Centro de Reabilitação e Readaptação Dr. Henrique Santillo (CRER), by a trained physiotherapist. 

Results: The entire sample of the group of amputees underwent pre and post fitting rehabilitation. The performance of amputees in the dynamic balance score was lower compared to the control group (p<0.05). However, the group of amputees showed less oscillation of the center of pressure, in the static examination of baropodometry (p<0.05), reflecting a good ability to balance. 

Conclusion: Our data suggest that transfemoral amputees have a good static balance, similar to that of people without amputations in the lower limbs, in contrast, despite having a dynamic balance considered good, the performance was significantly lower than that of the control group. As there was a small group of individuals who composed the studied groups, a more expressive sample group can be used in future studies, comparing different levels of amputation.

Implications: The results of this research aggregate information on the subject for interested researchers, using common and accessible tools among scientific research for the assessment of postural stability, which are the Berg Balance Scale, the Short Physical Performance Battery and baropodometry. The results of the study point to the inclusion of early balance training in treatment protocols.

Keywords: Amputees, Postural Balance, Physiotherapy

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

Acknowledgment: Not applicable. 

Ethics committee approval: State University of Goiás, n° 2.500.124.

https://doi.org/10.1016/j.bjpt.2024.100966

381

ANALYSIS OF FUNCTIONAL CLINICAL AND PHYSICAL VARIABLES OF HOSPITALIZED ELDERLY PEOPLE

Raquel Brito Elmescaný1, Ruth Loanda de Menezes1, Leonardo Alves Resende2, Letícia de Souza Pereira1

1 Postgraduate Program in Health Sciences, Universidade Federal de Goiás (UFG), Goiânia, Goiás, Brazil
2 Hospital Estadual de Urgências de Goiânia Dr. Valdemiro Cruz, Goiânia, Goiás, Brazil

Background: The hospitalization process can influence a sharp functional decline of the elderly, the reduction of independence and other functional aspects can increase the length of hospital stay with consequent impact on hospital expenses, influencing clinical, physical and mental variables, the functionality of this population can be well understood from the analysis of these variables.

Objectives: This study analyzed the relationship between clinical and physical factors and the functional capacity of hospitalized elderly.

Methods: This is an analytical cross-sectional study that evaluated elderly people in a referral hospital for urgency and trauma in Goiânia. Were used the Functional Independence Measure (FIM), Handgrip Strength (HGS), Medical Research Council (MRC), Berg Balance Scale (BBS), and Visual Analogue Scale (VAS).

Results: 111 elderly people participated, with a mean age of 73 (± 6.9) years, with a predominance of females and fractures musculoskeletal disorders including fractures the main reason for hospitalization (59.5%). Most of the elderly (79.3%) showed functional dependence that was associated with age, sedentary lifestyle, presence of musculoskeletal disorders, BBS, FPP and MRC, sedentary lifestyle was also associated with a decrease in HGS and the imbalance assessed by BBS with impairment of global muscle strength assessed by the MRC.

Conclusion: Hospitalized elderly have reduced functional capacity, and the level of independence can be influenced by age, sedentary lifestyle, presence of musculoskeletal disorder, strength and balance.

Implications: The recognition of factors related to the level of activity and participation during hospitalization is necessary in order to reduce the damage caused by the loss of function in hospitalized elderly, directing the physiotherapeutic approach in order to increase independence for daily activities and autonomy of these patients, the research may also serve as an incentive for new studies related to the functional capacity of hospitalized elderly.

Keywords: Gerontology, Aged, Functional status

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

Acknowledgment: Not applicable. 

