Absence from work and functionality: the case of workers with lower back diseases

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Abstract: Objective: To investigate the functional aspects of subjects affected by chronic diseases involving the lumbar spine and in absence from work. Method: Two steps. (1) Documentary analysis of open records of patients treated at the Worker’s Health Reference Center (CEREST), Santos-SP, selection of subjects with a clinical diagnosis of “other back diseases” and initial complaint of lower back pain. (2) Use the script with semi-structured questions for the interviews with the subjects, which were recorded and transcribed for content analysis, and also an application of the Oswestry Low Back Pain Scale-OSW tool. Results: We analyzed 431 records with patients of both genders, and 15.77% (68) were diagnosed with “other back diseases”. Of these, 73.5% (50) presented initial complaint of lower back pain. Ten (10) subjects participated of the interview, aged between 35-58 years, both genders, different professions, and most with little schooling. Among the subjects were found the loss of identity in social roles based on disability, postures that can trigger pain in everyday life, the need to perform tasks that can trigger pain, mental suffering related to situations, among others. Conclusion: The leave of absence due to chronic lower back pain may cause disability and suffering, and functional aspects are relational and must be analyzed and dealt with the biopsychosocial perspective and multidisciplinary teams.

Keywords: Sick Leave, Low Back Pain, Chronic Pain, Occupational Health.
1 Introduction

Several changes have occurred in the world of work in recent decades, and they have been affecting the health of workers in various ways. Current work contexts, with precarious conditions, job instability, little possibility for development and professional growth as well as aggressive forms of work organization, which require goals that are hard to reach and that cause discomfort among workers, can contribute to the sickness of the worker. There is a need to have pleasure at work and to avoid suffering. Pleasure is a constituent part of health, it is a creative act in front of one’s life, besides giving a meaning to life (MENDES; CRUZ, 2004). According to the authors, pleasure at work is related to social and personal identity. This identity is revealed because work is a central and important aspect of human socialization. According to Lancman (2008), the development of identity and the transformation of suffering into pleasure are directly related to the other’s gaze and the mechanisms of recognition arising from this view.

The experience of moving away from work due to professional illness is socially and historically marked by an incapacity for work and insecurity (RAMOS; TITTONI; NARDI, 2008). Disability is the impact that the acute and chronic conditions have on the bodily functions and the ability of the individual to act in an expected and personally desirable way in society (ORGANIZAÇÃO..., 2003). For the world of work, discrimination and rejection generate public attestation of professional decline, disrepute as to the patient’s condition and disillusionment about the possibility of improvement (NEVES; NUNES, 2009).

Among the diseases of work, there are diseases of the spine. Among the diseases of the vertebral column, there are cervical syndrome, thoracic and sciatic pains, disorders of intervertebral discs, spondyloses, radiculopathies, and dorsal syndrome, which are the most common (HAGEN et al., 2002). One of the most affected body regions is the lumbar region. According to Helfenstein, Goldenfum and Siena (2010), occupational low back pain is the single largest cause of work-related health disorder and absenteeism, and it is also the most common cause of disability in workers under 45 years old.

Factors related to professional activity, such as occupations with great physical overload, inadequate posture, repetitive movements, subjection to vibration and high-velocity work are at risk for low back pain (ABREU; RIBEIRO, 2010). Aspects related to work organization, such as high demands for productivity, fast pace, long journeys and inadequate working conditions are also related to diseases (ALENCAR; TERADA, 2012). Lumbar pain is a public health problem in several countries (HOY et al., 2012; GOLOB; WIPF, 2014). Initially, the symptoms are acute, but over the months, they can become chronic.

For Zavarize et al. (2014), chronic back pain is the main cause of absenteeism at work. It is a cause of disability in individuals in the productive age group and is one of the costliest causes of locomotor disorders. In chronic low back pain, it is common to have functional limitations in daily life and practical life, in addition to restricting the individual’s participation in society (leisure, work, school) (SAMPAIO et al., 2005). Due to the pain, most patients become partially or totally incapacitated, transient or permanently, triggering accentuated suffering and loss of quality of life (GARCIA; TORRES NETO, 2011).

