

Results: The study included 27 participants, mostly women (66.7%), mean age of 59,78 years (± 9.81) and a mean baseline PPT of 4.2Kgf (± 1.40). The two-way ANOVA analysis indicated an increase in the PPT in the Exercise group, compared to the Education group, in the interaction between the group and time factors ($P < 0.05$). The analysis indicated no difference between the groups at baseline ($P > 0.05$).

Conclusion: The graded exercise was effective in reducing hyperalgesia in patients with KOA. Future research about the effects of graded exercise in other pain processing measures and with a larger number of participants must be done to confirm this preliminary conclusion.

Implications: Graded exercise is an effective tool for reducing hyperalgesia in people with KOA and can be used to reduce pain sensitization in this population.

Keywords: Knee osteoarthritis, Hyperalgesia, Exercise

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

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Ethics committee approval: Federal University of São Carlos (UFS-Car) CAAE 52917921.4.0000.5504.

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COLOPROCTOLOGICAL SYMPTOMS IN PARALYMPIC SPORTS ATHLETES: A PILOT CROSS-SECTIONAL PREVALENCE STUDY IN THE NORTH REGION

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Background: Paralympic sports is a sports practice adapted for people with disabilities, who, due to exposure to the overload generated by training and competitions, become susceptible to health problems in sports, and the pelvic floor may have its functionality compromised, resulting in various dysfunctions such as coloproctological, characterized by changes in anorectal physiology, such as anal incontinence and constipation symptoms.

Objectives: To verify the prevalence of pelvic floor dysfunctions in athletes of paralympic sports.

Methods: Observational epidemiological research of a quantitative and descriptive cross-sectional nature, carried out with athletes of paralympic sports of any modality; data collection was by electronic forms using the Google Forms tool, the form was divided into sections: Presentation of the research in video along with Informed Consent Form (ICF), sociodemographic data, obstetric data, use of ostomies and validated questionnaires (Cleveland Clinic Florida Fecal Incontinence Score (CCFFIS), Bristol Scale and Rome III Criterion); initially with a pilot survey, initially tested in the North Region, in Belém do Pará, locality that resides its researchers, being part of a national research. Data were transferred from the platform to Excel 2019, tabulated, and a descriptive analysis of coloproctological symptoms was performed.

Results: The pilot research had 7 volunteers of both sexes (3 female participants and 4 male participants), aged 37 ± 9.18 years, self-declared black, heterosexual, all of them people with physical disabilities, from 5 different modalities (sitting volleyball, judo, basketball, fencing, and wheelchair dancing), residents of the Metropolitan Region of Belém. Regarding obstetric history, of the 3 participants, only one reported a pregnancy, which evolved into abortion. None of the participants reported the presence of ostomies. The CCFFIS indicated that none of the participants had solid

stool losses, however 2 participants indicated liquid stool losses, 4 lost gas/fluids, and 2 used linings to avoid soiling their clothes; furthermore, only 1 indicated a change in lifestyle due to involuntary loss. Regarding the Rome Criterion III, 3 of the participants reported the sensation of incomplete evacuation, besides the evacuation effort reported by 2 participants, as well as the sensation of blocking the exit of stools and hardened stools, and 1 participant reported the use of medication to evacuate and manual maneuvers to get rid of stools. Regarding the Bristol Scale, 4 reported stools with a degree of dryness, 2 with the normality pattern, and 1 reported softer stool.

Conclusion: It is noteworthy that the data presented, even if with a reduced n, indicate the need to describe these symptoms in this population, trace their profile and epidemiological data, and stimulate future interventions that minimize the severity and prevent these dysfunctions.

Implications: There is a large number of paralympic high-performance athletes from the North Region, making this research of great stimulus for prevention and intervention actions initially in loco.

Keywords: Pelvic Floor Dysfunction, Parathletes, Sports for Persons with Disabilities

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

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CARDIOVASCULAR HEALTH AND QUALITY OF LIFE OF UNIVERSITY WORKERS

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Background: Cardiovascular diseases are the leading causes of death in the world and the American Heart Association (AHA) has established seven metrics that indicate cardiovascular health (CVS). A poor CVS affects health-related quality of life (HRQoL). The university environment presents different activities and may require maintaining postures (sitting or standing) for long periods (secretary and professors) or repetitive effort (cleaning workers).

Objectives: To evaluate the CVH and to associate it with the HRQoL of workers in a university environment.

Methods: This is a cross-sectional observational study carried out with workers at a higher education institution. The study included 121 workers aged between 18 and 59 years who had been effective for at least six months. Those with a clinical diagnosis of cardiovascular disease or those who did not complete all stages of the study were excluded. The sample was recruited for convenience. CVH was assessed following the AHA recommendations using seven metrics, four of which were behavioral (diet, level of physical activity, smoking and body mass index) and three were biological (fasting glucose, total cholesterol and systemic blood pressure) and classified as poor, intermediate and ideal. After computing the metrics a score is generated. To assess the level of physical activity and diet, the International Physical Activity Questionnaire and the Mediterranean Diet Questionnaire were used, respectively. The Short Form – 36 (SF-36) was used to assess HRQoL and the physical (PC) and mental (MC) components were computed. Data normality was tested using

the Kolmogorov-Smirnov test. Comparison between CVH groups was performed using the one-way ANOVA test with Tukey's post hoc (symmetrical distribution) and the Kruskal-Wallis test for independent samples with Dunn's post hoc. Multiple linear regression verified the relationship between the CVH score and the HRQoL domains, with data adjusted for sex and age. The software used for analysis was the Statistical Package for Social Science (SPSS) and the value considered for p was <0.05 .

