Conclusion: Our study is the first to investigate the association between these variables, adjusting for potential confounders, and the data suggest an association of PSI with NP and LBP, being a possible risk factor that can be taken into account in preventive approaches focused on individuals.

Implications: We consider that the results have a scientific, sociocultural, educational, and clinical practice impact, since the PSI is such an important personal contextual factor that is associated with several clinical conditions of health and quality of life, but which is still subjugated in the literature. We emphasize the importance of further studies to clarify gaps about PSI, particularly post-pandemic as our data were collected before the COVID-19 pandemic, and we believe that PSI risks due to COVID-19 may have increased. We hope that based on these results, health professionals will start to include the ISP in their assessment routine and, thus, more fully address the biopsychosocial model focused on the individual.

Keywords: Social isolation, Neck Pain, Low Back Pain

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

**Acknowledgment:** The Postgraduate Program in Rehabilitation and Functional Performance, Universidade Federal dos Vales do Jequitinhonha e Mucuri, Brazilian Registry of Twins and the University of Melbourne.

**Ethics committee approval:** Universidade Federal dos Vales do Jequitinhonha e Mucuri, CAAE 75120117.1.0000.5108

https://doi.org/10.1016/j.bjpt.2024.100939

#### 354

### EXPLORING MOBILITY DYSFUNCTION IN PEOPLE WITH AND WITHOUT IMPAIRED COGNITION IN PARKINSON DISEASE

Natália Mariano Barboza<sup>1</sup>, Martina Mancini<sup>2</sup>, Suhaila Mahmoud Smaili<sup>1</sup>, Fay Horak<sup>2</sup>, Patricia Carlson-Kuhta<sup>2</sup>, Laurie King<sup>2</sup>

<sup>1</sup> Grupo de Pesquisa em Fisioterapia Neurofuncional, Programa de Pós-graduação em Ciências da Reabilitação, Universidade Estadual de Londrina (UEL), Londrina, Paraná, Brasil

<sup>2</sup> Departament of Neurology, Balance Disorders Laboratory, Oregon Health & Science University, Portland, United States of America

Background: The relationship between mobility and cognition has been studied in the elderly population. In atypical aging, such as Parkinson's disease (PD), these associations have also been reported. It is believed that people with PD may compensate for mobility deficits using increased attentional resources to overcome deficit. This phenomenon reflects the importance of understanding the relationship between mobility and cognition.

*Objectives*: To compare gait and balance characteristics in PD individuals with and without cognitive impairment.

Methods: Cross-sectional study, comprising 143 participants with PD divided into two groups according to the Montreal Cognitive Assessment (MoCA) cut-off: 1) without cognitive impairment (MoCA > 26) and 2) with cognitive impairment (MoCA  $\leq$  26). Groups were compared through instrumented and clinical measures for gait and balance in the following domains: sensory orientation, anticipatory postural adjustments, automatic postural responses, and dynamic gait. Clinical measures were obtained from Mini-BESTest. Instrumented measures of gait and balance were obtained via six wearable sensors (Opals, APDM Wearable Technologies, A Clario company), each including triaxial accelerometers, triaxial gyroscopes, and magnetometers, placed on both feet, wrists, sternum, and the lumbar region while performing a total of eight different motor tasks. For data analysis, t-test for independent samples and a general linear model were carried out using the SPSS 28.0.

Results: 72 individuals had cognitive impairment and 71 were considered without cognitive impairment. There was no difference in the total Mini-BESTest score between groups, however, in the dynamic gait domain there was a difference between groups (p=0.010), in which the group with cognitive impairment presented worse performance in dynamic gait when compared to the group without cognitive impairment (p=0.010). When looking at the instrumented measures for gait and balance domains, all significant group differences were under the dynamic gait domain, specifically, dual task gait speed (p=0.004), dual cost stride length (p=0.016), stance time (p=0.038), and turn velocity (p=0.037). For all the instrumented measures where it was possible to verify differences between groups, the worst performance in dynamic gait was presented by the group with cognitive impairment.

Conclusion: Dynamic gait performance was worse in individuals with PD who had cognitive impairment compared to individuals without cognitive impairment, both for clinical and instrumented measures. *Implications*: Gait performance differs between individuals with and without cognitive impairment. This fact helps to guide the clinician therapeutic prescription, prioritizing gait training for individuals with PD, rehabilitation strategies focused on mobility, as well as approaches that treat gait and cognition simultaneously, particularly for individuals who have cognitive impairments.

