulties, the latter were not so significant as to hinder the rehabilitation process. As well, all the workers enjoyed their work and wished to return to their pre-injury workplace. In spite of some tension between the employer and the worker in the first idealtype, both workplaces offered the flexibility for a gradual return to work to take place.

17 These idealtypes also highlighted certain differences. For example, the workers' situations differed in terms of their ages, the presence of work-accident histories, and their initial physical capacities. However, these factors do not seem to have undermined the progression of the intervention in any major way.

## 4.2 Return-to-work trajectory with obstacles (n=8) (subjects DD, FF, HH, II, KK, LL, MM, NN)

#### 4.2.1 Idealtype

In this case, the work was manual work and the worker had problems with his back, neck and shoulders. His work involved major physical, psychological and cognitive constraints. He did not see himself as having the capacity needed to do his work and was afraid of a relapse or aggravation if he were to return to the same workplace. However, the team believed that he looked favourably upon the idea of returning to regular work, even if he sometimes expressed the desire for vocational reorientation. He had been absent from work because of his injury for a relatively long period of time (one year). From the team's perspective, the attending physician's collaboration remained somewhat ambiguous throughout the process, and this caused insecurity for the worker. The team sought to clarify the mandate with all stakeholders, which finally rekindled the worker's motivation. Personal problems of a social or psychological nature were often present when the worker arrived at the clinic. The team, therefore, used a relatively in-depth psychological approach to reduce the impact of these problems on the rehabilitation process. Because the worker had suffered from major physical de-conditioning, the team invested considerable energy in the physical retraining component. The worker made progress in the clinic, but his physical improvement most often depended on his psychological state.

As soon as he was exposed to work, the worker experienced pain, stress and anxiety. The workplace was generally seen by the team as being somewhat resistant to the worker's reintegration. Steps were therefore taken to change the employer's perceptions of and attitudes toward the injured worker to convince those in charge to be more flexible. Following these interventions, the employer and the co-workers appeared to have greater appreciation for the worker's worth and skills. Circumstantial changes of a structural nature successfully reduced the constraints presented by the work environment, making it possible for the worker to return to work on a full-time basis. The worker experienced some delays from the insurer in authorizing the application of ergonomic measures.

#### 4.2.2 Analysis of the characteristics of the return-to-work trajectory with obstacles

A few differences were brought to light by comparing these trajectories to the preceding ones. First, work absences were usually longer in the case of the return-to-work trajectories with obstacles. The team considered fears of relapses and perceived inabilities to return to work, which they had not discussed in relation to the preceding trajectory, as posing significant obstacles. This trajectory also involved more psychological distress, requiring more sustained intervention. To the team, compliance with the programme by workers in this trajectory appeared to be more difficult than by workers in the preceding trajectory; however, the team's reassurances helped elicit a sufficient degree of worker participation to successfully complete the clinical phase.

The workplaces seemed less open to the idea of the workers' reintegration. These workplaces were geared to performance, did not seem willing to recognize the workers' injuries, and the employers had developed a negative image of the injured workers. The desire to return to work was also less apparent in these workers. In the trajectory with obstacles, the team needed to address the attitudes of the workers, employers and coworkers in order to implement the return-to-work strategy. The team also focused on helping the workers learn how to manage their pain.

## 4.3 Non-return-to-work trajectories with episodes of progression (n=5) (subjects CC, EE, QQ, WW, XX)

#### 4.3.1 Idealtype

- This case involved a woman who had problems with her back or upper extremities and who had been off work for approximately eight months. Before entering the programme, she had received several types of treatment; however, she had no history of employment injuries. The team considered her to be physically out of condition when she was admitted to the programme. She quickly showed an interest in the programme and participated very well in the physical training component. Clinical progress was also observed a few weeks after the programme began.
- Approaching the time of first exposure to work, the team tried to identify the worker's desire to reintegrate into her pre-injury tasks, but she remained ambiguous in this regard. Her work opportunities remained uncertain for a number of weeks. Her relationship with her supervisor appeared to be somewhat strained and the team felt that the supervisor took considerable time to return their calls. As soon as the worker was exposed to work, her pain recurred, and managing it was difficult. The team felt that this situation was mainly attributable to constraints related to the workplace, family constraints, or overly high expectations of recovery. Despite the progress observed in the clinic, both the team and the worker regarded this progress as insufficient for her to meet the work requirements. As a result, the exposure-to-work phase was never completed.
- Throughout the rehabilitation process, the team did not perceive their collaboration with the physician to be positive, since the physician gave the worker messages that she had a severe condition. From the team's viewpoint, the insurer paralyzed the process by delaying its authorization.

