

# Functioning of people with Parkinson's Disease: ICF analysis from a family perspective

Funcionalidade de pessoas com Doença de Parkinson: análise pela CIF sob a perspectiva familiar

Funcionalidad de personas con enfermedad de Parkinson: análisis por la CIF bajo la perspectiva familiar

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## **Abstract**

**Introduction:** The International Classification of Functioning, Disability and Health (ICF) is a tool used to classify functioning across various health conditions, such as Parkinson's Disease (PD). Objective: To analyze functioning from the perspective of family members of individuals with PD using the ICF. **Method:** This is a descriptive, cross-sectional study approved by the Research Ethics Committee. Thirteen family members of individuals with PD participated in interviews to collect sociodemographic data and assess the functioning of those under their care across 32 ICF categories. **Results:** Most family members were female spouses, with an average age of 51,23 years. The individuals with PD had a mean age of 67 years and an average disease duration of 10.8 years. In the Body Functions, family members reported impairments in memory, language-related mental functions, vestibular functions, voice, articulation, speech fluency and rhythm, and involuntary movements. In the Activity and Participation, the greatest difficulties were related to spoken and written language, as well as activities of daily living (household tasks, eating, dressing, and dealing with stress). In Environmental Factors, most categories were perceived

## Authors' contributions:

TSS: study conception; data collection; data analysis, and article writing.

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as facilitators, while attitudes of friends and transportation services were identified as barriers. **Conclusion**: Difficulties in the areas of language, daily living activities, and interpersonal relationships may increase dependence on family members. Understanding the functionality of people with PD, considering language and communication from the perspective of their family members, is crucial for planning speech-language interventions, promoting autonomy of the studied group, and supporting family health.

**Keywords:** International Classification of Functioning, Disability and Health; Parkinson Disease; Family; Speech-Language Pathology.

# Resumo

Introdução: A Classificação Internacional de Funcionalidade, Incapacidade e Saúde (CIF) é uma ferramenta para classificar a funcionalidade em diferentes condições de saúde, como a Doença de Parkinson (DP). Objetivo: Analisar a funcionalidade na percepção de familiares de pessoas com DP pela CIF. Método: Estudo descritivo e transversal aprovado pelo CEP. Treze familiares de pessoas com DP participaram de entrevistas para levantamento do perfil sociodemográfico e funcionalidade das pessoas sob seus cuidados em 32 categorias da CIF. Resultados: Os familiares, em sua maioria, eram do sexo feminino, cônjuges e média de 51,23 anos de idade. As pessoas com DP apresentaram média de 67 anos e 10,8 anos de tempo de doença. Em Funções do Corpo, familiares referiram deficiências de memória, funções mentais da linguagem, funções vestibulares, voz, articulação, fluência, ritmo da fala e movimentos involuntários. Em Atividade e Participação, as maiores dificuldades relacionaram-se à linguagem oral e escrita e Atividades de Vida Diária (AVD) (tarefas domésticas, comer, vestir-se e lidar com o estresse). Em Fatores Ambientais, a maioria das categorias foram indicadas como facilitadoras e atitudes de amigos e serviços de transporte como barreiras. Conclusão: As dificuldades nas categorias de linguagem, AVD e relacionamentos interpessoais podem aumentar a dependência dos familiares. Conhecer a funcionalidade das pessoas com DP, considerando-se a linguagem e comunicação, a partir da percepção dos familiares, é relevante para o planejamento da intervenção fonoaudiológica, favorecer a autonomia do grupo estudado e a saúde dos familiares.

**Palavras-chave:** Classificação Internacional de Funcionalidade, Incapacidade e Saúde; Doença de Parkinson; Família; Fonoaudiologia.

