

# A look into Repetitive Strain Injury/ Work-Related Musculoskeletal Disorders within physical therapists' clinical context

Um olhar sobre as LER/DORT no contexto clínico do fisioterapeuta

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## Abstract

**Objective:** To understand physical therapists' representations regarding Repetitive Strain Injury/Work-Related Musculoskeletal Disorders (RSI/WRMSD) and to analyze how these representations interfere with the clinical practice of these professionals. **Methods:** The study took a qualitative approach, and the methodological tools were semi-structured interviews and non-participatory observation. The theory of social representations and comparative epistemology served as the theoretical foundations for the study. Fourteen physical therapists from the city of Divinópolis, Minas Gerais, took part in this study. **Results:** The physical therapists' representations about RSI/WRMSD and patients were collectively elaborated on the basis of the therapists daily practice. A reductionistic thinking style with a mechanistic conceptualization of the human organism was perceived among the interviewees. **Conclusions:** It is insufficient to direct efforts towards restoring the normal functioning of the body if the patient's needs are ignored. Physical therapists' scientific and technical knowledge should be reconciled with patients' subjective expression, in order to seek more effective intervention strategies.

**Key words:** RSI/WRMSD; social representation; comparative epistemology; physical therapy; clinical reasoning.

## Resumo

**Objetivo:** Conhecer as representações do fisioterapeuta a respeito das Lesões por Esforços Repetitivos/Distúrbios Osteomusculares Relacionados ao Trabalho (LER/DORT) e analisar como essas representações interferem na prática clínica desses profissionais. **Métodos:** O estudo foi realizado numa abordagem qualitativa, e os recursos metodológicos foram entrevista semi-estruturada e observação não-participante. A teoria das representações sociais e a epistemologia comparativa serviram como referenciais teóricos. Participaram do estudo 14 fisioterapeutas da cidade de Divinópolis, Minas Gerais. **Resultados:** a representação dos fisioterapeutas sobre LER/DORT e o doente foi elaborada coletivamente, com base na realidade cotidiana, e configurou-se entre os entrevistados um estilo de pensamento reducionista, com uma concepção mecanicista do organismo humano. **Conclusões:** não basta concentrar esforços na tentativa de restaurar o funcionamento normal do corpo se as demandas do paciente são desconsideradas. O conhecimento técnico-científico do fisioterapeuta deve ser conciliado com a expressão subjetiva do paciente na busca de estratégias de intervenção mais eficazes.

**Palavras-chave:** LER/DORT; representação social; epistemologia comparativa; fisioterapia; raciocínio clínico.

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## Introduction

In Brazil, a syndrome of occupational origin composed by diseases which affect the upper limbs, scapular region and neck was recognized by the Ministry of Social Security and Pensions as Repetitive Strain Injury (RSI), through the Technical Regulations for Incapacity Assessment<sup>1</sup>. In 1997, with the revision of these regulations, the expression Work-Related Musculoskeletal Disorders (WRMSD) was introduced.

The normative regulations of the National Institute for Social Security (INSS)<sup>2</sup> use the expression RSI/WRMSD to establish the concept of the syndrome and state that RSI/WRMSD does not originate exclusively from repetitive movements, but may also occur because parts of the body remain in certain positions for a long period of time. The need for concentration and attention of workers to perform their activities, and the pressures imposed by the way the work is organized are factors that have significant influences on the occurrence of the syndrome<sup>2</sup>. In the 1990s, there was an accelerated growth of RSI/WRMSD cases in Brazil: what previously had seemed to be an isolated syndrome, caused by susceptibility among workers exposed to risks, transformed into an epidemic. This growth may be attributed to the process of production restructuring in which are introduced unstable working conditions, and to social recognition of RSI, due to the creation of the Technical Regulations in 1991<sup>3</sup>. It is important to emphasize that RSI/WRMSD has multifactorial origins and that this diagnostic imprecision makes more difficult the process of determining an association between becoming injured and the professional history of the worker who demonstrate the symptoms<sup>4</sup>. To increase the complexity of these cases, the patients' beliefs and behaviors have a marked influence on pain, incapacity and treatment results.

