

Background: Diabetes mellitus (DM) is a chronic disease characterized by hyperglycemia due to changes in the hormone insulin. The most common type is type 2 (DM2), which has insulin resistance as one of its manifestations. Several metabolic changes affect these patients, including endothelial dysfunction and vascular and neurological disorders, as well as impact on quality of life, mental health, and sleep. Pharmacological therapy is one of the main interventions, associated with adaptations in the diet and physical activity routine. However, patients with DM2 do not adhere to treatment for various reasons and the disease continues its progression, burdening the entire health system and impacting the lives of this individual and his entire community. Photobiomodulation therapy (PBMT) appears as an alternative because it acts on energy metabolism, the side effects are negligible, and its non-invasive application can favor adherence. Several scientific studies have shown its effectiveness in glycemic control in an experimental model and the first studies with humans are beginning to emerge to consolidate this possibility.

Objectives: To verify the effects of PBMT by infrared LED on blood glucose levels and consequent impact on the biopsychosocial context of patients with DM2. Therefore, initial and final laboratory tests of fasting blood glucose, glycated hemoglobin, HOMA-IR index and application of quality of life and sleep questionnaires, perception of pain, sensitivity and mental health will be carried out.

Methods: Randomized, double-blind controlled trial with sham group. Sample space of 36 volunteers diagnosed with DM2, distributed in: sham (irradiation with zero parameters), panel (irradiation by the Joovv Elite system of the whole body) and blanket (irradiation with a flexible blanket prototype applied to the abdomen and bilaterally to the quadriceps femoris, hamstrings, triceps surae, arm and forearm). The volunteers underwent initial and final assessments consisting of laboratory tests (fasting blood glucose, glycated hemoglobin and HOMA-IR index) and questionnaires (Diabetes Quality of Life-Brazil-8, Neuropathic Pain Questionnaire 4, painDETECT, Sleep Quality Index of Pittsburgh, Depression, Anxiety and Stress Scale). Participants will be irradiated (active or not) every other day within a 12-day period.

Results, Conclusion, and Implications: As this is a study protocol, there are no results, conclusions, and implications to be presented.

Keywords: Photobiomodulation, Type 2 diabetes mellitus, biopsychosocial impact

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

Acknowledgment: To Professor Dr. Guilherme Borges Pereira and MSc. Tatiana de Oliveira Passos de Araújo, from the FisioClinEx Laboratory, Department of Physiological Sciences at UFSCar.

Ethics committee approval: UFSCar ethical committee approval - number 5.833.875

<https://doi.org/10.1016/j.bjpt.2024.100683>

87

PREVALENCE AND ASSOCIATION OF VULVOVAGINAL SYMPTOMS WITH AGE GROUPS IN BRAZILIAN WOMEN: A CROSS-CROSS STUDY

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Background: Several studies have shown that perimenopausal, menopausal and postmenopausal women have a high prevalence of vulvovaginal symptoms, such as itching, burning, pain, irritation,

dryness and vaginal odor. However, knowledge about such symptoms in the younger Brazilian public is scarce.

Objectives: To verify the prevalence of vulvovaginal symptoms and the association of these symptoms with the different age groups of Brazilian women.

Methods: This is a cross-sectional study with a quantitative approach, carried out between October 2021 and August 2022 with Brazilian women aged ≥ 18 years, literate, with internet access and who had an email account, recruited from the disclosure of the search on social networks. The study was developed based on the guidelines of the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) initiative. To obtain the data, the participants answered a questionnaire via Google Forms that contained sociodemographic and health data and the Vulvovaginal Symptoms Questionnaire (VSQ) to screen for vulvovaginal symptoms. Data were analyzed descriptively using the chi-square test to verify the association between vulvovaginal symptoms and age groups using the SPSS program (version 26.0). Age-related data were categorized into 3 groups, 18 to 35 years old ($n=168$), 36 to 50 years old ($n=45$) and 51 to 79 years old ($n=12$) for analysis, adopting a significance level of 5%.

Results: The study included 225 women with a mean age of 28 years (minimum age 18 and maximum age 79 years), who had at least one vulvovaginal symptom according to the VSQ-Br. Regarding vulvovaginal symptoms in general, there was a prevalence of 55.1% behavior, 31.6% burning, 20.4% pain, 28% intercourse, 30.7% dryness, 64% discharge and 28% smell. As for the results by age group, the symptoms were more prevalent among women aged 18 to 35 years (itching 72.4%, burning 69%, pain 78.3%, protection 74.6%, dryness 60.9%, discharge 82, 6% and smell 69.8%). As for the associations between the variables (vulvovaginal symptoms and age groups), there was a significant association between dryness ($p<0.004$) and discharge ($p<0.001$) with the age group variable.

Conclusion: According to the presented results, young women may experience one or more vulvovaginal symptoms. As for the association of variables, there was an association between age and symptoms of discharge and dryness.

Implications: By presenting data by age group, it is possible to understand the prevalence of symptoms in the young public, in addition to directing possible interventions due to the identification of the most prevalent symptoms in this public. However, due to the characteristics of the participants, there is a limitation regarding the analyzes related to the elderly population.

Keywords: Women's Health, Prevalence, Signs and Symptoms

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

Acknowledgment: This study was funded by Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) under process 2019/14666-7.

Ethics committee approval: UFSCar Human Research Ethics Committee (CAAE: 27822120.7.0000.550).

<https://doi.org/10.1016/j.bjpt.2024.100684>

88

NEUROMUSCULAR FUNCTION IN PEOPLE WITH CHRONIC KIDNEY DISEASE ON HEMODIALYSIS INITIATION

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Background: The progression of chronic kidney disease (CKD) to its most advanced stage, which usually requires hemodialysis, causes

metabolic changes that can impact the neuromuscular system of this population. The difficulty of early detection of CKD often leads to late nephrological referral and initiation of hemodialysis on an emergency basis.