## Resumen

Introducción: La Clasificación Internacional del Funcionamiento, de la Discapacidad y de la Salud (CIF) es una herramienta para clasificar el funcionamiento en diferentes condiciones de salud, como la Enfermedad de Parkinson (EP). Objetivo: Analizar el funcionamiento desde la percepción de familiares de personas con EP, utilizando la CIF. Método: Estudio descriptivo y transversal, aprobado por CEP. Trece familiares de personas con EP fueron entrevistados para levantar el perfil sociodemográfico y el funcionamiento de las personas bajo su cuidado, considerando 32 categorías de la CIF. Resultados: La mayoría de los familiares eran mujeres, cónyuges, con una edad media de 51,23 años. Las personas con EP tenían media de edad 67 años y 10,8 años de evolución de la enfermedad. En Funciones Corporales, los familiares reportaron deficiencias en: memoria, funciones mentales del lenguaje, funciones vestibulares, voz, articulación, fluidez y ritmo del habla, y movimientos involuntarios. En Actividad y Participación, las mayores dificultades se relacionaron con el lenguaje oral y escrito, y las Actividades de la Vida Diaria (tareas domésticas, alimentación, vestirse y lidiar con el estrés). En Factores Ambientales, la mayoría de las categorías fueron señaladas como facilitadoras, y las actitudes de amigos y servicios de transporte como barreras. Conclusión: Las dificultades en las categorías de lenguaje, AVD y relaciones interpersonales pueden aumentar dependencia de los familiares. Conocer la funcionalidad de las personas con EP, considerando el lenguaje y la comunicación desde la percepción de familiares, es relevante para planear la intervención fonoaudiológica, favoreciendo la autonomía del grupo estudiado y salud del cuidador.

**Palabras clave:** Clasificación Internacional del Funcionamiento, de la Discapacidad y de la Salud; Enfermedad de Parkinson; Familia; Patología del Habla y Lenguaje.



# Introduction

Population aging is a global reality that has challenged health and social care systems, contributing to an increased prevalence of chronic diseases such as Parkinson's Disease (PD)¹, classified as the second most common neurodegenerative disease among people aged 65 and over². In response to this context, the World Health Organization (WHO) prepared a technical summary that highlights the growing burden of PD, unequal access to treatment and the need for public policies and coordinated initiatives to support professionals, patients and caregivers¹.

PD presents motor symptoms such as brady-kinesia, postural instability, rigidity and resting tremor, as well as non-motor symptoms, including sensory changes, sleep disorders and neuropsychiatric manifestations like depression, anxiety and dementia<sup>3,4</sup>. These changes compromise functioning, of which language is a fundamental component, directly affecting the social participation of people with PD<sup>5</sup>. Among environmental factors, the attitudes of family members and caregivers play a decisive role, either promoting functioning or generating disability<sup>6</sup>.

The diagnosis of PD marks a significant transition in the life of the individual and their family, highlighting its irreversible nature and often placing a family member in the role of primary caregiver<sup>7,8</sup>. In addition, the progression of the disease can result in increasing dependence on family members for essential tasks<sup>9</sup>.

In speech-language pathology, PD symptoms may lead to alterations in motor skills and functions associated with speech, chewing, swallowing, breathing, phonation and language, compromising the individual's ability to express needs and ideas clearly, resulting in restrictions on social participation and limitations in performing daily activities<sup>5,6</sup>. Therapeutic and care interventions in PD assist not only with challenges related to mobility, daily activities and communication, but also support family members who provide essential care. Speech-Language Pathology plays a key role in promoting independence, maintaining functioning and fostering more effective communication for people with PD, reducing restrictions and dependence and contributing to improved quality of life<sup>10,11</sup>.

A biopsychosocial approach to healthcare, as advocated by the International Classification of

Functioning, Disability and Health (ICF), widely recognized by the WHO, is essential in the context of people living with PD. By recognizing that health and functioning are influenced by personal, social and environmental factors, the ICF provides a framework for documenting progress throughout the therapeutic process, considering the complex needs of these individuals<sup>12</sup>.

The motor symptoms of PD, which include alterations in the ICF components of *Body Structures* and Functions, can impact a person's functioning, impairing their ability to perform daily activities, engage in tasks and participate fully in society<sup>6</sup>. The use of the ICF in Speech-Language Pathology supports a person- and family-centered perspective by identifying categories related to *Body Functions*, *Body Structures*, *Activity and Participation*, and *Environmental Factors*, in an integrated approach that recognizes the influence of the environment and provides opportunities that contribute to the health and well-being of the group studied<sup>13</sup>.