Ethics committee approval: Hospital de Urgência de Goiânia Dr. Valdemiro Cruz (HUGO), n° 73957317.5.0000.0033.

https://doi.org/10.1016/j.bjpt.2024.100967

382

IDENTIFICATION OF ICF CODERS FOR ENVIRONMENTAL FACTORS IN THE NEONATAL ICU

Fernanda Gabrielle Mendonça Silva1, Gaby Kelly Bezerra de Macedo1, Mayara Fabiana Pereira Costa1, Rayane Emília de Souza Gama1, Alana Vallessa Bernardo Silva1, Karolina Souza Monteiro1

1 Universidade Federal do Rio Grande da Norte (UFRN), Faculdade de Ciências da Saúde do Trairí (FACISA), Programa de Pós-Graduação em Ciências da Reabilitação. Santa Cruz, Rio Grande do Norte, Brasil

Background: The Neonatal Intensive Care Unit (NICU) represents an atypical environment that interferes with the relationship between parents and the baby, as well as provides unusual sensory experiences, resulting from frequent procedures that can cause pain, exposure to noise, excessive light, and mechanical ventilation. The International Classification of Functioning, Disability, and Health (ICF) is divided into “Disability and Functioning” and “Contextual factors”, which provide a large number of coders through an alphanumeric system in which the letters related to each domain are followed by a code that starts with the chapter number (one digit), followed by the second level (two digits) and the third and fourth levels (one digit each). The ICF can also provide us with a set of coders directed in shorter forms, called CORE SETS or Checklists, which also allow us to classify and evaluate the environmental factors involved in the NICU.

Objectives: To identify the coders of the ICF environmental factors related to the NICU.

Methods: This is a cross-sectional study, carried out from May to September 2021, characterized as an expert survey, based on the guidelines of the World Health Organization and the ICF research department for the development of a CORE SET. Health professionals from different areas, with at least two years of experience in the NICU and/or in research on the subject, were recruited. The professionals answered a virtual form, using the Google Forms platform, with sociodemographic questions and open questions about the environmental factors involved in the NICU scenario. Subsequently, three independent evaluators linked the answers with the categories and domains of the ICF, based on international guidelines.

Results: Fifty health professionals answered the questionnaire during the data collection period. Most were female (94%), with a mean age of 39.30 ± 9.16 years, 54% were physiotherapists, 22% nurses,
10% nursing technicians, and 10% physicians, with a mean of 15.56 ± 9.36 years of training. The process of linking responses about the NICU environment and the ICF codes generated a total of 33 categories of environmental factors.

**Conclusion:** Based on the various physical, attitudinal, and social aspects considered as barriers and facilitators by professionals working in NICUs, it was possible to identify 33 categories of ICF environmental factors related to this environment, 14 of them at level 2 and 19 at level 3.

**Implications:** From the identification of the coders, we can proceed with the next steps of the research to arrive at the final model of an ICF checklist of environmental factors for the NICU. This checklist is essential to understand, classify and evaluate the environmental factors involved in the NICU and to encourage the creation of assessment instruments focused on these aspects.

**Keywords:** Environmental Exposure, Neonatal ICU, ICF

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

**Acknowledgment:** Not applicable.

**Ethics committee approval:** Research Ethics Committee of the Faculty of Health Sciences of Trairi – UFRN/FACISA (Opinion no 4,545,850).

https://doi.org/10.1016/j.bjpt.2024.100968

---

**383**

**RELATIONSHIP BETWEEN SKIN TEMPERATURE AND BODY COMPOSITION WOMEN**

Rayanne Kathleen do Nascimento Silva¹, Francillene Lira Matias¹, Alessandra Feitosa Gonçalves¹, Francielly Natanalley Andrade dos Santos¹, Graziele Nogueira Eduardo¹, Palloma Rodrigues de Andrade¹

¹Department of Physical Therapy, Postgraduate Program in Physical Theray, Federal University of Paraíba (UFPB), João Pessoa, Paraíba, Brazil

**Background:** Infrared Thermography (IT) is a tool for the investigation of physiological functions through changes in blood flow that are associated with the control of Skin Temperature (Tsk). Tsk depends on extrinsic factors, such as environmental temperature and humidity; and intrinsic factors, such as anthropometric characteristics, circadian rhythm, age and sex. Sex, menstrual cycle, use of exogenous hormones, subcutaneous fat, and metabolic rate can affect female Tsk. Although there are already studies that relate temperature to body fat percentage, there are few inconclusive studies that correlate body composition with skin temperature by specific area.