Results: Of the workers, 25.6% had poor CVH, 27.2% intermediate and 47.1% ideal. Workers with poor CVH [46.26 (6.98)] had lower PC HRQoL values when compared to the intermediate [50.34 (6.53), $p=0.036$] and ideal group [50.07 (6.21), $p=0.002$]. There was also a positive relationship between the CVH score and the PC [$\beta=0.068$ (95%CI= 0.011 to 0.126), $p=0.020$] of HRQoL.

Conclusion: Half of the workers had between poor and intermediate CVH. Those with poor CVH had worse HRQoL on the PC. There was a direct relationship between the CVH score and HRQoL PC.

Implications: The use of metrics can be a tool for screening CVH, easy collection and good cost-effectiveness. It is also an opportunity to show workers the importance of physical exercise and proper nutrition.

Keywords: Cardiovascular health, Quality of life, Worker's health

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

Acknowledgment: We want to thank participating university staff for sharing their valuable time with us.

Ethics committee approval: The study was approved by the Ethics and Research Committee of Universidade Evangélica de Goiás under number 4.512.382/2021.

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COMPARTMENTAL THORACOABDOMINAL VOLUME DISTRIBUTION IN PATIENTS WITH PARKINSON'S DISEASE IN THE OFF STATE OF LEVODOPA USE

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Background: Parkinson's disease (PD) is a neurodegenerative disorder resulting from the death of motor neurons in the substantia nigra and is associated with reduced lung volumes.

Objectives: To analyze the compartmental distribution of thoracoabdominal volumes in PD patients evaluated by optoelectronic plethysmography (OEP) and describe the respiratory function of the sample.

Methods: This is a cross-sectional study in which 16 patients (12 men and 4 women), between 50 and 75 years old, classified in stages 2 to 3 of the Hoehn and Yahr Scale, were evaluated by OEP and spirometry. Data collection was performed at the Cardiopulmonary Physical Therapy Laboratory (LACAP) of UFPE.

Results: In the analysis of the distribution of thoracoabdominal volumes, there was a predominance of abdominal tidal volume compared to the other compartments (VCab% = 0.34 > VCrcp% 0.13 > VCra% 0.09, with $p < 0.001$). Patients maintained tidal volume (Vt), minute ventilation (Ve), and respiratory rate (RR) within the normal range (Vt 0.54 ± 0.22 L; Ve 9.198 ± 3.40 L/min; RR 18.25 ± 5.73), and forced spirometry yielded an FEV1 (% predicted) of 0.71 ± 0.17 L and FVC (% predicted) of 0.69 ± 0.58 L.

Conclusion: The results suggest that in the distribution of thoracoabdominal volumes, there was an abdominal predominance

compared to the others. In the respiratory pattern and spirometric variables, patients presented normal ventilation with a predominance of abdominal breathing pattern, despite the presence of longer inspiratory time. Despite the condition of Parkinson's disease, patients without medication therapy and normal respiratory function showed greater ventilation in the abdominal compartment compared to the thoracic compartments.

Implications: Despite normal respiratory function, future studies should elucidate the reasons for the disadvantage of thoracic impairments compared to abdominal impairments in the breathing pattern of these patients. An alternative would be to compare this assessment of the respiratory pattern in patients with medication use.

Keywords: Parkinson Disease, Plethysmography, Physical Therapy

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

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THE INFLUENCE OF FUNCTIONAL CAPACITIES ON THE PARTICIPATION OF ADOLESCENTS WITH CEREBRAL PALSY: PRELIMINARY DATA

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Background: The motor dysfunctions that result in the incapacity and participation limitations in individuals with Cerebral Palsy (CP) are described as adjacent alterations from their pathology. The characterization of daily activities and participation is still little explored and studied in the literature to assist practice. We need to know the characteristics of the participation of adolescents with CP to guide a more assertive clinical practice.

Objectives: To explore associations between the functional level and the frequency of social participation of adolescents with CP.

Methods: Observational cross-sectional study. Adolescents diagnosed with CP, between 12 and 17 years old, without associated cognitive or behavioral changes were assessed. The adolescents were classified by the Brazilian Economic classification criteria ABEP-2022, and regarding the frequency of participation at home, school and community by the Participation scale and environment Measure for Children and Youth (PEM-CY) and the functional levels classified by Gross Motor Function Classification System (GMFCS), Manual Ability Classification System (MACS), Communication Function Classification System (CFCFS), Eating and Drinking Ability Classification System (EDACS) and Vision Function Classification System (VFCS). Data were analyzed descriptively and through Spearman correlations, using the Statistical Package for Social Science.

Results: 10 adolescents were evaluated, 5 boys and 5 girls, with a mean age of $13.90 (\pm 1.79)$. Regarding socioeconomic status, measured by ABEP, 3 (30%) of the adolescents were classified as B2, 3 (30%) as C1 and 4 (40%) as C2. Classifications of functional levels were: GMFCS level I = 4 (40%), II = 1 (10%), IV = 3 (30%) and V = 2 (20%); MACS level I = 4 (40%), II = 3 (30%) and IV = 3 (30%); CFCFS level I = 2 (20%), II = 3 (30%), III = 4 (40%) and IV = 1 (10%); EDACS level I = 4