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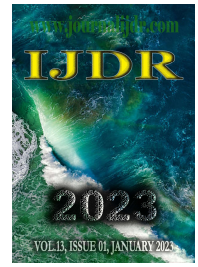
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## NOSOLOGICAL CHARACTERISTICS OF PATIENTS WITH LOW BACK PAIN SUBMITTED TO PHYSIOTHERAPEUTIC TREATMENT: DOCUMENTARY STUDY

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### ABSTRACT

Musculoskeletal and uncomfortable disorder between the costal margin and the lower gluteal fold, and may or may not radiate to the leg. To evaluate the nosological profile from the medical records of patients with low back pain submitted to physiotherapeutic intervention. Documentary study, approved under no. 3,293,204. With medical records of patients with a clinical diagnosis of nonspecific low back pain or low back pain in physiotherapy treatment. The researchers divided into pairs to select the medical records, and performed data analysis using descriptive statistics. At the end of the research, a total of n=30 (100%) eligible medical records was found, the gender variable was equally distributed, 31 to 40 years (08;27%) with higher number, 26.1 (87%) do not practice physical activity, 8 (26.6%) are smokers, 11 (36.6%) use alcohol, 23 (76.7%) report sleeping well and 20 (66.7%) sleep on mattresses. As for the pain, it was seen. The same percentage is manifested for sex, all from the locality of Iguatu-Ceará, practice physical activity regularly, do not smoke, drink alcohol, sleep well and in beds, use medication for low back pain, few have associated SAH and perform several treatment protocols. It was possible to value health promotion in pain patients with chronic low back pain.

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## INTRODUCTION

Chronic low back pain is a musculoskeletal disorder and discomfort between the costal margin and the lower gluteal fold, and may or may not radiate to the leg<sup>1</sup>. Of multifactorial origin, considered as a public health problem, it is the main cause of disability in the world<sup>2</sup>. It also reflects on other injuries, leading to greater demand of the population for health services. In Brazil, the annual prevalence of low back pain exceeds 50% in adult individuals. About 80% of adults will have at least one episode of low back pain at some point in their lives<sup>3</sup>. Studies have pointed to alarming data in southern Brazil in 2021, where 46.5% of women self-reported low back pain<sup>4</sup>. In Ceará, in 2015 and 2016, 32.7% in a sample of (n=103;100%) of young adults reported minimal and disabling pain<sup>6</sup>.

Through alarming epidemiological data, it is necessary that treatment measures be more effective. Initial management should occur with non-pharmacological therapies, focused on exercises, multidisciplinary rehabilitation, acupuncture and stress reduction<sup>7</sup>. Other therapies that may contribute to pain improvement are tai chi, yoga, motor control exercise, progressive relaxation, electromyographic biofeedback, low-intensity laser therapy, operating therapy, cognitive behavioral therapy or spinal manipulation<sup>7</sup>. Another study points out that exercise may be effective for the treatment of chronic low back pain compared to no treatment<sup>8</sup>. Conditions and lifestyle influence low back pain, so it is necessary to promote health. It is therefore indispensable to combat physical inactivity<sup>9</sup>, encourage weight reduction, improve posture during sleep, improve posture, align the pelvis and decompress the tibial nerve. Risk situations reduce the damage of involvement of the

sindromic picture and practices and lifestyle attitudes contrary to risks can promote a good health condition. Furthermore, this study aimed to evaluate the nosological profile from the medical records of patients with low back pain submitted to physiotherapeutic intervention.