**Objective:** To correlate skin temperature and body composition by body segments of women in the physiological menstrual cycle, use of exogenous hormones, and menopause.

**Methods:** This is a prospective observational study. Participants were 45 volunteers equally allocated into three groups: Exogenous Hormone Group (EHG) [24.53±4.30 years, 58.59±8.46kg, 161.13±6.67cm] Physiological Menstrual Cycle Group (PMCG) [26.33±4.83 years, 58.12±10.02kg, 161±5.53cm] and Menopause Group (MG) [57.13±8.79 years, 68.76±15.82kg, 157±7.16cm]. The EHG volunteers use combined oral contraceptives, while the others did not use any other type of medication or hormonal supplementation. To control the circadian rhythm and the phase of the menstrual cycle, all of them underwent segmental body composition measurements (muscle mass and fat in kilograms) using an InBody 120 bioimpedance scale, and skin temperature measurements were made using a FLIR model T-360 camera once a week, at the same time, over a 28-day period. The areas of interest were the breast region, abdomen, trunk, lumbar spine, breech, upper and lower limbs. For correlation analysis between skin temperature and body composition a Pearson correlation test was performed using SPSS, version 21.

**Results:** There was no significant correlation (P>0.05) between muscle mass and skin temperature of the evaluated areas in any of the groups or evaluation times. Regarding to body fatness, it was observed that independently of the phase from the menstrual cycle, the PMCG presented a negative correlation between temperature and trunk fatness (r= -0.780, P<0.01) and between upper limbs fatness and breast temperature (r= -0.655, P<0.01) and abdomen (r= -0.638, P<0.01). The EHG group showed significant negative correlations between body fat and temperature of breast (r= -0.712, P<0.01), abdomen (r= -0.701, P<0.01), posterior trunk (scapulae region) (r= -0.680, P<0.01), right lower limb (r= -0.672, P<0.01) and upper limbs (r= -0.686, P<0.01). The MG showed only negative correlation (r= -0.591, P<0.01) between fat and skin temperature of the posterior trunk.

**Conclusion:** Skin temperature has an inverse relationship with fatness of the assessed region, while resting muscle mass has little impact on the distribution of skin temperature in women at different stages of life.

**Implications:** The study shows the need to consider anthropometric characteristics when analyzing skin temperature by IT.

**Keywords:** Thermography, Menstrual cycle, Bioimpedance

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

**Acknowledgment:** Not applicable.

**Ethics committee approval:** Health Sciences Center Ethics Committee the Federal University of Paraíba - CAAE 30676620.2.0000.5188.

https://doi.org/10.1016/j.bjpt.2024.100969

---

**384**

**ANTHROPOMETRIC MEASURES AND PAIN INFLUENCE THE STAIR CLIMB TEST PERFORMANCE IN PATIENTS WITH KNEE OSTEOARTHRITIS?**

Rebecca B Ramalho¹, Natália A Casonato¹, Luiz FA Selistre¹

¹Department of Physiotherapy, Federal University of São Carlos (UFSCar), São Carlos, São Paulo, Brazil

**Background:** For the evaluation of physical function in the population with knee osteoarthritis (KOA), one of the tests recommended by the Osteoarthritis Research Society International (OARSI) is the Stair Climb Test, so it is important to investigate which factors can influence performance in the test.

**Objective:** To investigate whether sex, age, BMI, and pain intensity interfere with the performance of the population with KOA in the Stair Climb Test.

**Methods:** The present study is an observational cross-sectional study. Participants over 45 years of age, of both sexes, with clinical diagnosis of KOA, according to the American College of Rheumatology (ACR) criteria, and pain intensity greater than 4, evaluated by the Numeric Rating Scale (NRS), were recruited. Anthropometric data were collected through an initial anamnesis, followed by the application of the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) questionnaire. Subsequently, participants were submitted to the Stair Climb Test. Participants were instructed to climb and descend a flight of 11 stairs, each 20 cm in height, quickly but safely. The sum of the times for climbing and descending was recorded by the evaluator. The Statistical Package for Social Sciences, version 21.0, was used for the multiple linear regression analysis, and the significance level was set at 5%.