The viewpoint of the family member is important in understanding the health of the person with PD, as it provides valuable information on the physical, social and emotional impacts of the disease within the family context, revealing nuances that may not be evident through clinical observation alone<sup>14</sup>. This study is motivated by the limited research that considers the perspectives of family members of people with PD, particularly through the lens of the ICF, whose biopsychosocial approach provides a comprehensive and personcentered view of the individual with PD and their family<sup>6</sup>. Therefore, this study seeks to understand and emphasize the importance of listening to the family members and incorporating their perspective as an integral part of healthcare for people with PD within Speech-Language Pathology practices. The aim of this study is to analyze functioning from the viewpoint of family members of people with PD, using the ICF.

#### Method

This is a descriptive cross-sectional study, approved by the Research Ethics Committee of the university where the investigation was conducted, under CAAE protocol no. 79692417.1.0000.5404.

Individuals with PD receiving care at the institution indicated a family member to take part in the study. Thirteen family members of individuals with



PD agreed to participate and signed the Informed Consent Form (ICF). Data collection was carried out through semi-structured interviews and a sociodemographic profile questionnaire.

The ICF framework comprises the following components: *Body Functions*, *Body Structures*, *Activity and Participation*, *Environmental and* 

Personal Factors<sup>12</sup>. As presented in Chart 1, this study used questions corresponding to 32 ICF categories: 10 from the *Body Functions* component, 17 from *Activity and Participation*, and five from *Environmental Factors*. The ICF codes consist of categories followed by a qualifier indicating the magnitude of impairment or difficulty.

**Chart 1.** International Classification of Functioning, Disability and Health (ICF) checklist for Parkinson's disease used in this study

Body Functions	
b1301- motivation	b144- memory functions
b167- mental functions of language	b230- hearing functions
b235- vestibular functions	b280- sensation of pain
b310- voice functions	b320- articulation functions
b330- fluency and rhythm of speech functions	b765- involuntary movement functions
Activity and Participation	
d230- carrying out daily routine	d240- handling stress and other psychological demands
d330- speaking	d350- conversation
d440- fine hand use	d445- hand and arm use
d450- walking	d470- using transportation
d540- dressing	d550- eating
d560- drinking	d570- looking after one's health
d640- doing housework	d710- basic interpersonal interactions
d730- relating with strangers	d760- Family relationships
d920- recreation and leisure	
Environmental Factors	
e410- individual attitudes of immediate family members	e420- Individual attitudes of friends
e425- individual attitudes of acquaintances, peers, colleagues, neighbors and community members	e540- transportation services, systems and policies
e580- health services, systems and policies	

Source: (adapted from Silva, Chun, Zerbeto, 2025).

In the semi-structured interviews, the 13 family members reported their perceptions regarding the functioning of the person with PD, assigning a qualifier to each of the proposed ICF categories and explaining the reason for their choice. The interviews were video recorded and conducted by one of the researchers, guided by a question script, with an average duration of 45 minutes each. For example, for the category Mental functions of language (b167): "Does the person you are related to or care for have difficulty understanding what people say and expressing their ideas? If so, what is the degree of difficulty? Mild? Moderate? Severe?

Or complete?" For the category Memory functions (b144): "Does the person you are related to or care for have difficulty remembering recent information or past memories? If so, what is the degree of difficulty? Mild? Moderate? Severe? Or complete?"

Data analysis was conducted using both quantitative and qualitative approaches. In the quantitative analysis, descriptive statistical analysis was performed, including means and frequency breakdowns of socioeconomic data and qualifiers related to the ICF categories. The family members' reports, organized according to the ICF categories, were analyzed qualitatively.



## **Results**

Table 1 below features the characterization of the family members of people with PD regarding sex, educational level, degree of kinship, age group, work and whether they live with the person with PD under their care.

Table 2 features the characterization of the individuals with PD regarding sex, educational level, age group, duration of the disease, mean age and mean duration of the disease.