Keywords: Parkinson Disease, Mobility Limitation, Cognition

**Conflict of interest:** For Balance Disorders Laboratory researchers, ADPM Wearable Technology is a potential conflict of interest reviewed and managed by OHSU.

Acknowledgment: Grupo de Pesquisa em Fisioterapia Neurofuncional (GPFIN). Coordenação de Aperfeiçoamento de Pessoal de Nível Superior — (CAPES). Balance Disorders Laboratory (OHSU).

Ethics committee approval: Oregon Health & Science University institutional review board (approval no. 4131) and the joint OHSU and Veterans Affairs Portland Health Care System (VAPORHCS) institutional review board (approval no. 8979).

https://doi.org/10.1016/j.bjpt.2024.100940

#### 355

# PERCEPTIONS OF INDIVIDUALS WITH PARKINSON DISEASE REGARDING A TELEREHABILITATION PROTOCOL DURING THE COVID-19 PANDEMIC: A QUALITATIVE STUDY

Natália Mariano Barboza<sup>1</sup>, Larissa Laskovski Dal Molin<sup>1</sup>, Renata Pasquarelli Volpe<sup>1</sup>, Larissa Alessandra Pereira<sup>1</sup>, Patrícia Gonçalves Broto da Silva<sup>1</sup>, Suhaila Mahmoud Smaili<sup>1</sup> <sup>1</sup> Grupo de Pesquisa em Fisioterapia Neurofuncional, Programa de Pós-Graduação em Ciências da Reabilitação, Universidade Estadual de Londrina (UEL), Londrina, Paraná, Brasil

Background: Due to the COVID-19 pandemic, changes were necessary in the field of physiotherapy, requiring new models of care that could be promoted by telerehabilitation. Therefore, a group of individuals with Parkinson's disease (PD), who before the pandemic performed face-to-face physical therapy, had their way of treatment replaced by a telerehabilitation program consisting of synchronous remote sessions of physical therapy, provision of graphic material and videos about physical and cognitive exercises and health education activities.

*Objectives*: To understand the meaning of the experience of individuals living with PD regarding a telerehabilitation protocol.

Methods: This is a qualitative descriptive analytical study with a phenomenological basis in which 20 individuals with PD who

participated in a telerehabilitation protocol for 6 months were included. They were interviewed by telephone calls recorded, guided by a semi-structured script. The interviews were transcribed, categorized, and analyzed, based on the principles of phenomenology following assumptions by Martins and Bicudo (1989). Data analysis was performed in the following stages: transcripts reading; division of the whole transcripts into units of meaning and interpretation; grouping units of meaning in units themes; interpretative synthesis regarding the content of the themes generated by the grouped units of meaning.

Results: From the qualitative analysis, four themes emerged that configure the structure of the phenomenon: 1) Expectations related to physiotherapy through telerehabilitation during the pandemic (includes feelings and thoughts about the expectations related to the beginning of remote physiotherapy after interruption of face-to-face treatment); 2) Experiences of the new daily life (includes the perceptions about the experiences of the new daily life that was configured from the proposed protocol, including the relationship with technology, the perceived changes and the new learnings); 3) Perceptions about themselves in relation to the proposed telerehabilitation program (includes participants' perceptions of themselves during their immersion in the telerehabilitation program); 4) A look at the protocol (includes the opinions and feelings about the protocol and preferences of the participants in relation to the approach modalities).

Conclusion: Apprehension and fear were present in the implementation of the protocol, however, the previous experience with face-to-face physiotherapy and the team allowed feelings of happiness, contentment, welcome and satisfaction with the possibility of returning to activities. The individuals actively participated in the program with commitment and co-responsibility, however, the lack of contact, limited equipment and concern for the safety and individuality of the participants must be highlighted.

Implications: Telerehabilitation was a necessary alternative during the period of the COVID-19 pandemic and brought new learning that may imply the indication and choice of therapeutic approaches nowadays, making it possible to list potentialities and limitations related to their use. Telerehabilitation can be useful when distance separates the patient from the team and can bring advantages such as reducing time and expenses and increasing the volume of treatment. The hybrid approach composed by remote and face-to-face modalities is an interesting option in the field of physiotherapy.

