therefore, that it will favor the clinical and scientific use of the instruments for assessing participation and the environment in Brazilian children and young people and, consequently, to stimulate rehabilitation actions aimed at these aspects.

Implications: In order to strengthen evidence-based practices, it is essential that standardized instruments are available in the Brazilian context. Furthermore, strategies must be created to facilitate the use of these instruments. On the other hand, the context of the pandemic reinforced the need for tools that can be applied remotely. The creation of the calculator has collaborated for the validation of the YC-PEM and PEM-CY Brasil in a broader context.

Keywords: Data analysis, Social Participation, Data Reliability

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## PARTICIPATION AND ENVIRONMENT MEASURE - CHILDREN AND YOUTH (PEM-CY): VALIDATION FOR USE IN BRAZIL

Jaíza Marques Medeiros e Silva<sup>1</sup>, Kênnea Martins Almeida Ayupe<sup>2</sup>, Élida Rayanne Viana Pinheiro Galvão<sup>3</sup>, Ana Paula Martins<sup>4</sup>, Ana Carolina de Campos<sup>5</sup>, Egmar Longo<sup>1</sup>

<sup>1</sup> Postgraduate Program in Decision Models and Health, Federal University of Paraíba (UFPB), João Pessoa, Paraíba, Brazil

Background: Participation is a complex multidirectional construct that is influenced by social, attitudinal, and physical aspects of the environment, in addition to being an indicator of social inclusion, health and well-being. The family of participation-related constructs includes attendance and involvement in relevant activities, to capture the participatory experiences of children and youth. In recent years, instruments to assess participation in different environments have been developed, facilitating the incorporation of this assessment into the physiotherapist's clinical practice, as participation represents an important outcome in rehabilitation. The Participation and Environment Measure - Children and Youth (PEM-CY) was developed from the theoretical framework of the International Classification of Functioning, Disability and Health (ICF). The PEM-CY was translated into Portuguese, but its psychometric properties have not yet been verified in the Brazilian population.

Objective: To verify the psychometric properties of the PEM-CY Brazil (internal consistency and construct validity) in Brazilian children and young people.

Methods: Participants were 101 Brazilian children and adolescents (mean age 9.36 years, SD 3.47) with and without disabilities. Parents or guardians answered the PEM-CY Brazil questionnaire that assesses Participation (Frequency, Involvement and Desire for Change) and Environment (supports, barriers, environmental helpfulness, environmental resources, and overall environmental support). The internal consistency of all subscales was assessed using Cronbach's Alpha. Construct validity was analyzed by comparing the PEM-CY results between groups of children with and without disabilities using the Mann-Whitney or Chi-square tests, considering p<0.05.

Results: Internal consistency ranged from good to excellent for all subscales of the participation section ( $\alpha$ =0.70 to 0.84) and all subscales of the environment section ( $\alpha$ =0.53 to 0.95). The comparative analysis between groups identified that children with disabilities participated in a small number of activities (p=0.000) and were less involved in all settings (home p=0.007, school and community p=0.000); showed a lower frequency of participation in the community (p=0.000) and a greater desire to change at school (p=0.007) when compared to their peers without disabilities. The guardians of children with disabilities perceived higher barriers at home (p=0.002), school, and community (p=0.000) and fewer supports at home (p=0.001), school and community (p=0.000). The group with disabilities also reported fewer environmental helpfulness at home (p=0.005), school (p=0.000) and community (p=0.000); less environmental resources at home (p=0.002), school (p=0.000) and community (p=0.010); and fewer overall support in all settings (p=0.000). Conclusion: The results support the reliability and validity of PEM-CY to measure participation at home, at school and in the community, and to verify the characteristics of the environment of Brazilian children and young people with and without disabilities.

*Implications*: The instrument represents an important resource to be used in research and in the clinical practice of rehabilitation professionals, who will be able to evaluate the participation of children and young people, as well as incorporate it as an outcome of interest in interventions.