In the light of this picture, some professionals have raised the hypothesis of secondary gain or exaggerated behaviors of patients in relation to the disease<sup>5</sup>. However, the possibility of secondary gains is rejected by several authors, since individuals who have a diagnosis of RSI/WRMSD, face great prejudice and difficulty regarding professional and social reintegration<sup>6,7</sup>.

In Brazil, some integrated attendance centers for injured workers have adopted an interdisciplinary approach and act in relation to the corporal, psychosocial and affective domains<sup>7</sup>. However, many workers do not have access to such centers and are treated through the health plan system, without this interdisciplinary approach. Therefore, workers who demonstrate symptoms of "pins and needles", pain and limitations to their work capacity frequently seek a doctor and then, after diagnosis and treatment, they are referred for physical therapy. When physical therapists attend patients with RSI/WRMSD, they experience a paradox between the subjectivity inherent in the syndrome and the objectivity of the treatment. Considering that

the representations adopted by physical therapists in relation to this disease and such patients may influence the way in which patients are referred for physical therapy assistance, it becomes necessary to have knowledge of and investigate possible associations between such representations and clinical practice.

This research question arose from observations made within the daily working environment, in which health professionals and, more specifically, physical therapists, routinely make statements like "Patients with RSI/WRMSD do not demonstrate favorable prognosis and always return for treatment". The origin and grounds for this kind of clinical reasoning are still unclear and it can be asked whether this might simply be the result of a culture created and reinforced by professionals because of their representations with regard to patients with RSI/WRMSD and interactions with colleagues.

In seeking a new theoretical reference point that would help in understanding this syndrome, social representations<sup>8</sup> and comparative epistemology<sup>9</sup> theories were chosen. Social representations are particular types of knowledge that have the function of elaborating individuals' behavioral patterns and communication. Such knowledge comes from symbolic and practical content that is part of people's daily lives and functions towards interpreting, thinking about and acting on the realities<sup>8</sup>.

In Ludwik Fleck's comparative epistemology, two concepts stand out: collective thought and style of thought. The first is defined as "a community of people interchanging ideas or maintaining intellectual interaction", and the second as "a defined construction of thought or intellectual availability for a particular way of seeing and acting instead of any other"<sup>9,10</sup>. The choice of these theories is grounded in the fact that these statements contain many expressions related to common sense, beliefs and behavior among physical therapists, in their interrelationships within certain social contexts.

## Methods

The present study was developed by taking a qualitative approach and seeking to gain knowledge of particular characteristics and work with a range of meanings, values and representations, which make up the fundamental components between both relationships and phenomena<sup>11</sup>. One of the resources used was semistructured interviews. Physical therapists assisting patients with RSI/WRMSD in the municipality of Divinópolis, Minas Gerais, were selected as a convenience sample. To locate these professionals, a search for physical therapy clinics was undertaken using the telephone directory. At the first contact, the study's objectives were explained, and the professionals were asked about their fields of activity and the year in which they concluded their undergraduate course.

Twenty-eight physical therapists with activities in the field of physical therapy applied to orthopedics were found. Their length of time since graduating ranged from one to 32 years. While selecting participants, the criterion of avoiding the selection of two professionals with the same length of professional activity was used, with the objective of obtaining statements from professionals with different practical experiences. After a second contact, the interviews were scheduled and held at the work location of the participating physical therapists, on dates and at times of their choosing. Fourteen interviews were held, and the criterion used for deciding not to hold any more interviews was the time when it became increasingly rare for any new data to appear, thus reaching the saturation point<sup>11</sup>.

The interviews were recorded, and their duration ranged from 20 minutes to one hour. By the end of the study, 406 minutes of recordings were obtained, which generated 118 transcript pages. After the transcription, the statements were sent to the participants for reading and confirmation of the information. The opening of the interviews was standardized: initially, the physical therapists were informed about the objective of the research and they then read and signed the free and informed consent statement, which had been approved by the Research Ethics Committee of the Universidade Federal de Minas Gerais (UFMG), under Report No. ETIC 0012/06. After that, the interview was conducted, based on the previously defined themes, such as the cause of RSI/WRMSD, the factors that interfered in the treatments, the evaluation focus and the criteria used for hospital discharge.