In chronic low back pain, functional impairment hinders patients to perform activities, and often has to move slowly and carefully, which makes them want to stay at home most of the time (WEINER et al., 2006). This incapacity can lead the affected individuals to greater social isolation. Functional disability and decline are common among patients with chronic low back pain, and patients’ quality of life depends more on the degree of disability than pain intensity. That is, most of the costs derive from disability rather than pain (SALVETTI, 2010).

In 2001, the World Health Organization (WHO) approved the definitive classification system for the understanding of functionality and human incapacity: the International Classification of Functioning, Disability, and Health - CIF (ORGANIZAÇÃO..., 2003). The CIF describes the functionality and disability related to health conditions, identifying what a person “can and cannot do in their daily lives,” in view of the functions of organs or body systems and structures, as well as the limitations of activities and social participation in the environment in which the person lives (BATTISTELLA; BRITO, 2002). The term of the CIF model is functionality, which covers the components of functions and structures of the body, activity and social participation, where the functionality is used in the positive aspect and the negative aspect corresponds to the incapacity (ORGANIZAÇÃO..., 2003). The purpose of classification is to group similar aspects of human functionality, organize them into a logical structure and define them so that the terms used in this classification are equivalent at the international level (RIBEIRO, 2011).
WHO highlights the importance of the biopsychosocial approach to integrating various perspectives of human functionality, but does not detail how this interaction occurs (Sampaio; Luz, 2009). According to these authors, the interaction is complex, and a biopsychosocial approach is used to achieve the integration of the various dimensions of health - biological, individual and social. The challenge is to understand the complex relationship between biological and psychosocial factors, refining the analysis of the relationship between disability and inability, from the perception of the body as a biological phenomenon and social production.

The society imposes norms and rules for what would be considered “normal”, together with the sick people, and within a functional analysis. It has to be considered what would be normal, since, according to Canguilhem (2014), normal is not a static or peaceful concept, but dynamic and polemical. The normal one depends on rules and norms. Then, a person who was ill with musculoskeletal disorder could be considered “normal” to have no social activities for a given society, and therefore, his functionality could be compromised by socio-cultural aspects, affecting his social participation. Perhaps, this fact may occur not because of the disease, but because of fears generated by the possible representations of the disease and the situation. Also, how much is the individual also motivated to become able or not to perform a certain movement or task, and under what conditions, and what would be the needs, expectations, and implications involved? Relating the complexity of existing interactions, including at the individual level. Two people with the same disease may have different levels of functionality, and two people with the same level of functionality do not necessarily have the same health condition (Farias; Buchalla, 2005).

Lumbar spine-related pain interferes in activities of daily living, ranging from limitations of simple movements, such as standing or sitting, walking, personal care and sexual activity, to disability in more severe cases (Salate; Sueishi, 2011). The impact of low back pain on functionality is a consensus among health professionals, which may restrict occupational activities mainly, generating important socioeconomic repercussions (Sampaio et al., 2005). The need to know what happens to patients after diagnosis and over time, especially in chronic diseases, becomes increasingly important for the health area (Farias; Buchalla, 2005).

This study aimed to investigate the functional aspects of subjects affected by chronic diseases of the lumbar spine and in situations of absence from work.

2 Method

This study is exploratory, descriptive and retrospective, with emphasis on qualitative results, carried out in two stages. In the first stage, a documentary analysis of the open medical records of individuals attended at the Reference Center for Occupational Health, CEREST, in the city of Santos-SP was carried out from January 2010 to December 2011. The personal data, profession, clinical diagnosis, the cause of remoteness, removal time, among others were collected. The inclusion criterion in this stage was for individuals who presented clinical diagnosis referring to “other dorsopathies” (between M50 to M54), established according to the International Classification of Diseases (ICD-10), and related to work. In the second stage, from the records already selected in the previous stage, those individuals, of both genders, who were living or who were in a situation of absence from work due to their dorsopathies and with an initial complaint of low back pain were selected.