## METHODS

This is a retrospective and documentary study, approved under no. 3,293,204, through the ethics committee of the UNILEÃO University Center. Developed in a specialized care service in physical therapy, this research had as sample medical records of patients with clinical diagnosis of nonspecific low back pain or low back pain in physiotherapy treatment during the period from July 2017 to July 2018. To recruit the medical records included in this study, the following criteria were adopted: age between 18 and 59 years, absence of pre-existing disease in the column described in the medical records, complete and legible data and patients who received care during the period from July 2017 to July 2018. There was no exclusion from the selected medical records. The variables studied by the medical records were: social profile (age, gender, locality), lifestyle/habit of life (physical activity - yes or no; smoker - ex-smoker and non-smoker; alcohol intake or not; sleep quality - sleep well or not, sleep in bed, hammock or others), self-declared health condition (use or not of medication, comorbidity and weight (kg)); pain, pain site and conduct of therapeutic treatment. The researchers divided into pairs to select the medical records and followed the order: choice of year, then in months (in this case every three months). Thus, the researchers selected medical records of patients with nonspecific low back pain. After this selection, other pairs of researchers performed the reading and interpretation of the medical records and then transcribed the information selected for a spreadsheet in Excel, and performed the analysis of the data through descriptive statistics.

## FINDINGS

At the end of the study, a total of  $n=30$  (100%) eligible medical records were found, the distribution was from 15 to 83 years, and age was divided into categories: 15 to 28 years ( $n=06;20\%$ ); 31 to 40 years ( $08;27\%$ ); 43 to 51 years ( $06;20\%$ ); 52 to 66 ( $07.23\%$ ); 67 to 83 ( $03;10\%$ ). Regarding gender, the data were also seen ( $n=15;50\%$ ) for each. The totality ( $n=30;100\%$ ) was from the South Center region of Ceará. Regarding lifestyle/lifestyle, it was seen that 26.1 (87%) do not practice physical activity, 8 (26.6%) are smokers, 11 (36.6%) use alcoholic beverages, 23 (76.7%) report sleeping well and 20 (66.7%) sleep on a mattress. In the health condition, it was seen that for the use of medication a higher percentage was found for those who use some drug 21.9 (73.3%). Regarding associated diseases or comorbidities, the highest percentage ( $n=6;20\%$ ) presented hypertension only. Another variable investigated about the health condition refers to body weight in which the most expressive amount was for 10 participants, with  $70 \pm 77$  kg. Initially, the diagnosis of these patients was investigated, realizing that the herniated disc appears with higher quantity, as shown in the following table:

**Table 1. Data from the medical records of patients with low back pain who reported the clinical diagnosis in the therapeutic evaluation - Iguatu/Ceará, 2018**

Diseases	n	%
Herniated Disc	13	43.3%
Lumbar scoliosis	4	13.3%
Disc Bulging	3	10.0%
Column arthrosis	2	6.7%
Osteoarthritis	2	6.7%
Sacroileitis	1	3.3%
Chronic cervical and lumbar pain	1	3.3%
Nonspecific low back pain	1	3.3%
Bilateral coxarthrosis/Protusão discal	1	3.3%
Fadiga Muscular	1	3.3%
	1	3.3%

Regarding pain, it was found in the medical records that the total of 30 (100%) had low back pain. Associated with this algia, other parts of the body were cited, such as:

**Table 2. Discrimination of body region of pain associated with pain in the lumbar spine. Iguatu/Ceará, 2018**

Region of Pain	n	%
Hip	6	20%
Legs and Feet	2	7%
Cervical Spine	3	10%
Sacral Region	1	3%
Joints (all)	1	3%
Shoulder	2	7%
Dorsal Column	15	50%

Já na tabela que descreve o tratamento fisioterapêutico, viu-se que o método Pilates esteve em maior destaque, como também um número significativo de terapia manual:

**Tabela 3. Descrição das condutas de tratamento fisioterapêutico – Iguatu/Ceará, 2018**

Treatment	n	%
Chiropractic	4	14%
Manual Therapy + Electrotherapy	2	7%
Pilates	11	37%
Manual therapy	7	23%
Laser	1	3%
Interferential current	3	10%
Aquatic physiotherapy	1	3%
Kinesiotherapy	1	3%