## 4.3.2 Analysis of the characteristics of the non-return-to-work trajectory with episodes of progression

During the first few weeks in the clinic, all the workers on this trajectory were regarded as complying very well with the programme. This factor undoubtedly contributed to some increase in physical capacity for the vast majority of these workers, although less so than for the workers in the preceding trajectories. The workplace was often perceived as uncooperative, for a variety of reasons (e.g., unsafe environment, not returning the team's calls, mistrust of the worker), and took time to clarify the job opportunities. Once the exposure to work began, all the workers showed major fears about their return to work. From this standpoint, this trajectory seems similar to those analyzed previously.

This trajectory did have several distinguishing characteristics. These workers usually displayed a more ambiguous desire to return to work. One of the biggest obstacles was the workers' inability to manage their pain at work, despite the team's efforts. The team also perceived the collaboration of each of the stakeholders (employer, physician, and insurer), for the most part, as negative. In addition, the attending physician and insurer's collaboration was regarded as negative, in most cases. As with the worker's attending physician, the insurer would send the employer and worker messages contradictory to or different from the messages sent by the team. In any given case, however, there were never more than two stakeholders who were perceived by the team as being uncooperative.

## 4.4 Non-return-to-work trajectories without progression (n=2) (subjects RR, SS)

#### 4.4.1 Idealtype

The worker in this case was a woman suffering from a lumbar strain who had been off work for more than one year. During that year and prior to her admission to the programme, she had received several types of treatment. She also had a history of occupational musculoskeletal injuries. The team evaluated the worker's physical capacities as being very weak and noticed the worker's lack of collaboration. The team also reported the worker as having difficulty managing the pain during the clinical phase. The progression during the clinical phase was considered as very poor. The team, therefore, confronted the worker in order to help her understand the importance of complying with the programme and, if applicable, to inform her that the intervention could be suspended until she was more motivated to participate. Following this meeting, it was concluded that the worker would not continue her rehabilitation process with the team. The exposure-to-work phase was never started. The employer collaborated minimally in the process, and the physician was seen as overprotective of the worker or as hardly interested in understanding the programme.

### 4.4.2 Analysis of the characteristics of the non-return-to-work trajectory without progression

This trajectory revealed the workers' very lengthy absence from the workplace, a marked contrast from the previous trajectories. Moreover, worker compliance with the clinical phase of the programme was more problematic. According to the team, the main reasons for this lack of collaboration were the presence of possible gains associated with disability status (e.g., waiting for legal recognition of their injury, greater personal support), poor pain management and fear of aggravating the condition. These workers' lack of motivation coupled with their poor physical condition contributed greatly to the fact that no attempt at an exposure to work was possible. It must be noted that the team also perceived the work opportunities and the employers' collaborations as relatively negative compared to those in the other trajectories. The attending physicians' and insurers' collaboration was also seen as unfavourable.

#### 5. Discussion

Based on the perspective of the interdisciplinary team, we identified four typical trajectories during follow-up with the workers participating in a work rehabilitation programme. Generally, three outlines emerged from the data analysis that allowed parallels to be drawn between the four trajectories.

