

Background: As with fibromyalgia, several musculoskeletal disorders are characterized by chronic pain, raising a clinical question – do the instruments used to assess fibromyalgia symptoms according to ACR criteria (ACR criteria) generate similar scores in other chronic musculoskeletal pain?

Objectives: To compare the pain, functionality, and symptoms between fibromyalgia and other chronic musculoskeletal pain using the Widespread Pain Index (WPI) and the Symptom Severity Scale (SSS).

Methods: This is a cross-sectional study. Participants over 18 years old were included if they presented the report of chronic musculoskeletal pain (≥ 3 months), and after that, they were divided into two groups (fibromyalgia and chronic pain). They answered the Fibromyalgia Impact Questionnaire-Revised (FIQ-R), Brief Pain Inventory (BPI), Numerical Pain Rating Scale (NPRS) for pain and fatigue, WPI, and SSS.

Results: A total of 166 participants were included in this study into two independent groups (chronic pain, $n=83$; fibromyalgia, $n=83$). We observed significant differences ($p < 0.05$) and large effect sizes (Cohen's $d, \geq 0.7$) in clinical outcomes comparisons between groups (i.e., widespread pain, symptom severity, present pain at rest, and after movement, fatigue; pain severity, and impact; function, global impact, and fibromyalgia symptoms).

Conclusion: Fibromyalgia patients (2016 ACR criteria) compared to other chronic musculoskeletal pain patients have higher levels of pain (at rest or after movement) and fatigue, greater impairment in both functionality and global impact, and worse symptoms.

Implications: WPI and SSS instruments should be used exclusively to assess fibromyalgia symptoms.

Keywords: Chronic Pain, Rheumatology, Primary Health Care

Conflict of interest: The authors declare no conflict of interest.

Acknowledgment: CAPES, CNPq, and UFSCar

Ethics committee approval: CEP-UFSCar, report number 4.193.940.

<https://doi.org/10.1016/j.bjpt.2024.100635>

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A BIOMECHANICAL ANALYSIS OF TURNING DURING GAIT IN INDIVIDUALS WITH PARKINSON'S DISEASE

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Background: Turning during gait is a complex component of locomotor capacity and can prove challenging to individuals with neurodegenerative diseases during their day-to-day lives. In Parkinson's disease (PD), motor dysfunction can be exacerbated in conditions that require interruptions in gait or change in direction. These changes in gait are among the leading factors contributing to falls and can occur at different stages and in different clinical subtypes of the disease, compromising functionality and, consequently, social participation.

Objectives: To describe and compare biomechanical variables during the task of turning while walking in individuals with Parkinson's disease and its different clinical subtypes.

Methods: A cross-sectional study approved composed of 43 individuals with idiopathic Parkinson's disease, divided into groups according to their clinical subtype: akineto-rigid, tremor-dominant, and mixed. Motor impairment was evaluated using the Unified Parkinson's Disease Rating Scale, and the cognitive status of individuals was assessed using the Mini-Mental State Examination. The

biomechanical parameters of gait (number of steps, step length, cadence, as well as variables associated with the displacement of the center of mass, such as amplitude, velocity, and turning radius) were analyzed while turning during gait, in a kinematics laboratory. Statistical analysis included a comparison between Parkinson's disease subtypes (one-way ANOVA and Kruskal-Wallis) and a correlation between biomechanical parameters (Pearson and Spearman), with the significance set at 5%.

Results: There were no statistically significant differences in the comparison between akineto-rigid, tremor-dominant, and the mixed subtypes. The correlation analysis highlighted a significant correlation between the anticipatory step length and the number of steps ($r = -0.418$; $p = 0.005$), step length while turning ($r = 0.805$; $p < 0.001$), step length after turning ($r = 0.644$; $p < 0.001$), the mean velocity ($r = 0.830$; $p < 0.001$), the mean velocity while turning ($r = 0.755$; $p < 0.001$), and the maximum velocity ($\rho = 0.835$; $p < 0.001$).

Conclusion: In people with Parkinson's disease, the greater the length of the anticipatory step, the greater the step length required to turn and the greater the step length taken after turning. In addition, the greater the speed, the greater the step length amplitude, and the greater the radius of the turn, resulting in fewer steps in order to complete the task.

Implications: This research demonstrates that individuals with Parkinson's disease face difficulties when turning during gait. The results suggest that these difficulties primarily occur during the anticipatory phase of the turn, which affects the entire task. Therefore, these findings can potentially be used to guide rehabilitation interventions in individuals with Parkinson's disease, such as targeting the anticipatory phase of turning through gait training, visual and auditory cues, rhythmic cues, verbal cues, environmental enrichment, and progressive activities with increasing complexity. These interventions are likely to be beneficial in improving turning and gait performance in the day-to-day lives of individuals with Parkinson's disease.

Keywords: Parkinson's disease, Gait, Kinematics

Conflict of interest: The authors declare no conflict of interest.

Acknowledgments: The authors thank the financial support provided by Coordination for the Improvement of Higher Education Personnel - Brazil (CAPES) - [Finance Code 001].

Ethics committee approval: State University of Londrina (UEL), n° 5.457.890.

<https://doi.org/10.1016/j.bjpt.2024.100636>

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DEPRESSION, DEPRESSIVE SYMPTOMS AND USE OF ANTIDEPRESSANTS IN HEALTH PROFESSIONALS DURING THE COVID-19 PANDEMIC - CROSS-SECTIONAL STUDY

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Background: Depression is a health problem that affects the whole of society, having worsened in the context of the Covid-19 pandemic. There is evidence that healthcare workers are more likely to develop depression, which can compromise productivity at work and quality of life.