A second tool used for collecting data was non-participant observation, through a random draw. The observation was done while patients with RSI/WRMSD were being treated, and was systemized based on the interview data. The dimensions to be observed included the physical therapist's interactions with the patient, the procedures used in the session and the guidance given to the patient at the end of the session. In total, there were four observations. The patients received information about the research and, after agreeing to participate in the observation process, they also signed a free and informed consent statement. The observation data were recorded in a logbook and subsequently analyzed to complement the interviews. The interview analyses were completed based upon the thematic units or topics that could be understood as meaning units, which could be naturally and coherently detached from the analyzed text. The criteria suggested by Bardin<sup>12</sup> were followed in three steps for organizing the analysis:

- a) pre-analysis: in this phase, the raw material was subjected to organization into thematic units, based upon the initial objectives of the research;
- b) exploration of the material: the material selected from the first reading was reorganized into thematic units guided by the categories;

- c) processing of the results obtained and interpretation: in this step, the aim was to go beyond the level of describing the words and observations to reach to an interpretation of the information.

Interpretation is a sequence in the analysis and its goal is to seek meaning sense in the words and actions, in order to reach comprehension beyond the limits of what is described<sup>12</sup>. The theory of social representations and comparative epistemology served as support during the interpretation process.

## Results and discussion : : .

The results are presented in two parts: first, a brief description of the participants and then the statements, which were divided into thematic units or topics. Based upon Patton<sup>13</sup>, it was considered that no simple method would adequately solve the research problem and that each method would reveal different aspects of this empirical reality. Therefore, triangulation was sought for the thematic units which resulted from analysis of the interviews, with the existing literature and the observation data.

### The participants

Eleven women and three men were interviewed; their names have been replaced by pseudonyms to preserve their identity. None of the participants graduated in the 1980s, and most of them had specialist titles. All the physical therapists worked with other people, in the same place, which may be an interesting factor when considering what was stated by Richardson<sup>14</sup>. According to this author, physical therapists' actions are strongly influenced by their work environment and by the perceptions of older colleagues. There is a culture in work locations that develops into a continuous process of influence and professional interactions<sup>14</sup>. Several of the interviewees provided examples of situations in which ideas and treatment strategies were shared, as can be observed from this following statement: "The influence of professional colleagues you know at university and we also have other colleagues. So, there we end up exchanging ideas and we share lots of information" (DIONÍSIA).

### Recurrent themes in interviews and observations

The process of analyzing the interviews and observations generated three major themes that were named "movements". The first movement included discussion about how physical therapists dealt with evaluation, treatment and discharge of patients with RSI/WRMSD. The second movement dealt with the stigma of RSI/WRMSD from the physical therapists' perspective, highlighting the representations, beliefs and attitudes in relation

to the injury and the patient. The third movement was about the conflict that existed between the physical therapist's knowledge and how they felt while treating these patients.

## First movement: Evaluation, treatment and discharge

In the preliminary provisions of Resolution No. 8 of the Federal Council of Physical Therapy and Occupational Therapy (COFFITO), instituted on February 20, 1978, evaluation, reevaluation and determination of the discharge conditions for clients undergoing physical therapy and/or occupational therapy constitute private actions by the physical therapist and occupational therapist, respectively<sup>15</sup>. However, in regard to assisting patients with RSI/WRMSD, the difficulties that physical therapists faced in carrying out these activities were evident. Evaluation and discharge were frequently grounded in the biomedical model and centered on the structure and functions of the body, which was evident in this statement: "I try to see if he has any limitation, if there is any muscle weakness, if the pain is irradiating, if there is any abnormal sensitivity" (DIONÍSIA).