The first outline was the degree of the worker's compliance with the programme, and his or her prospects of returning to work. Compliance is understood to mean adopting the recommendations made and complying with the programme activities (Haynes et al., 1979). Another concept discussed was self-efficacy, which is the workers' ability to look favourably on their return to work. According to Dionne et al. (2005), self-efficacy has mostly been examined in light of different health situations, but rarely investigated in the context of back pain. Only a handful of researchers have found this variable to be a better predictor of future performance than pain and psychological distress in workers with chronic pain (Dionne et al., 2005; Hunt et al., 2002). We found that compliance and the patient's positive return-to-work expectations were seen in the return-to-work trajectories, but were absent from the non-return-to-work trajectories. These two factors, compliance and return-to-work expectations, were closely related to and may be associated with the cognitive and emotional representations of the illness and with the adaptive coping strategies in the model proposed by Leventhal, Leventhal and Cameron (2001). A critical analysis by Coutu et al. (2000) identified this model as the most appropriate for explaining the adoption of healthy behavioural habits. Using this model, it is possible to explain that the behaviours adopted by a person depend primarily on his or her view or mental representation of the problem and its solutions. These representations are based on a construction of various information and experiences influenced by the individual's sociocultural and personal context (Leventhal et al., 2001). If an injured worker's beliefs about possible solutions correspond to the proposals made by the rehabilitation team, he or she is more likely to comply with the recommendations. Therefore, a discrepancy between patients' perceptions and that of the professional involved can be associated with a poor prognosis (Daykin & Richardson, 2004). These results support the importance of the clinician's in-depth exploration of the workers' illness representations in building a coherent action plan.

In this study, the proposed intervention was that of intensive reactivation combined with a gradual exposure to real work. All the workers discussed by the team were in a prolonged disability phase. Thus, the workers' representations may have been shaped by the many interventions carried out prior to their admission to the programme. These interventions may have conveyed messages contrary to reactivation and cultivated expectations of recovery in the worker in terms of his or her pain. The results suggest that the time elapsed between injury and intervention, which was relatively shorter in the return-to-work trajectory without obstacles, was a factor influencing compliance with a programme focused on reactivation. This may have been due in part to the individual's greater facility in reactivating him-/herself, to fewer consultations and treatments received, and to the fact that the person continued to see him-/herself as a worker. The issue of early intervention has been documented in several studies (Frank et al., 1998; Spitzer, 1987); however, the relationships between early intervention, the

worker's representation of his or her illness, and compliance in terms of reactivation, present new avenues to be explored.

A second outline was the way the individual coped with the announcement of the imminent exposure to work, or to the actual exposure itself. The data revealed that a pivotal moment in the process was the first exposure to work, which allowed the individual to re-establish contact with the workplace, resume certain tasks in his or her job, and develop his or her pain management skills in the real work context, or contrarily, to confirm his or her disability. In the two non-return-to-work trajectories, the imitation of this pivotal moment was significant; it caused an exacerbation of pain or the development of other symptoms. The way the individual coped was partly predetermined by the presence of fears of relapses or aggravation, and by the worker's perception of disability before the exposure to work. Here again, his or her fears or projections formed part of the illness representation. A number of studies have described fears as prognostic factors for prolonged disability in both the acute and chronic phases (Crombez et al., 1999; Dionne et al., 2005; Picavet et al., 2002). Moreover, this result concurs with the Vlaeyen model of fears and beliefs (Vlaeyen et al., 1995). This model suggests that the concept of pain-related fears plays a primary role in the development of problems of persistent musculoskeletal pain and the associated disability. It suggests that an individual facing a pain situation may adopt one of two behaviours: confrontation or avoidance. More specifically, a person who adopts avoidance behaviours will make a catastrophic evaluation of situations and will give an exaggeratedly negative connotation to certain movements and activities. This person will interpret these movements and physical activities as possibly aggravating his or her condition and will avoid them. It is now clear that avoiding certain movements during the acute phase is healthy for an individual with a musculoskeletal impairment, but such avoidance becomes harmful as more time goes by and could become a vicious circle (Pincus et al., 2002; Vlaeyen et al., 1995; Vlaeyen & Linton, 2000). In the intervention proposed in this study, the exposure to work consisted precisely of re-introducing, in a supervised manner, a number of work behaviours that had been excluded from the injured person's activities (Durand et al., 1998). The team needed to approach this key moment in the rehabilitation process through an analysis of the work requirements, to ensure a concordance between the individual and his or her work (Durand et al., 2003), and also through preparation and coaching of the worker on the cognitive-behavioural treatment of anxieties (Ladouceur et al., 1999).