The individuals selected for the second stage were contacted by telephone, and they made an appointment with those who agreed to participate in the study. Some contacts were not possible due to the change of phone number. A script was written for the semi-structured interviews, containing questions about the current difficulties experienced in daily life in various spheres of life (family, leisure, work, etc.), based on experiences and perceptions of the participant. The interviewer asked the questions that he/she considered necessary to clarify matters that were not clear and/or to obtain the information that he/she considered relevant to the study, based on the script developed for the interviews. This stage was recorded, and the interviews had an average duration of 60 minutes. The interviews were recorded and transcribed in full for content analysis by thematic categories (Bardin, 2011). According to the author, the categories are classes, which bring together a group of elements (registration units) under a generic title, and whose grouping is carried out due to common characteristics of these elements. In this study, titles in grouped elements were chosen in some categories.

As a complement, the Oswestry Low Back Pain Disability Questionnaire (OWS) instrument was also applied (Fairbank; Pynsent, 2000). This questionnaire has ten items that refer to the functional aspects and are related to how much the back problem has affected the day to day, with items on personal care, ability to lift weights, to walk, among others. Each item has a score of 0 to 5,
with the highest scores indicating great disability. If all ten items are completed, the score is calculated as follows: if the final score was 16 (sum of points scored), 50 points being possible, \[ \frac{16}{50} \times 100 = 32\% . \] The authors recommend rounding the percentages to the whole number. For the analysis of these instruments: 0 to 20\% - minimum disability; 21\% to 40\% - moderate disability; 41\% to 60\% - severe disability; 61\% to 80\% - physically disabled; 81\% to 100\% - totally disabled (usually bedridden).

The study was approved by the Research Ethics Committee of the Federal University of São Paulo - UNIFESP, under number 186.843.

### 3 Results and Discussion

There were 431 patient records analyzed at the Reference Center for Occupational Health (CEREST), in the city of Santos-SP, from January 2010 to December 2011. Of these records, 15.7\% (n=68) of workers had clinical diagnoses established between M50 and M54 by ICD-10. Of this sample, 52.9\% of the individuals were male, being the age group more affected between 41 and 50 years old. Among the most prevalent clinical diagnoses in this sample were: other intervertebral disc disorders (M51); Lumbago with sciatica (M54.4); Disorders of lumbar discs and other intervertebral discs with radiculopathy (M51.1), and Dorsal syndrome (M54).

Dorsopathies involve several regions of the spine and the complaint of low back pain in workers at initial consultation was 73.5\% (n=50). Of them, some individuals had symptoms of lumbosciatica, in addition to low back pain resulting from clinical diagnoses related to the disorders of the lumbar intervertebral discs. Lumbar disc herniation is a problem that affects a large part of the population and, besides causing discomfort, it also generates a series of inconveniences in the professional and psychosocial life of the affected individual, in different age and social groups (FRITZ et al., 2010).

There were 50 subjects with low back pain (73.5\% of the 68) contacted for the interviews. Ten subjects participated in the second stage of the study. Personal data, profession and time of removal of the interviewees are shown in Table 1.

As shown in Table 1, age varied between 35 and 58 years old, and six subjects were younger than 45 years. For some authors, there is a greater involvement in age groups starting at 40 and productive age (HEDEAGER-MOMSEN et al., 2014; HELFENSTEIN; GOLDENFUM; SIENA, 2010). Among the professions, there was a prevalence of cleaning and general services assistants in this sample (n=6). According to Pataro and Fernandes (2014), these workers carry out professions exposed to occupational risks, especially with the high physical workload, with risks of back pain and, consequently, the removal of work. Most subjects’ time of removal (n=6) was greater than three years, and most had experienced a return to work (n=6). Prolonged time away from work may be a negative factor for return to work (STAAL et al., 2003; TOLDRÁ et al., 2010). Most of them had a low level of education, with incomplete High School, and all reported physical efforts in work activities.