According to Bonet<sup>16</sup>, the set of representations and practices in modern Western culture, regarding various health-disease processes, has prioritized the biological order and enabled what today is called the "biomedical model". This model does not leave space for the social, psychological and behavioral dimensions that also have influences on the injury. It is, therefore, based upon biological reductionism, by which diseases are characterized by a recognized etiological agent, a group of identifiable signs and symptoms, and consistent anatomical abnormalities. This preoccupation with objectifying the disease, which has made it possible for biomedicine to become constituted nevertheless as scientific knowledge, has caused it to become distanced from patients' interests<sup>16</sup>. This is seen in the following citation: "[...] and then the persons insist on telling me about their work, but I insist on looking at the elements outside of their work" (VANESSA).

In the view of the interviewed physical therapists, the etiology of RSI/WRMSD is reduced to three kinds of approaches: biological, psychological and sociological. These approaches go against the findings in the specialized literature on workers' health, which show the connections between work with RSI/WRMSD and report that such findings may only be understood from careful evaluation of the specific work activity<sup>17</sup>. Among the physical therapists who were more attuned to the biological approach, the biomechanical and physical characteristics of RSI/WRMSD were considered to be etiological factors for the condition. Here is what NATÁLIA said were critical factors: "...repetitive movements, carrying of excessive weight and inadequate posture".

The physical therapists who prioritized the psychological approach pointed towards behavioral failures or susceptibility of the workers themselves as being possible triggering factors

for the process of becoming injured. This conceptualization discards the work link and demonstrates the injured worker as naturally predisposed. "It is the kind of activity, the repetition, the inadequate posture, inadequate machinery, you know? But it starts, it starts first with this tension, this anguish of having to deal with it, you know? The fear of losing the job and the patient's depressive character" (MARCELO). The study by Sato et al.<sup>18</sup> showed contradictory evidence, in which psychological trauma, blame and diminished self-esteem were considered to be consequences of the disease, and not the basis of a personality that was naturally predisposed to becoming injured.

Some of the interviewees, even when recognizing the resulting pressures from the way their work was organized, still seemed not to believe that the workers were suffering through the limitations imposed by RSI/WRMSD. The physical therapists who adopted this attitude attributed a preponderant role in injury genesis to the socioeconomic and cultural context, believing that RSI/WRMSD was simulated, characterized by deceit, and was used by workers with a view to gaining salary-related benefits. The following examples showed this: "I have cases of people who actually even managed to gain retirement and, particularly, I see close-up that they have relatively normal lives. People who play tennis and *peteca* and are on sick leave" (GUSTAVO). Furthermore: "The person prefers to become comfortable, have a guaranteed retirement pension for the rest of his life and to know that he does not need to work anymore and that he is at least guaranteeing his little salary every month" (BRUNA).

It can be said that it is hard to see what gains workers obtained through such simulations, given that after the diagnosis of RSI/WRMSD was confirmed, they faced a variety of prejudices and difficulties in both social and professional reintegration. Through their incapacitation due to these lesions, while belonging to the most productive age group, workers lose the reference points of their lives that are represented by the social elements of work, when they retire early<sup>19</sup>. Several authors have put forward the idea that RSI/WRMSD is determined through the social structure, and is especially related to changes in how their work is organized and to technological innovations for the restructuring of production<sup>5,6,18</sup>.

The lack of objective signs which characterizes the syndrome favors the maintenance of partial approaches such as the ones described above. The ethereal nature of the syndrome, its unpredictable clinical evolution and subjectivity of the pain often cause professionals to appear lost in relation to this condition: "The state of pain is very difficult for us. It is very subjective for you to question a patient's pain, isn't it? So we see that there has been some improvement, and then suddenly the patient appears again with lots of pain, and then you get very confused, right?" (CARLA).

