

STUDY PROFILE, KNOWLEDGE AND BELIEFS ON PAIN OF BRAZILIAN PHYSIOTHERAPY STUDENTS

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Background: Clinical practice guides for chronic pain management recommend assessment and treatment centered on a biopsychosocial perspective, which requires adequate training of health professionals. Despite the recognition of the importance of pain study and the international recommendations of pain curricula, training in physiotherapy seems insufficient to prepare professionals for the management of people with chronic pain.

Objectives: To understand the study profile of pain in physical therapy graduation in Brazil and to assess whether there is a difference in pain knowledge and beliefs between graduation years and regions of Brazil.

Methods: Cross-sectional study with a descriptive and quantitative approach in which the sample corresponded to physical therapy undergraduate students from all over Brazil. Data were collected through an online form that addressed questions related to the study of pain during graduation, the pain knowledge of undergraduates (Questionnaire of Neurophysiology of Pain, QND, 0-12) and attitudes and beliefs about pain (Health Care Providers' Pain and Impairment Relationship Scale, HC-PAIRS, 0-90). Data were expressed as percentages and mean \pm standard deviation and compared across years and regions using one-way ANOVA.

Results: 218 physiotherapy students participated in the study. Only 18.3% of the sample had contact with a specific discipline on pain during graduation, which seems to happen predominantly in the 3rd (28.9%) and 4th (22.6%) years of the course, as well as in the north-east region of Brazil (27.3%). Most students learn about pain diffusely in other disciplines, which happens from the 2nd year onwards (63 to 78%) and predominantly in the southern region (74.5%). The vast majority of students report interest in knowing or deepening the study of pain (95.41%). Students in the 1st year have lower pain knowledge (5.5 ± 2.2) than those in the 2nd (6.8 ± 2.3), 3rd (7.6 ± 2.0), 4th (7.7 ± 2.0) and 5th (7.3 ± 1.9) years, which corroborates to the level of contact with pain content in the 1st year of the course. Students in the 1st (50.3 ± 9.0) and 2nd (47.1 ± 9.9) years have more dysfunctional beliefs about pain than those in the 4th (43.7 ± 9.7) and 5th (40.8 ± 10.3) years. Regarding the regions of Brazil, the QND and HC-PAIRS scores did not show significant differences.

Conclusion: The study of pain has predominantly been addressed in a diffuse and non-specific way in physiotherapy undergraduate programs in Brazil. Students' pain knowledge is low, especially in the first two years of the undergraduate programs. Students report a high interest in knowing or deepening their knowledge of pain, which reinforces the need to implement the IASP recommendations on the minimum curriculum on pain in physical therapy graduation in Brazil.

Implications: The implementation of a pain curriculum based on the IASP guidelines can help to improve the knowledge of pain among undergraduate physical therapy students in Brazil.

Keywords: Pain, Physiotherapy students, Knowledge

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CALCULATOR FOR MEASURING PARTICIPATION AND THE ENVIRONMENT – VERSIONS FOR YOUNG CHILDREN AND CHILDREN AND YOUTH: REPORT ON DEVELOPMENT

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Background: The participation of children and young people in home, school and community activities is an indicator of well-being and health. However, children and young people with disabilities have fewer opportunities to participate in these activities compared to subjects without disabilities. The environment can influence participation, making it essential to identify barriers and facilitators. Faced with this need, the PEM-CY (Participation and Environment Measure for Children and Youth) and the YC-PEM (Participation and Environment Measure - Young Children) evaluate the participation and environment of children and young people from 0 to 5 years old (YC-PEM) and from 5 to 17 years old (PEM-CY), in the perception of their caregivers. Both instruments were translated and adapted to Brazilian Portuguese. However, the multiplicity of calculations related to the scores can hinder the clinical and scientific use of the tool, a factor that motivated the development of a calculator that allows the automatic computation of results.

Objectives: To report the process of development and finalization of the calculators for the scoring of the instruments YC-PEM and PEM-CY Brasil.

Methods: This is a methodological study on the development process of calculators for the YC-PEM and PEM-CY Brasil instruments. A physical educator with experience in programming, and three physiotherapists and an occupational therapist, all three being university professors, participated. The team's discussions took place in several meetings on the Google Meet platform. For the development of the calculator, the Excel program was used.

Results: The calculators maintain the visual identity of the original instruments, and fully present the questions and answer options of the Brazilian version. Multiple choice answers are directed to an Excel spreadsheet, which stores the results of a group of subjects and allows statistical analyses. Open-ended responses allow a qualitative analysis of the aspects that help with participation. The calculators also generate individual charts and graphs that allow users to visualize participation and environmental factors related to the three sections. The greatest difficulty in this process involved the understanding of each score, for proper programming in the spreadsheet, being necessary to consult the authors of the original version to establish a consensus, which enabled a deeper understanding of the instrument.

Conclusion: The YC-PEM and PEM-CY Brasil calculators allow the remote evaluation of individuals, as well as the archiving and calculation of the results, generating spreadsheets that facilitate data analyses, and graphs and tables that allow the translation of knowledge for professionals and family members. It is expected,

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

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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

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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