The third outline was the presence of collaboration from the various stakeholders, which facilitated the rehabilitation process. In the workplace, the employer's flexibility, recognition of the employee's value to the company's productivity, and the reception given by co-workers were positive elements that helped to implement a gradual return-to-work plan. If these elements were partially or completely absent, the worker's progression toward a return-to-work would be more laborious. These elements agree with those identified in previous studies (Franche et al., 2004; Turner et al., 2000). This reinforces the multidimensional aspect of managing musculoskeletal disorders, which can no longer be solely a medical concern, but must also be a workplace concern. In this study, the absence of a single, consistent message from the clinicians in the rehabilitation programme and the workers' attending physicians negatively impacted the process. In fact, contradictory messages may have promoted a representation of severe illness in the worker's mind. This phenomenon is legitimate since workers do not necessarily have the

skill to assess which professional is making a reasonable assessment. The results of this study agree with the preceding one (Loisel et al., 2005) and suggest that the absence of a single consistent message from the health professionals can lead to confusion for workers and pose a major impediment to the resumption of their activities. The results also outline the importance of providing interdisciplinary training on musculoskeletal disorders in order to minimize these discrepancies.

This study evaluated data gathered from a larger study on the decision-making process. The results are based on the observations of a single interdisciplinary team, chosen for its expertise in work rehabilitation. A single case is often recommended for studying new or rare phenomena; however, this study design is not very robust (Flyvbjerg, 2006; Yin, 2003). For greater external validity, a multiple case study should be used with a theoretical replication.

#### 6. Conclusion

The results of this study underlined the non-linear work rehabilitation processes of individuals with prolonged disabilities due to an MSD, as described by an interdisciplinary team. They supported the importance of considering all the systems involved in the disability paradigm during the return-to-work process and of going beyond a unique medical model. The results also underscored the need to reconsider the theories used to develop rehabilitation programmes as a tool, in order to improve the efficacy of the intervention in parallel with outcome studies. Moreover, they indicated that work disability and work rehabilitation are complex processes that may not be perfectly predictable at the beginning of the process. Although more studies are needed to validate and refine the trajectories found in this study, this study may be used by clinicians to understand the complexity of the process, to plan the intervention more efficiently, especially during key moments (such as the first exposure to work), and to predict some outcomes of a work rehabilitation programme.

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#### **ABSTRACTS**

Purpose: Based on the viewpoint of an interdisciplinary team, this exploratory study aimed to identify different types of trajectories followed by workers with musculoskeletal disorders and the factors contributing to them.

Methods: The research design used a single-case study in which the main unit of analysis was an interdisciplinary work team. This team discussed eighteen workers' progression during a work rehabilitation programme. Analytical methods were based on phenomenology. All team discussions were audiotaped and transcribed, and two researchers completed the content analysis.

Results: Four types of trajectories emerged: (1) return-to-work trajectories without obstacles; (2) return-to-work trajectories with obstacles; (3) non-return-to-work trajectories with episodes of progression; and (4) non-return-to-work trajectories without progression. Moreover, three outlines emerged from the data analysis: (1) the worker's compliance with the programme; (2) the way the worker coped with exposure to work; and (3) stakeholder collaboration. The results of this study also suggested that the absence of a single consistent message among participating health professionals could create confusion for workers and pose a major impediment to the resumption of their activities.

Conclusion: The results underscore, for clinicians, the complexity in managing this type of chronic work rehabilitation population, related to both the worker and the worker's interactions with the stakeholders. Also, this study casts light on the non-linear work rehabilitation processes of individuals with prolonged disabilities of musculoskeletal origin, as described by an interdisciplinary team.

Sujet : Cette étude exploratoire a pour objectif de décrire différents types de trajectoires de travailleurs présentant des troubles musculo-squelettiques pendant un programme de réadaptation. Les trajectoires sont tracées à partir des visions d'une équipe interdisciplinaire.