Some of the interviewees showed a lack of preparation for recognizing and distinguishing RSI/WRMSD from other

musculoskeletal pathological conditions. In some cases, they considered any pathological process in an upper limb or the scapular belt as RSI/WRMSD, independent of the causal connection with work, as was recorded in the observation phase of the treatment sessions. For example, one of the patients scheduled by the physical therapists for the observation process was elderly and retired and demonstrated a condition of chronic neck joint degeneration. This difficulty in defining RSI/WRMSD cases could also be noticed in the interviews. The following is a statement from DIONÍSIA: “Everyone has heard about these terms RSI and WRMSD and everyone says that this only happens with the profession, right? And we know that this may also happen inside the home, or wherever.”

The difficulties found in the process of recognizing the syndrome and in evaluating the patients drastically interferes with the definition of an adequate treatment plan and establishment of discharge criteria, particularly in chronic cases, as can be seen in this statement: “You can, for instance, indicate cryotherapy for the patient and, in three days, you withdraw the cryotherapy, because his pain has increased and he does not tolerate ice, then you attempt heat treatments or contrast baths” (JANAÍNA).

The time to discharge the patient is particularly difficult, because of the restrictions of the health plan system itself, or because of the professional’s insecurities. Two statements regarding these points follow: “The discharge of patients with these cases is the thing that bothers us the most, so that is why I think that working in a team is very effective. I think that the team gives very significant support and confidence to whoever is giving the discharge” (JANAÍNA). “Often we can’t even discharge the patient, because when we ask them to come back, they don’t, right? They have 10 sessions and stop, physical therapy is done for the health plans and they stop because of financial issues” (DIONÍSIA).

In this light, various issues arise, such as: is adopting the biomedical model sufficient for assisting and understanding the demands of chronic patients? Why is the treatment focused on the relief of symptoms, and not on the movement dysfunctions or the elimination of causal factors?

The normative regulations of the INSS in 2003 make it clear that the conventional treatment used for acute pain is ineffective for chronic conditions. Moreover, professionals who are unaccustomed to dealing with these conditions have difficulty in accepting the fact that some patients, even when on sick leave from their work and receiving treatment, do not demonstrate improvements<sup>2</sup>. Comprehension of the genesis of RSI/WRMSD seems fundamental for more effective and resolute approaches.

## Second movement: The stigma of RSI/WRMSD

Baszanger<sup>20</sup>, in his study on experiencing and treating pain, emphasized that in cases of chronic pain, the patient’s experience is considered to be the main target of the therapy. In other words, the

patient constructs the appropriate treatment for himself, in accordance with his particular experience, and together with the health professional. The objective of this approach is that the patients learn to treat and deal with their own pain. However, this seems impossible if the pain is considered to be a subjective manifestation by the patient and consequently cannot be valued. Furthermore, it may be that there is a belief among professionals that patients have the capacity to simulate pain in order to obtain secondary gains. This can be seen in the following statement: “So the person takes advantage of this to get sick leave, to spend some time away, and I think sometimes this business is kind of suggested” (BRUNA).

These propositions have been much criticized because they rule out the possibility that work becomes an element in the process of becoming injured. The radical separation between work and the body that becomes injured ends up anchored in the idea of certain predispositions<sup>21</sup>. Viana<sup>22</sup> reported that the adaptation to a chronic condition may be affected by psychological factors and that the way patient face the problems coming from the disease must be considered, since the way this is done influences their level of well-being. According to this author, facing problems must be understood as a process that undergoes modifications over the course of time according to the demands of the context. The search for social support is also considered to be a fundamental strategy in facing up to the injury, and lack of such support may contribute towards poorer rehabilitation of patients with chronic pain. The influence of these psychosocial factors was well observed by some physical therapists in the present study, who recalled how the attitudes of the health professionals themselves or even the lack of family support might have a negative influence on these patients’ recovery. For example, MARCELO stated: “There are many patients with terrible family problems and this puts the patient into a miserable situation. What was bad gets worse. If there is no separation from dramatic family situations, it is difficult for such patients to improve”.