All subjects (n=10) were affected in the region of the lumbar spine with lumbar disc protrusion, and none of them had undergone surgery, only treatments, such as medications and physiotherapy, at some moments of the total period of absence from work. All subjects (n=10) were in a situation of absence from work at the time of the research and received the sickness benefit (B31). Most (n=6) had experienced more than one process of leaving work, indicating that they had experienced situations that may be good or bad, and that may have repercussions on their lives, including possible unsatisfactory relationships and conditions in the process of returning to work, which was not investigated.

### Table 1. Personal data, profession and time of removal of the individuals interviewed with diseases of the lumbar spine.

<table>
<thead>
<tr>
<th>Data</th>
<th>N=10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age group</td>
<td>From 35 to 58 years old</td>
</tr>
<tr>
<td>Gender</td>
<td>Female: n = 6</td>
</tr>
<tr>
<td></td>
<td>Male: n = 4</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married: n = 8</td>
</tr>
<tr>
<td></td>
<td>Divorced: n = 1</td>
</tr>
<tr>
<td></td>
<td>Widow: n = 1</td>
</tr>
<tr>
<td>Education</td>
<td>Incomplete ehigh school: n = 6</td>
</tr>
<tr>
<td></td>
<td>Complete high school: n = 4</td>
</tr>
<tr>
<td>Profission</td>
<td>Cleaning assistant: n = 3</td>
</tr>
<tr>
<td></td>
<td>General Service Assistant: n = 3</td>
</tr>
<tr>
<td></td>
<td>Nursing assistant: n = 1</td>
</tr>
<tr>
<td></td>
<td>Pizzaiolo: n = 1</td>
</tr>
<tr>
<td></td>
<td>Loading and unloading supervisor: n = 1</td>
</tr>
<tr>
<td></td>
<td>Mason: n = 1</td>
</tr>
<tr>
<td>Total time of absence from work</td>
<td>More than 3 years: n = 6</td>
</tr>
<tr>
<td></td>
<td>Less than 3 years: n = 4</td>
</tr>
</tbody>
</table>
3.1 Identity, disability, and suffering

All individuals had chronic pain symptoms, which affected the practical and instrumental activities of daily living. These activities affect social roles, such as worker, housewife, among others, which caused suffering. When possible, the subjects sought help from relatives in domestic activities, but at the same time, they generated a sense of incapacity and dependence on others to perform some tasks.

[...] because of today, not even the house chores I can do, the “normal” service I cannot do, I am already disabled... even to put a suit to dry! I depend on the children or the husband (43 years, general service assistant, female gender).

[...] in my house my children have to do things, for me because I cannot... he (husband) does it for me because I cannot... and knowing that one day I have done it a lot more, it is horrible... having to depend on others to do their thing (44, nursing assistant, female gender).

Having to rely on others to accomplish previously easily accomplished tasks seemed to “attest” to a condition of inability and uselessness, by the meanings assigned. It is not always possible to have someone at home available when you need help with the tasks, and you can also suffer having to let the other carry them out for you when there is a desire to do them. These experiences can reinforce the identity of sick and incapable, generating suffering. Physical and emotional incapacity tends to suspend activities of daily living, housewife, and wife, and women end up manifesting depressive symptoms (GAEDKE; KRUG, 2008). Subjects may require adaptations and family support in the process, especially when family interpersonal relationships occur in patterns considered dysfunctional, an aspect that would require further investigation. According to Rocha and Lima (2011), the sick worker, incapacitated and estranged, seeks shelter in the family environment, and there are demands of the family’s efforts to deal with the new demands that arise after an illness.

Both men and women in this study suffered from their inability to work, leaving aside the identity of a skilled and “efficient” worker, and socially valued.

[...] we feel like crap because while we are working, we are workers, we are good people... then we have, get a problem, then treat us like nobody... unfortunately that is what happens (37 years, general service assistant, male gender).

[...] we feel incapable, right? Poor thing... because, my life, I cannot do the things I did so well (55 years old, mason, male).