Objectives: To assess neuromuscular function in people with CKD starting hemodialysis.

Methods: Cross-sectional study, evaluating the neuromuscular function in people with CKD admitted to an urgent and emergency hospital who started hemodialysis on an emergency basis (CKD group) compared to people without kidney disease (control group). Measures of neuromuscular excitability (chronaxie obtained in the stimulus electrodiagnostic test), peripheral muscle strength (peak strength focused on lower limb isometric dynamometry) and functional capacity (number of repetitions in the 1-minute sit-to-stand test) were used. To compare the results between the groups, Student's t test was used for variables with normal distribution and the Mann-Whitney test for variables with non-normal distribution, adopting a rejection index of the null hypothesis ≤ 0.05 .

Results: Twenty-eight participants, 14 without kidney disease (42 ± 12 years, 5 males and 9 females) and 14 in the CKD group (53 ± 18 years, 9 males and 5 females) were evaluated. The CKD group, compared to controls without kidney disease, showed impairment in neuromuscular excitability (vastus lateralis chronaxie: 654 ± 230 vs 415 ± 190 μ s, $p = 0.008$; tibialis anterior chronaxie: $600 [500 - 1000]$ vs $400 [300 - 400]$ μ s, $p = 0.001$), peripheral muscle strength in all muscles assessed (knee extensors: 12.3 ± 4.6 vs 23.5 ± 9 kgf; knee flexors: 11.3 ± 3.2 vs 17.8 ± 4.3 kgf; dorsiflexors: 8.7 ± 2.8 vs 16.7 ± 4.3 kgf; and plantar flexors: 11.2 ± 2.5 vs 16.6 ± 4.4 kgf, all $p < 0.001$) and in functional capacity (13.8 ± 4.9 vs 36.7 ± 9.1 repetitions, $p < 0.001$).

Conclusion: People with advanced CKD who started hemodialysis on an emergency basis have impaired neuromuscular function, considering neuromuscular excitability, lower limb isometric muscle strength and functional capacity.

Implications: These findings may guide screening and monitoring strategies for neuromuscular deficiencies and rehabilitation planning.

Keywords: Kidney Failure, Chronic, Peripheral Nervous System Diseases, Debilidade Muscular

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

Acknowledgment: To the volunteers participating in this research, for their availability and trust in the work.

Ethics committee approval: Hospital Universitário João de Barros Barreto da Universidade Federal do Pará, approval number 5.254.576.

<https://doi.org/10.1016/j.bjpt.2024.100685>

89

PELVIC FLOOR DISCOMFORT AND GENITAL SELF-IMAGE IN WOMEN ATTENDING PRIMARY HEALTH CARE IN THE MUNICIPALITY OF CRICIÚMA/SC

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Background: There are several factors that lead to pelvic floor discomfort (PAD); these dysfunctions do not directly affect the lives of affected women but end up affecting female genital self-image.

Objective: The aim of the study is to relate the PAD and genital self-image in women assisted in primary health care in the city of Criciúma/SC.

Methods: This is a cross-sectional study with 212 adult women, aged 18 years or older, with self-reports of being sexually active in the last four weeks, registered in the health network of the city of Criciúma/SC. DAP were verified using the Pelvic Floor Distress Inventory (PFDI-20) and genital self-image was assessed using the Female Genital Self-Image Scale (FGSIS). The instruments were applied through individual interviews. A comparison of self-image between women with and without PAD was performed using the Spearman test for independent samples, according to data normality.

Results: Genital self-image correlated with all PAD (14.6%), with 12.5% of the variation in anorectal symptoms being explained by genital self-image.

Conclusion: Women with PAD worsen their genital self-image. The main results found were that the increase in DAP and the increase in anorectal symptoms decrease genital self-image.

Implications: The lack of national studies on this theme is highlighted, evidencing the importance of its realization.

Keywords: Pelvic Floor Discomfort, Genital self-image, Anorectal symptoms

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

Acknowledgment: This work was carried out with the support of the Coordination for the Improvement of Higher Education Personnel – Brazil (CAPES).

Ethics committee approval: Federal University of Santa Catarina - UFSC. Approval by the Ethics Committee number 04028318.8.0000.0121.

<https://doi.org/10.1016/j.bjpt.2024.100686>

90

INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH COMPONENTS E CATEGORIES ASSESSED BY THE SPINAL CORD INDEPENDENCE MEASURE

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Background: The Spinal Cord Independence Measure (SCIM) was developed in 1997 to measure functional independence in individuals with spinal cord injury (SCI), embracing activities relevant to their daily life. Five versions of the SCIM have been published, respecting the construct delimited before the International Classification of Functioning, Disability and Health (ICF) advent (2001). The ICF, by being capable of describing an individual's health, health estate and functioning through a biopsychosocial model, is highly relevant to the rehabilitation process.

Objectives: Identify ICF components and categories covered by different versions of the SCIM.

Methods: Each SCIM version's items were linked to an ICF code accordingly to Cieza et al. (2019) linking rules. Data was descriptively analysed.

Results: The items of different SCIM versions' linkage to the ICF showed that all versions contemplate the Body structures, Body Functions and Activities and Participation ICF components. The instrument embraces Functions of the cardiovascular, hematological, immunological, and respiratory systems (b4), Functions of the digestive, metabolic, and endocrine systems (b5), Genitourinary and reproductive functions (b6), Mobility (d4) and Self-care (d5)