## Third movement: Conflict between knowing and feeling

One special feature that occurred during the interviews was the interviewees’ hesitation when questioned about the theoretical model adopted for treating patients with RSI/WRMSD. In some cases, it was necessary to repeat the question several times, and, even so, it was impossible to obtain a coherent response. We then chose not to insist upon the question, in order to avoid embarrassment and excessive pressures. Some of the interviewees seemed to have confused the theoretical model with theories that set out the grounds for using physical therapy resources or with the use of treatment protocols. This can be seen in the following citation: “If the patients arrives in a painful condition, we try to ease what’s going on. I’m not going to go get a book to find out what it says because maybe it won’t work on that patient” (CARLA). According to

Wolff et al.<sup>23</sup>, the difficulties found in treating patients with chronic pain are composed not only by lack of knowledge, but also by the behaviors of the professionals regarding the chronic pain. The physical therapists in this study were questioned about their participation in courses, congresses or lectures about RSI/WRMSD and in relation to factors that might have interfered in the treatment of these patients with chronic pain. The majority declared that they had participated in courses or congresses on this topic only when they were at university and only used old concepts regarding the differences that existed between chronic and acute patients. The following is what two of the physical therapists said: "Acute patients are easier to treat, but what is chronic remains, right? Often they do not do what we ask them to" (DIONÍSIA). "There are no differences whatsoever in treating them" (NATÁLIA).

The patients' slow evolution was attributed to their lack of care with, or adherence to, the proposed treatments. This belief may generate an accommodation by the professional towards the complexity of chronic pain and the definition of the treatment. Also, in relation to the ways of updating their knowledge, some physical therapists reported that they searched for information on RSI/WRMSD on the internet, but were not able to access specific websites or to find any quality of information.

These patients became a challenge because they put physical therapists in face of a gap in their knowledge. This lack of knowledge and uncertainty regarding satisfactory outcomes generated feelings of frustration, exhaustion, lack of interest and even panic. Here are a few statements to support these points: "I'll be honest with you; I am kind of lazy with this issue. It's just that I think that these are patients with which it's much more difficult to get an improvements" (BRUNA). "Awful, I hate them. I hate treating all these inflammatory diseases! I panic about them. Especially the ones related to work. The ones in which the person comes to you and says: I have RSI. I think that we rarely get good results from them" (GABRIELA).

Almost all the interviewees demonstrated feelings that represented the professionals' impotence in seeing patients with RSI/WRMSD. This feeling may be explained, in part, by the reductionistic vision of the biomedical model adopted, which makes effective therapy more difficult in these cases. It must be recognized that RSI/WRMSD demonstrates complex etiology which involves biological, psychological and social elements, and that the inefficiency of treatment may be even greater in the presence of chronic pain. Chronic pain does not demonstrate a measurable cause and amplifies the distance between the objective knowledge of the physical therapist and the subjective experience of the patient. The distance between these two poles was very clear when triangulation was used between the interviews and the observations.

At some moments during the interviews, the physical therapists pointed out the following factors as being fundamental

for the improvement of treatment quality and the prevention of RSI/WRMSD: were capable of listening to the patients; outlined a clinical approach based on the information obtained in the evaluations; guided patients regarding their positioning and adequate posture at work; and helped them to practice exercises and stretching. However, during the observations of the treatment sessions, these factors were not witnessed. While the physical therapists applied their therapeutic tools, the patients kept on reading magazines or books and dialog between the professional and the patient was rare. During one session, the patient complained that his pain had migrated from the shoulder to the elbow, and the physical therapist immediately changed the location of application of the therapeutic resource, as if the apparatus could "run" after the pain. The patients did not receive guidance related to postural care during the observed sessions, and only one patient received stretching exercises, which have been highlighted as an important intervention in preventing RSI/WRMSD symptoms.

In the study by Daykin and Richardson<sup>24</sup>, the physical therapists classified the patients with chronic lumbar pain as "good patients" and "difficult patients". The good patients were those who demonstrated a well-defined clinical profile, were motivated regarding the treatments and listened to the physical therapists' recommendations. The difficult patients were those who were more passive, did not participate in the treatments and consulted several other professionals. This kind of classification of patients also appeared in the interviews of the present study: "People who want to improve are more interested in everything. You tell them something like this: do this at home, this stretching, use ice at home, and they do it. The patients who don't want to improve don't have this kind of preoccupation, you know?" (GABRIELA).