Keywords: Child Health, Social Participation, Data Reliability

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## **QUALITY OF LIFE AND SLEEP OF** PHYSIOTHERAPISTS ACTING ON THE FRONT LINE AGAINST COVID-19: A CROSS-SECTIONAL STUDY

Guilherme Henrique Ferreira Araújo<sup>1</sup>, Vitória Rafaela Pereira de Oliveira<sup>1</sup>, José Nogueira da Silva Neto<sup>1</sup>, Anderson de Moura Mota<sup>2</sup>, Anna Luísa Araújo Brito<sup>3</sup>, Jakson Henrique Silva<sup>3</sup>

Background: The exponential increase in SARS-CoV-2 infection has impacted on a change in the professional and personal lifestyle of the world's population. Health professionals working on the front line experienced increased work hours and exposure to risk factors as a result of the high demand for severe cases. The hospital physiotherapist, one of those responsible for the therapeutic management of COVID-19, suffered repercussions from the pandemic, which possibly contributed to physical and mental exhaustion.

Objectives: To analyze the quality of life and sleep of physiotherapists working on the front lines against COVID-19.

Methods: This is a cross-sectional study, involving physiotherapists of both sexes over the age of 18, working on the front line against COVID-19 in hospital units, who agreed to participate in the research by signing the term of free and informed consent (TCLE). Sociodemographic data, quality of life using the Short Form

<sup>&</sup>lt;sup>2</sup> Department of Physical Therapy, University of Brasilia (UnB), Brasilia, Distrito Federal, Brazil

<sup>&</sup>lt;sup>3</sup> Postgraduate Program in Rehabilitation Sciences, Faculty of Health Sciences of Trairi, Federal University of Rio Grande do Norte (UFRN), Santa Cruz, Rio Grande do Norte, Brazil

<sup>&</sup>lt;sup>4</sup> Department of Dance, University of Ceará (UFC), Fortaleza, Ceará,

<sup>&</sup>lt;sup>5</sup> Postgraduate Program in Physical Therapy, Federal University of São Carlos (UFSCar), São Carlos, São Paulo, Brazil

<sup>&</sup>lt;sup>1</sup> Course of Physiotherapy at the Mauritius University Center of Nassau (Uninassau Caruaru), Caruaru, Pernambuco, Brazil

<sup>&</sup>lt;sup>2</sup> Unifavip Wyden, Caruaru, Pernambuco, Brazil

<sup>&</sup>lt;sup>3</sup> Federal University of Pernambuco (UFPE), Recife, Pernambuco, Brazil

questionnaire (SF-36) and sleep index using the Pittsburgh were evaluated. Data collection took place from June to August 2022 via an electronic form developed by the researchers on the Google Forms platform.

Results: A total of 37 individuals were analyzed, predominantly female (81.6%) with a mean age of 30.13  $\pm$  4.52 and training time from 1 to 5 years (55.3%), 97.4% of whom were post-graduated with the weekly workload of 30 to 60 hours (71.1%), working on duty for 24 consecutive hours. The quality of life of the evaluated individuals showed unfavorable results (<70 points) in relation to the domains: general health status, social aspects, vitality, pain, and limitation by physical aspect. Regarding sleep quality, the domains that presented the worst indices were subjective sleep quality, sleep latency and habitual sleep efficiency.

Conclusion: The challenges in coping with the pandemic associated with excessive working hours were favorable factors in reducing the quality of life and sleep of physiotherapists working on the front line.

Implications: The development of this study made it possible to evaluate the effects of the pandemic on the mental health of professionals working on the front line, which may favor the development of actions aimed at the health of workers, considering that emotional disorders can last for a while, leading to the removal of work activities.

Keywords: Quality of Life, Physical Therapists, COVID-19

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# FUNCTIONAL CAPACITY AND QUALITY OF LIFE OF UNIVERSITY STUDENTS IN THE HEALTH AREA: CROSS-SECTIONAL STUDY

Guilherme Henrique Ferreira Araújo<sup>1</sup>,

Vitória Rafaela Pereira de Oliveira<sup>1</sup>, José Nogueira da Silva Neto<sup>1</sup>, Anderson de Moura Mota<sup>2</sup>, Anna Luísa Araújo Brito<sup>3</sup>, Jakson Henrique Silva<sup>3</sup>

Background: University students are subject to experiencing a change in their lifestyle during the period of adaptation and development of their professional future as a result of the demands required in the academic environment that can negatively reflect on quality of life and functional capacity. Aspects that influence poor quality of life can have a direct impact on the physical fitness of health students.