Perceptions and ideas of disability are strengthened by the social environment. For Canguilhem (2014), being sick means being harmful, undesirable or socially devalued. In this sense, by conventional social rules and norms, a cure is sought, but chronic diseases have no cure. Perhaps they should be more careful in reporting on the diagnosis of a chronic disease since the information carries stigmas and the diagnosis may come as an absolute truth. When a disease becomes chronic, there is always a “past”, and the person is sick not only about himself but also about others (CANGUILHEM, 2014). It is not clear how the normality can be defined when it comes to structures, functions, activities and performance of roles that “normally” present great variability (SAMPAIO; LUZ, 2009).

Healthcare of workers unable to work needs to be reviewed through a broader lens, a holistic perspective of care (NEVES; NUNES, 2009). Suffering, living conditions, expectations, beliefs must be considered, and the experiences of the subjects, their ways of being and reacting are influenced by the society to which they belong.

3.2 Postures and pain

Common postures in everyday life, such as sitting or standing for some time, have been compromised by the disease in some situations.

[...] if I stand very still, I cannot get very far, only if it is about 10 minutes... if it does not start to hurt... then I have to keep moving back and forth, you know? (53 years old, cleaning assistant, female gender).

[...] sometimes we cannot stand for a long time and not sit for a long time, so what kind of work will we find in this way? (37, general service assistant, male gender).

Simple questions, such as sitting or standing for a while, often caused pain and, because they were common in everyday postures, ended up generating grief by perceiving incapacity. The fact that pain arises in certain settings, without necessarily physical exertion, other than the body’s maintenance effort, can accentuate the fear of pain and the belief of incapacity. Levels of phobia related to painful situations are usually related to anxiety and fear of pain, and imply the maintenance of disability in individuals with chronic pain (VOWLES; GROSS, 2003). In simple situations, if pain can arise, what should you think about returning to work? When talking about chronic low back pain, it must be considered that there are psychic and social aspects
involved. In a study by Vianne et al. (2003), both physical well-being and mental well-being had relations with severe pain.

3.3 “Must” do

Subjects often end up doing what they think has to be done (household chores), even though they know they will be at risk for pain, which interferes with clinical symptoms.

[...] you are a housewife, you have a dinner to make, you need to pack a wardrobe, you have clothes to iron, and you are in pain, you do! Many times, I had to do... I had no one to do! (42 years, general service assistant, female gender).

[...] what I have to do I do it… it is very hard to depend on others... very difficult... then I get tired (53 years, general service assistant, female gender).

[...] I will not lie to you, I do it... If I do something else, that is it, it starts to pain (55 years old, mason, gender).

The fact of doing something that could be harmful should not be judged, without first investigating the contexts in which the subjects are inserted, aspects that would need further investigation. It is not intended here to blame them but to try to understand their situations. Often, there is no one who does the chores, and there is suffering of not being able to do them without triggering the pains, becoming an internal conflict. It seems to be an attempt to flee from feelings of failure and futility, and doing so might alleviate those sensations and perhaps anguish, reflecting on what would be the worst pain.

Perhaps, having an awareness of the risks to the onset of chronic pain in daily activities seems not to be enough to avoid them. When symptoms cease or subside, subjects tend to perform tasks.

[...] how will a homemaker avoid it? It is difficult to live with this pain. It gets better a little, and you do it. However, you know it is coming back (43, general service assistant, female gender).

When performing tasks, symptoms may re-emerge, and, especially if postural care is not performed and physical efforts have not avoided the risk is of worsening. The invisibility of symptoms and illness also prompts doubts about the pain that is felt and about the disability (NEVES; NUNES, 2009; ALENCAR; OTA, 2011).

3.4 The instrumental

The Oswestry Low Back Pain Disability Questionnaire (OSWESK) was applied to the interviewed subjects (FAIRBANK; PYNSENT, 2000). This questionnaire consists of ten items that refer to the functional aspects and are related to how much the problem of low back pain has affected the day to day. Table 2 shows the scores obtained and interpretations.