Keywords: Telerehabilitation, Qualitative Research, Parkinson Disease

Conflict of interest: The authors declare no conflict of interest. Acknowledgment: Grupo de Pesquisa em Fisioterapia Neurofuncional (GPFIN) and Coordenação de Aperfeiçoamento de Pessoal de Nível Superior — (CAPES) support.

Ethics committee approval: Ethics committee approval from Universidade Estadual de Londrina (CAAE 36782720.0.0000.5231 and approval number 4.276.635)

https://doi.org/10.1016/j.bjpt.2024.100941

#### 356

### PHYSIOTHERAPIST'S PERFORMANCE IN THE CARE OF PERSONS WITH DISABILITIES IN A SPECIALIZED REHABILITATION CENTER

Natasha Felipe da Silva<sup>1</sup>, José Erivonaldo Ferreira Paiva Júnior<sup>1</sup>, Mayza Leite Felix Maciel<sup>1</sup>, Letícia Mylena Guedes Souza<sup>1</sup>, Maria Gabriela Alves de Brito<sup>1</sup>, Robson da Fonseca Neves<sup>1</sup>

<sup>1</sup> Departamento de Fisioterapia, Programa de Pós-graduação em Fisioterapia, Universidade Federal da Paraíba (UFPB), João Pessoa, Paraíba, Brasil

*Background:* Physical therapist practices have undergone transformations over the years in the search for the primacy of comprehensive care. In Specialized Rehabilitation Centers, this care model is recommended for the care of Persons with Disabilities.

*Objective*: To identify and describe the care practices and actions carried out by physiotherapists in approaching Persons with Disabilities in specialized rehabilitation centers based on the comparison between prescribed work and real work.

Methods: This is a qualitative and descriptive study, taking the case study as a guiding model, based on ethnographic analysis resources. The study was developed with the association of three data collection strategies: document analysis, direct observation with conversational approaches and interviews with physiotherapies from an Especialized Rehabilitation Center (ERC) in the state of Paraíba-PB. Results: The study reveals that there are differences and nuances between the prescribed work and the real work, the physiotherapists partially present, or do not present in their routine, elements such as the practice of reassessing assisted users, elaboration and execution of the Singular Therapeutic Project (STP), and periodic meetings in team, reference and counter-reference practices, communication between the points of the Care Network for people with disabilities and intersectoral articulation, as recommended by the instruction.

*Conclusion*: Knowledge of the practices allowed for identifying the distance between the prescribed work and the concrete conditions for carrying it out, which makes it possible to adopt strategies to improve the process and organization of work in the ERC.

*Implications*: The research pointed out important elements for the debate about the performance of physiotherapists in the CERs, elements that can become points of permanent education in health for the physiotherapy professionals of these centers, and secondarily can result in important changes in the process and organization of work of physiotherapists at CER.

Keywords: Physiotherapy, Rehabilitation Centers, Biopsychosocial Models

**Conflict of interest:** The authors declare no conflict of interest. **Acknowledgment:** Thanks to FAPESQ/CNPq for the financial incentive for scientific research through PPSUS 05/2020.

**Ethics committee approval:** Research Ethics Committee of the Federal University of Paraíba, CAAE: 37347020.3.0000.5188).

https://doi.org/10.1016/j.bjpt.2024.100942

#### 357

## THE ORGANIZATION OF THE WORK OF PHYSIOTHERAPISTS IN A CENTER SPECIALIZED IN REHABILITATION

Natasha Felipe da Silva<sup>1</sup>, José Erivonaldo Ferreira Paiva Júnior<sup>1</sup>, Mayza Leite Felix Maciel<sup>1</sup>, Letícia Mylena Guedes Souza<sup>1</sup>, Iara Fialho Moreira<sup>1</sup>, Robson da Fonseca Neves<sup>1</sup>

<sup>1</sup> Departamento de Fisioterapia, Programa de Pós-graduação em Fisioterapia, Universidade Federal da Paraíba (UFPB), João Pessoa, Paraíba, Brasil

Background: Physiotherapy in a specialized rehabilitation center (CER) has an important role in the care of Persons with Disabilities (PwD), it can be a fundamental part of adopting the biopsychosocial approach that is sought in these centers, provided that the organization of work is also aligned providing comprehensive care to PwD. Objective: to know facilitators and obstacles related to the organization of the physiotherapist's work in the Center specialized in rehabilitation and its relationship with the care practices provided to Persons with Disabilities.