

most experienced evaluators, followed by those with more experience. moderate experience, while the inexperienced preferred the QEC and the REBA. The SI is the method considered the most difficult by all evaluators in pre-training. After training, the evaluators somewhat maintained their trends towards the easier pre-training methods, although they improved their impression of the SI, previously considered more difficult.

**Conclusion:** The conclusion of this study is that the evaluators do not agree with each other. The training of evaluators to use explicit observational methods interferes little with the identification of exposure to biomechanical risk in the occupational environment and has not shown an effect on changing the evaluation of occupational exposure for inexperienced evaluators, with moderate experience and experts.

**Implications:** By evaluating the need and influence of training for the use of observational methods of analysis of biomechanical exposure, we contribute to improving them by knowing the results of measurement properties.

**Keywords:** Ergonomics, Occupational Health, Risk assessment

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

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371

## SOCIODEMOGRAPHIC AND UROGYNECOLOGICAL PROFILE OF WOMEN ASSISTED IN THE PHYSIOTHERAPY SERVICE AT THE FEDERAL UNIVERSITY OF PARÁ

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**Background:** Urogynecological dysfunctions represent deficits in the functionality of the pelvic floor muscles (PFMs). Among these comorbidities, urinary incontinence is the involuntary loss of urine and affects about 50% of women at some point in life, with increasing incidence in advanced age in women under 65 years old, stress urinary incontinence is a little more common, while women over 65 are more likely to have mixed incontinence. Deficient or inadequate function of PFMs is one of the etiological factors for urinary incontinence, directly impacting the quality of life and sexual quality in women. Pelvic organ prolapse (POP) is defined as a protrusion or herniation of the pelvic organs through the vaginal walls and pelvic floor. It affects women between 20-29 years old about 6%, while women aged 50-59 years old represent 31% with POP and 50% of women with POP are 80 years old or older.

**Objectives:** To describe the profile of patients assisted by physiotherapy in women's health in the proposed unit and to identify the main pathologies that most affect this population.

**Methods:** This is a cross-sectional study. All participants signed the Informed Consent Form (TCLE). The sample consisted of women with urogynecological disorders referred by doctors from hospitals and units of the Unified Health System (SUS) or sought the physiotherapy service at CASMUC, in the period 2022-2023.

**Results:** A total of 32 patients were admitted and treated at the outpatient clinic during the period. As for the sociodemographic profile, there was a higher prevalence of elderly women (60 years old or more) (31.3%), single (37.5%) with housewife occupation (28.1%). It appears that in the sample most of the patients went through 2 or 4 pregnancies (25% each). Therefore, this multiparity leads them to a greater risk of urogynecological dysfunctions due to the weakening of the MAP. Regarding urogynecological disorders, based on medical diagnosis, 21.9% had stress urinary incontinence, 18.8% mixed urinary incontinence, 12.5% pelvic organ prolapse, and 15.6% mixed urinary incontinence associated with pelvic organ prolapse.

**Conclusion and Implications:** This study allowed us to trace the sociodemographic and urogynecological profile of patients undergoing physiotherapeutic care at CASMUC, like others reported in the literature, being elderly women, housewives, multiparous with a predominance of stress urinary incontinence and with a medium level of education.

**Keywords:** Physiotherapy, Women's Health, Profile

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**Acknowledgment:** Not applicable.

**Ethics committee approval:** Federal University of Pará (UFPA) under Opinion Number: 4,393,793

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372

## EFFECTS OF GRADED EXERCISE ON HYPERALGESIA IN PATIENTS WITH KNEE OSTEOARTHRITIS. PRELIMINARY RESULTS

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**Background:** People with knee osteoarthritis (KOA) usually present pain sensitization, which impacts the experience of pain and predicts reduced quality of life and low responsiveness to treatments. A graded exercise has been proposed for the treatment of KOA. In this proposal, the practice of physical exercise should be within the individual possibilities, with the potential to remove the fear of exercising and thus create an adequate physical activity routine.

**Objectives:** This study aimed to investigate the effects of graded exercise on hyperalgesia in people with KOA compared to an educational control group.

**Methods:** Participants with primary symptoms of pain ( $\geq 4$  on a 0-10 scale) and clinical diagnosis of KOA were recruited. After explanations about the procedures, they signed a consent form and were assessed at baseline and after the intervention. Anthropometric data and pressure pain threshold (PPT) in the center patella at the more symptomatic knee were collected. Three measurements were performed with an algometer (ITO-2020, Japan), with the 30s intervals between measurements. The mean of them was used for statistical analysis. The participants were randomly assigned to 2 groups for the 14 weeks of intervention: The exercise group and the Education group. The Exercise group performed exercises 3 times a week and had individualized progression of the duration and intensity of the exercise. The session duration initially was of 15-25 minutes and in the end of the intervention of 55 minutes. The participants of exercise group were contacted weekly for evaluation of progress and referral of exercise videos. The educational group also was contacted weekly to clarify doubts. Both groups received educational materials and participated in lectures with health professionals. Two-way ANOVA SPSS (Statistical Package for the Social Science 26.0) was used to compare differences between groups using group-versus-time interaction analysis (significance of 5%).

**Results:** The study included 27 participants, mostly women (66.7%), mean age of 59,78 years ( $\pm 9.81$ ) and a mean baseline PPT of 4.2Kgf ( $\pm 1.40$ ). 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

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373

### 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  $37 \pm 9.18$  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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374

### 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