As shown in Table 2, most of the subjects (n=6) had a severe disability, with the disease affecting several aspects of everyday life, and the most common are: when carrying weight, not sitting, not staying standing and in domestic activities. Many of these restrictions are because the pain is chronic and the symptoms worsen, in general, as the daily activities are performed. Chronic pain causes limitations that go beyond the physical aspect, as it also encompasses psychological and social aspects that interfere with daily activities, which prevents personal satisfaction, causing situations of exhaustion (POLIZELLI; LEITE, 2010). The experience of a chronic (especially late-onset) disease involves a complex process of adaptation and brings with it a set of changes that can challenge the individual’s view of himself, his abilities and the world (BISHOP, 2005). The subjects of the study went through experiences of incapacity due to illness and related suffering, besides possible disillusionment about a possibility of improvement. In addition to the experiences, there were changes in social roles, social representations, internal and relational conflicts, which may have contributed to the identity of the patient and the disabled, triggering severe and moderate incapacities observed by the instruments, which would require further investigation. Also, “must” do some housework, in the struggle to maintain perhaps a sense of socially recognized “utility”, and supposed mental

<table>
<thead>
<tr>
<th>Subjects (n=10)</th>
<th>Scores</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1*</td>
<td>58%</td>
<td>Severe disability</td>
</tr>
<tr>
<td>E2</td>
<td>44%</td>
<td>Severe disability</td>
</tr>
<tr>
<td>E3</td>
<td>58%</td>
<td>Severe disability</td>
</tr>
<tr>
<td>E4</td>
<td>34%</td>
<td>Moderate disability</td>
</tr>
<tr>
<td>E5</td>
<td>58%</td>
<td>Severe disability</td>
</tr>
<tr>
<td>E6</td>
<td>58%</td>
<td>Severe disability</td>
</tr>
<tr>
<td>E7</td>
<td>50%</td>
<td>Severe disability</td>
</tr>
<tr>
<td>E8</td>
<td>40%</td>
<td>Moderate disability</td>
</tr>
<tr>
<td>E9</td>
<td>30%</td>
<td>Moderate disability</td>
</tr>
<tr>
<td>E10</td>
<td>38%</td>
<td>Moderate disability</td>
</tr>
</tbody>
</table>

E1* = interviewed 1, etc.
well-being might have aggravated clinical cases. In general, because of chronic pain, the individual has his routine modified and his occupational performance compromised. In a study by Alencar and Terada (2012), chronic pain affected leisure and social activities, causing, in some subjects, a “total” dismay to perform previously pleasurable activities.

4 Conclusion

Removal from work-related illness can lead to disability and suffering. Human functionality is relational and complex. In general, there is a need for a process of acceptance and overcoming the new situations with the subjects affected by the chronic lumbar disease and who are in a situation of absence from work. This situation requires a certain amount of time for adaptation in the rehabilitation process, which should occur with teams composed of several professionals and in interdisciplinary work, including group and expressive activities. It should be remembered that the pain that is felt may not only be a physical pain and the psychosocial aspects need to be investigated and considered with the subjects with chronic back pain in the rehabilitation processes.

The analysis by the instruments showed the high levels of reported and perceived disabilities by the subjects. These high levels are often not consistent with the results of clinical assessments and biomedical approaches, often leading to mistrust and the need for constant struggle to prove the disease and the need for treatments. Also, these treatments are not always easily accessible, which can cause suffering.

5 Limitations of the Study

This study did not aim to analyze all the functional aspects due to the complexity of the theme. The number of participants in the sample was considered low, and they were related to a single health service. The participants in this study may be the most serious cases and, for this reason, presented moderate and severe disability, and agreed to participate in the study. Such aspects would require further investigation. However, some aspects analyzed and discussed evidenced some existing relationships with the topic and the subjects. It is suggested a deepening future research and qualitative analysis on the theme, aiming for advances in the processes of investigation and rehabilitation, and not aiming at the attempt of control and generalization.

References


Absence from work and functionality: the case of workers with lower back diseases


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Author’s Contributions
Maria do Carmo and Janaina worked on the design, review and writing of the article. Janaina participated in the field work. Maria do Carmo carried out the work of orientation and supervision of the field and study. All authors approved the final version of the text.

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