Objectives: To describe the prevalence of depression, depressive symptoms, and use of antidepressant medications in healthcare workers during the COVID-19 pandemic.

Methods: 125 healthcare workers from different occupations who are part of the HEROES cohort were evaluated. Diagnosis of depression and use of antidepressant medication were obtained by self-report. Depression symptoms were assessed using the Beck Depression Inventory (BDI), consisting of 21 items that include symptoms and attitudes. Age, sex, and occupation were extracted from the sociodemographic questionnaire. Data analysis was performed descriptively and using the Chi-square test in the SPSS program with a significance level of 5%.

Results: The sample consisted of women (83%) and hospital workers (49%). About 45% had symptoms of depression on the BDI; 18% use antidepressant medication and 6% reported a medical diagnosis of depression. Among the symptoms of depression, the most prevalent were fatigue (80%), insomnia (68%) and dissatisfaction (66%). The least prevalent symptoms were weight loss (4%), suicidal ideation (9%) and punishment (19%). There was an association between medical diagnosis and the use of medication for depression ($P<0.01$). There was no association between depression symptoms and medical diagnosis ($P=0.19$) and medication use ($P=0.21$).

Conclusion: Many healthcare workers reported depressive symptoms and use of antidepressant medication; however, the proportion of workers with a medical diagnosis was much lower.

Implications: The BDI was sensitive to identifying depressive symptoms and can be used for screening and designing preventive actions. Many healthcare workers use antidepressant medications without a medical diagnosis. Thus, additional investigations are necessary to understand this finding.

Keywords: Health Promotion, Disease Prevention, Occupational Health

Conflict of interest: The authors declare no conflict of interest.

Acknowledgment: São Paulo Research Foundation (FAPESP Proc N 2020/10098-1); National Council for Scientific and Technological Development (CNPq).

Ethics committee approval: Research Ethics Committee of the Federal University of São Carlos, Brazil (certificate number: 39705320.9.0000.5504)

<https://doi.org/10.1016/j.bjpt.2024.100637>

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PREVALENCE OF FALLS IN THE OLDER ADULT: AN INTRINSIC FACTOR OF DIABETES AND ARTERIAL HYPERTENSION

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Background: Falls are the most common cause of injuries in the elderly and have a higher prevalence with advancing age in addition to intrinsic factors such as female gender and comorbidities, extrinsic and behavioral. However, there is a need to understand how much some factors can potentiate these falls.

Objectives: To verify the influence of intrinsic risk factors such as diabetes and high blood pressure on falls in elderly Brazilians.

Methods: A cohort study with retrospective and prospective analysis using an online questionnaire and one of the arms of a larger

study. Individuals aged 60 years or over, of both sexes, who had access to the online questionnaire and agreed to participate in the research, by signing "yes" in the digital Free and Informed Consent Form (ICF) were included. Duplicates in the answers to the online questionnaire were excluded, as well as questions that were not related to intrinsic factors. The elderly were invited through communication applications, social networks, and by e-mail to people known to the researchers, and a link was sent to answer the questionnaire, which took 30 minutes to complete. A Shapiro-Wilk distribution test was performed, which found that the data had a normal distribution. Thus, median, and interquartile ranges were used for continuous variables, and frequency (number and percentage) for nominal variables. The chi-square test was performed to analyze the association between comorbidities (hypertension and diabetes) and falls, using the JASP software, adopting a significance level of $p<0.05$.

Results: A total of 402 elderly participants in the research with an average age of (69.7 ± 9.8) were collected, 71.15% female and 28.85% male. Related to intrinsic factors, 20.4% reported having diabetes, with 41.5% having fallen in the last 12 months, and 13.4% having fallen due to dizziness, with a prevalence of falls in the afternoon. As for arterial hypertension, we had a sample of 42.8% of the elderly, with 41.8% falling in the last year, and 7.5% falling due to dizziness, with the highest rate of falls occurring in the afternoon. When we relate diabetes and hypertension, we had a sample of 14.9%: 46.7% had a fall in the last 12 months, and 11.7% fell due to dizziness, with a prevalence of falls in the afternoon.

Conclusion: According to the results, diabetes and hypertension had the greatest significance when related only to falls. Regarding the symptoms dizziness was not significant between diabetes and hypertension. The afternoon period was found for the occurrence of falls.

Implications: With the results of this study, we can better identify where the greatest risk of falls is for the elderly, improving guidance and increasing the conditions to prevent and try to inhibit these falls as much as possible.

Keywords: Falls, Arterial hypertension, Diabetes

Conflict of interest: The authors declare no conflict of interest.

Acknowledgment: Thanks to Prof. Erika for giving me this opportunity of knowledge, to God and all my family for their support.

Ethics committee approval: Research Ethics Committee of the Faculty of Medicine of the University of São Paulo (4.488.029). 4.488.029

<https://doi.org/10.1016/j.bjpt.2024.100638>

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STUDY PROTOCOL: EVALUATING THE EFFECTIVENESS OF CEREBELLO-SPINAL STIMULATION IN INDIVIDUALS WITH ACS

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Background: Spinocerebellar ataxias (SCA) comprise a set of progressive degenerative diseases, still without available pharmacological treatment, that cause gait and balance disorders. Two recent clinical trials demonstrated that the use of transcranial direct current stimulation (tDCS) cerebellar spinal cord improved performance on tests of upper limb coordination, severity of ataxia and gait (2 weeks of stimulation), and motor scores (including balance), cognitive and quality of life scores (4 non-consecutive weeks) in subjects with degenerative ataxias, including ACS.