## DISCUSSION

It is understood that there are important and distinct variables to characterize low back pain. Those who describe the socioeconomic profile may help in the search for associations on a larger or smaller scale for this pain condition. Therefore, the authors of this study highlight the importance of verifying these questions and investigating what impacts they have on the state of disease and health of patients with chronic low back pain. According to this thought, a study<sup>10</sup> states that the evidence of nosological profile linked to the psychological aspect produces little evidence in the conduction of interventions that are more effective to solve a low back pain condition. For the social profile, it is known that age, gender and geographic location, among others, alone are not determinant variables for the involvement of a picture of pain in the lumbar spine. Issues related to these should be the objective of studies to associate the relationship as a predisposition to the framework. In this study, age presented a varied distribution, from 18 to 83, with the highest percentage for those between 31 and 40 years (27%). This statement is in agreement with another epidemiological study<sup>11</sup> that states that adults are the most prevalent population for low back pain. It may be thought that at this stage low back pain is more present, because the years spent in harmful habits/lifestyle, among others, are among the most harmful. In this example, we can mention body weight, inadequate posture at work, position during sleep and joint wear.

It is known that low back pain increases as age increases and consequently its incidence also manifests advances, and can start at any age. According to the definition of the U.S. National Health and Nutrition Survey, the highest prevalence belongs to the age group 45 to 54 years<sup>12</sup>. Different from the age found in this study, the researchers find that habits/lifestyle of people from developed countries are different from Brazil, especially in social and work issues. Regarding gender, in this study, the data were equally distributed among the proportions, being (50%) for each. However, the risk conditions are different for the sexes, because in the case of women there is a higher chance of pain of low back pain given the physical, psychological or cultural conditions. Regarding physical

risks in women, it can be mentioned the performance of domestic activities, which in some cases are related to weight lifting, poor posture and endocrine factors such as hormonal changes. In general, the vulnerability of involvement to chronic diseases is linked to the female sex<sup>13</sup>. A positive habit/lifestyle seen in the medical records analyzed for this study was related to the variable "sleep well" (n=27;76.7%). However, a distinct data warns that people with chronic low back pain have sleep-related problems<sup>14</sup>.

Pain, medication use and different clinical conditions are examples of risk factors that can interfere in the quality and quantity of sleep<sup>15</sup>. Therefore, the authors of this research believe that the fact of the use of medication associated with the therapeutic treatment may have caused a status of sleep well in the patients of this study. It is expected, in studies that address the theme pain, that at some point the findings mention which medications patients recommend to use or manifest pharmacotherapy. This treatment is among the conducts present in the protocols of the country's offices. This study pointed out that 73.3% used some medication, since all medical records indicated pain in the lumbar spine of patients. Clinical guidelines indicate that drug management, in the case of the acute phase, is the use of nonsteroidal anti-inflammatory drugs (IINEs) and weak opioids for short periods. In a chronic period, the use of NSAID and antidepressants<sup>16</sup> should occur in the management of low back pain. Among the chronic algias that most affect people are those of musculoskeletal nature. In this study, it was identified that among the parts of the body that may be in pain, the dorsal column is also present, representing 50% of the total. However, another study<sup>17</sup> showed different data, presenting prevalence of musculoskeletal pain in the shoulder and neck regions, and the segments were associated with the pain of the lumbar. Regarding pain that affects other regions of the body associated with low back pain, its occurrence is probably due to the misalignment of the muscle chains involved. Therefore, the importance of identifying the cause for safer and more effective conduct interventions and practices. In the current literature, the practice of regular physical exercise as a form of musculoskeletal pain control has been encouraged. One study obtained positive results when it was associated with chronic low back pain and increased time and frequency of practice.

## CONCLUSION

At the end of this research, it can be considered that the nosological profile of patients who were undergoing a physiotherapeutic intervention with low back pain were adults. The same percentage for sex is manifested, all from the locality of Iguatu-Ceará, practice physical activity regularly, do not smoke, drink alcohol, sleep well and in beds, use medication for low back pain, few have associated SAH and perform several treatment protocols. It was possible to value health promotion in pain patients with chronic low back pain. It was found that only knowing which conducts are performed is not enough to know whether patients were successful or not in treatment. Similarly, it was noticed that some conducts were mentioned and are on the sidelines of scientific evidence. Therefore, this article emphasizes the importance of associating clinical care practice with scientific literature.

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