Méthode: Le devis de recherche est une méthode de cas unique où l'unité d'analyse principale est une équipe interdisciplinaire. Cette équipe a discuté de la progression de 18 travailleurs, durant un programme de réadaptation. Les analyses des discussions ont été inspirées par la phénoménologie. Toutes les discussions de l'équipe ont été enregistrées et retranscrites. L'analyse de contenu a été effectuée par deux chercheurs.

Résultats: Quatre types de trajectoires ont émergé: 1) trajectoires de retour au travail sans obstacle; 2) trajectoires de retour au travail avec obstacles; 3) trajectoires de non-retour au travail avec épisodes de progression et 4) trajectoires de non-retour au travail sans progression. Trois facteurs clefs ont émergé de ces analyses comme déterminant au processus de retour au travail: 1) la complaisance des travailleurs face au programme de réadaptation, 2) les différentes façons dont le travailleur aborde et vit la première exposition au travail et 3) la collaboration avec les différents partenaires. Les résultats de cette étude suggèrent aussi que l'absence de message unique entre les professionnels de la santé face au travailleur peut entraîner de la confusion et devenir un frein à la reprise des activités.

Conclusions: Les résultats soulignent encore une fois la complexité pour les cliniciens de la prise en charge en réadaptation au travail de travailleurs en phase chronique. Cette intervention doit agir à la fois sur le travailleur et également sur les interactions entre les travailleurs et les différents partenaires concernés. Aussi, cette étude souligne le processus non linéaire de la réadaptation au travail pour des individus présentant des incapacités prolongées d'origine musculo-squelettique, tel que décrit par une équipe interdisciplinaire.

Tema: Este estudio exploratorio se propone identificar diferentes tipos de trayectorias de trabajadores que presentan lesiones músculo-esqueléticas en el marco de un programa de readaptación. Las trayectorias se definen a partir de las visiones de un equipo interdisciplinar.

Método: El método utilizado, llamado « devis de investigación » es un método basado en el estudio de casos y en el cual la unidad de análisis principal es un equipo interdisciplinar. En este caso, el equipo ha intercambiado opiniones acerca de la progresión de dieciocho trabajadores durante un programa de readaptación. El análisis de los intercambios ha seguido un enfoque fenomenológico. Todas las discusiones del equipo han sido grabadas y desgrabadas posteriormente. El análisis del contenido ha sido efectuado por dos investigadores.

Resultados: Cuatro tipos de trayectorias han emergido: 1) trayectorias de reinsecion laboral sin obstaculos; 2) Trayectorias de reinserción laboral con obstáculos; 3) trayectorias sin reinserción laboral y con episodios de progresión; y 4) trayectorias sin reinserción laboral y sin progresión. Tres factores clave han emergido de estos análisis en tanto determinates del proceso de reinserción laboral: 1) el hecho de que los trabajadores respeten el programa de readaptación, 2) las diferentes formas en las que el trabajador aborda y vive su primera exposición al trabajo, 3) la colaboración con los diferentes compañeros de trabajo. Los resultados de este estudio sugieren tambien que la ausencia de unidad en los mensajes enviados por los profesionales de la salud al trabajador puede generar confusión y transformarse en un freno en el proceso de retorno a la actividad.

Conclusiones: Los resultados obtenidos resaltan una vez más la complejidad que significa, desde un enfoque clínico, el hacerce cargo de la readaptación del trabajador en fase crónica. Esta intervención debe actuar a la vez sobre el trabajador y sobre las interacciones entre los trabajadores y las diferentes personas implicadas. Asimismo, este estudio subraya la no linealidad de la readaptación laboral para los individuos que presentan incapacidades prolongadas de origen musculoesquelético, tal como lo describe un equipo interdisciplinar.

#### **INDFX**

**Palabras claves:** readaptación, lesiones musculo-esqueléticas, reinserción profesional, equipo interdisciplinariedad

**Mots-clés**: réadaptation, troubles musculo-squelettiques, retour au travail, interdisciplinarité **Keywords**: rehabilitation, musculoskeletal disorders, return to work, interdisciplinarity

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