*Objectives*: To evaluate the functional capacity and quality of life of university students in the health area.

Methods: This is a descriptive cross-sectional study with a sample involving university students in the health area aged 18 years or over of both sexes enrolled in a private University Center in the city of Caruaru-PE who agreed to participate in the research by signing the free and informed consent form (TCLE). Functional capacity was evaluated through the six-minute walk test (6MWT) and quality of life through the Short Form questionnaire (SF-36) available online through the Google Forms® platform. Data collection took place between august and october 2022.

Results: A study with 117 participants, a mean age of  $22.91\pm5.38$  years, predominantly female (71.8%) and mean body mass index of 24.68 kg/m². The greater participation in the study involved health university students from the first to the fourth period (53.8%) and the physiotherapy course (58.1%). During the assessment of functional capacity by the 6MWT, an average distance covered of 554.61m x 595.38m of predicted distance was evidenced by these university students, which corresponds to 93.85% of the predicted distance for the studied population. Quality of life, when evaluating the domains of vitality and social aspects, scored less than 50 points, which is considered a worrying result.

Conclusion: The present study presented favorable data regarding the functional capacity of these university students, however, the quality of life of these young adults showed negative outcomes in some domains with scores below expectations.

*Implications*: The study generated an alert about the importance of an institutional view for the development of actions that can improve the perception of quality of life and functional aspects of university students, considering that both performance and permanence in the academic field can be compromised.

Keywords: Quality of life, Students, Exercise Toleranc

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## RELATIONSHIP BETWEEN FUNCTIONAL MOBILITY AND FALLS IN WOMEN WITH KNEE OSTEOARTHRITIS

Jamilly Radiuc Cipolli<sup>1</sup>, Marcelo Tavella Navega<sup>1</sup>, Deborah Hebling Spinoso<sup>1</sup>

<sup>1</sup> Universidade Estadual Paulista (UNESP), Physiotherapy and Occupational Therapy Department. Marília, São Paulo, Brazil

Background: Osteoarthritis is the most prevalent rheumatic illness in the population, characterized by progressive loss of joint cartilage and subchondral bone sclerosis that results in functional limitation. Among the affected joints, the knee is the most injured. Pain, muscle weakness, reduced balance and reduced movement range are the main symptoms of patients with knee osteoarthritis (KOA) and they may contribute to a decrease in functional mobility and a greater possibility of falls in this population.

*Objectives*: The study aims to compare the functional mobility in women with and without KOA, relating it to the number of falls.

Methods: Were chosen 71 people, who were divided into two groups, the studied one with Knee Osteoarthritis (GOAJ: n = 39; 66,8  $\pm$  7,7 years) and the control group (GC: n = 32; 64,9 $\pm$  7,1 years). The research project was approved by the local ethics committee (1.503.496/2015) and all the participants had signed the free informed consent term and agreed to join the study. Firstly, anamnesis was done to obtain personal data and the number of falls in the last 12 months. To assess functionality, the Short Physical Performance Battery (SPPB) was applied, consisting of three items: assessment of balance, gait speed and, indirectly, lower limb strength, through the sit-to-stand test. For statistical analysis, the T-test for Independent Samples was used, considering a significance level of p < 0.05.

Results: Women with KOA had a 48% lower gait speed (p < 0,001) and a 30% higher time to sit down and stand up from a chair for five consecutive times (p < 0,001), compared to the control group. No significant difference was found in the balance tests of both groups.

<sup>&</sup>lt;sup>1</sup> Course of Physiotherapy at the Mauritius University Center of Nassau (Uninassau), Caruaru, Pernambuco

<sup>&</sup>lt;sup>2</sup> Unifavip Wyden, Caruaru, Pernambuco

<sup>&</sup>lt;sup>3</sup> Federal University of Pernambuco (UFPE), Recife, Pernambuco