In relation to the fundamental prevention procedures for patients with RSI/WRMSD, some of the interviewees mentioned that ergonomic analyses and exercises in the workplace were ineffective, even with simplified ergonometry for the adaptation of the furniture and in the physical environments. This was shown in the following citations: "The intense work in companies shows the importance of exercises in the work place for prevention. Physical activity is fundamental, as is good posture and daily stretching" (DIONÍSIA). Furthermore it was reported that: "If I could, I would go to all companies and tell them how the desk, computer and work schedules should be placed or done, and I would implement those exercise therapies with them so that they could avoid the causes of RSI/WRMSD" (CARLA).

Ergonometry seeks to analyze the processes of the restructuring of production in regard to characterizing activities and inadequacies of various work stations. Characterization of these activities is a fundamental element for the achievement of a functional state that is stable regarding both quantity and quality of

performance. Therefore, activities must be conceived considering the diversity of the populations of workers and their inherent variability. Well beyond the simple physical adaptations of working environments, it is necessary to know about and integrate the individuals' variables into the requirements and organization of work. Only by integrating such variables can quality of life in work be facilitated and production increased<sup>25,26</sup>. Regarding the effects of workplace exercises in preventing RSI/WRMSD, there is still some controversy in the literature. Although this has been considered important for the prevention of skeletal muscle injuries related to wear and stress at work<sup>27</sup>, some authors have advocated that workplace exercises used alone, is insufficient for the prevention of RSI/WRMSD and may distort the systemic view needed for dealing with this complex phenomenon<sup>27,28</sup>.

## Final considerations : : : .

In this study, it was observed that, when characterized by subjective symptoms such as pain and paresthesia and by the absence of objective clinical signs, RSI/WRMSD was configured as a complex syndrome for physical therapists who were interviewed. It was possible to detect a reductionistic style of thinking in relation to this syndrome. This style of thinking revealed that the interviewees regarded their patients in a fragmented manner, with a mechanistic conceptualization of the human organism. It was also observed that the social representations of the physical therapists who were interviewed, in relation to RSI/WRMSD and such patients were collectively elaborated based upon the daily realities of clinical attendance. As a theoretical reference point for clinical practice, the use of the biomedical model stood out, favoring the view that the patient is only a person who has an injury. The lack of link between the injury and the patient, provokes disbelief regarding the patient's suffering and reinforces the technical nature of the interventions. The focus of the

treatments become the disease, and the distance between the professional and the patient becomes increasingly large. The interviewees who tried to go beyond the limits of mechanical conceptualization ended up taking a psychological approach towards these individuals' suffering.

Independent of the theoretical model adopted by professionals, there is an urgent need for them to understand the health process in a broader manner and to accept that the biological body is created and developed within a specific cultural and social environment. Therefore, each individual's experiences, feelings and history are factors that must be recognized in the development of intervention strategies. Physical therapists' technical-scientific knowledge and objectives must be reconciled with patients' subjective expressions. Thus, it is not enough to concentrate efforts on attempts to restructure the normal functioning of the body, if the patient's demands are not considered. It is also not enough to seek disease prevention by normalization of behavioral patterns, if the individual's active participation is ignored.

The interviewees showed difficulties in recognizing and dealing with the subjective aspects of RSI/WRMSD, which seemed to negatively affect the effectiveness of the treatments. Therefore, the failure of some interventions reinforced the clinical presuppositions that patients with RSI/WRMSD were difficult, did not improve or always returned for treatment.

It is worth emphasizing that recognition of these subjective features, which rarely coincide with the objective characteristics of the injury, do not imply ignoring the biological abnormalities that may be present. These abnormalities must be treated with the objective of expanding the individuals security and tolerance towards the risks imposed on their health. It is hoped that through this contribution towards the adoption of a model for physical therapy care that focuses on individuals with their individual characteristics, while still open to listening and dialog, the popular and technical knowledge might be decoded and reconstructed for potential clinical interventions.

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