

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

Ivan Silva Martins¹, Lucas Araújo de Almeida¹, Karina Gramani-Say², Melina Nevoeiro Haik¹

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

² Department of Gerontology, Federal University of São Carlos (UFSCar), São Carlos, São Paulo, Brazil

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

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

Acknowledgment: I would like to thank the supervisors, co-supervisor and colleagues who contributed to the completion this work and everyone who voluntarily participated in the research.

Ethics committee approval: Human Research Ethics Committee of the Federal University of São Carlos (CAAE: 51017521.4.0000.5504).

<https://doi.org/10.1016/j.bjpt.2024.100775>

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

Jaíza Marques Medeiros e Silva¹, Ana Paula Martins Cazeiro², Daniel Gonçalves Pereira³, Rayane Monteiro⁴, Ana Carolina de Campos⁴, Egmar Longo¹

¹ Federal University of Paraíba (UFPB), João Pessoa, Paraíba, Brazil

² Federal University of Ceará (UFC), Fortaleza, Ceará, Brazil

³ Federal University of the Vale Jequitinhonha and Mucuri (UFVJM), Diamantina, Minas Gerais, Brazil

⁴ Federal University of São Carlos (UFSCar), São Carlos, São Paulo, Brazil

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,