Table 1. Characterization of family members interviewed

Parameter	n (%)
Sex	
Female	10 (77)
Male	3 (23)
Total	13 (100)
Education level	
Incomplete secondary	3 (23)
Complete secondary	4 (31)
Incomplete tertiary	2 (15)
Complete tertiary	4 (31)
Total	13 (100)
Degree of kinship	
Spouse	8 (62)
Son/Daughter	4 (31)
Grandchild	1 (8)
Total	13 (100)
Age group	
≥ 20 and < 30 years	2 (15)
≥ 30 and < 40 years	1 (8)
≥ 40 and < 50 years	2 (15)
≥ 50 and < 60 years	4 (31)
≥ 60 and < 70 years	3 (23)
≥ 70 years	1 (8)
Do you work outside the home?	
Yes	5 (38)
No	8 (62)
Total	13 (100)
Do you live with the person with DP?	
Yes	10 (77)
No	3 (23)
Total	13 (100)



Table 2. Characterization of persons with pd

Parameter	n (%)
Sex	
Female	6 (46)
Male	7 (54)
Total	13 (100)
Education level	
Incomplete elementary	2 (15)
Complete elementary	5 (38)
Incomplete secondary	1 (8)
Complete secondary	4 (31)
Complete tertiary	1 (8)
Total	13 (100)
Age group	
≥ 40 and < 50 years	2 (15)
≥ 50 and < 60 years	2 (15)
≥ 60 and < 70 years	3 (23)
≥ 70 and < 80 years	4 (31)
≥ 80 years	2 (15)
Duration of the disease	
≥ 1 and < 5 years	1 (8)
≥ 5 and < 10 years	6 (46)
≥ 10 and < 15 years	3 (23)
≥ 15 and < 20 years	0 (0)
≥ 20 years	3 (23)

It is important to note that due to the small number of participants, the findings presented refer exclusively to this sample and cannot be generalized to the broader population of people with PD and their families. Table 3 features the breakdown of qualifiers related to *Body Functions* in people with PD, according to their family members' perceptions.

**Table 3.** Breakdown of the qualifiers of the body functions component for people with Parkinson's disease according to family members' perceptions

Categories/Qualifiers*	0	1	2	3	4
b1301- Motivation	8	1	2	2	
b144- Memory functions	5	3	2	2	1
b167- Mental functions of language	3	4	4	2	
b230- Hearing functions	11	1		1	
b235- Vestibular functions	2	4	5	1	1
b280- Sensation of pain	12		1		
b310- Voice functions	4	3	4	1	1
b320- Articulation functions	4	4	3	1	1
b330- Fluency and rhythm of speech functions	6	4	1	2	
b765- Involuntary movement functions	4	1	4	4	

Key: 0 (no problem), 1 (mild problem), 2 (moderate problem), 3 (severe problem), 4 (complete problem).



In the *Body Functions* component (Table 3), the categories reported by family members as having the greatest impairments were: memory functions (b144), mental functions of language (b167), vestibular function (b235), voice functions (b310), articulation functions (b320), fluency and rhythm of speech functions (b330), and involuntary movement functions (b765).

Below are statements related to voice functions, involuntary movement functions and motivation, which illustrate these aspects: "Her voice is very weak. I think it can improve, but she has no motivation, she doesn't have the strength." (Family Member 8)

"He has little motivation, it doesn't last long, or because of physical difficulty combined with lack of motivation, he gradually gives up. It is hard because we are not in his position. I think he has some degree of depression because he can't do the things he used to enjoy, going to Brumado, doing outdoor activities, he stopped doing them." (Family Member 1)

**Table 4.** Breakdown of the qualifiers of the activity and participation component for people with Parkinson's disease according to family members' perceptions

Categories/Qualifiers*	0	1	2	3	4
d230- Carrying out daily routine		1	4	3	1
d240- Handling stress and other psychological demands		4	5	2	1
d330- Speaking		3	1	3	
d350- Conversation		2	2	1	1
d440- Fine hand use		1	8	2	
d445- Hand and arm use		3	4	2	1
d450- Walking		2	4	4	2
d470- Using transportation		1	4	2	4
d540- Dressing		3	4	2	1
d550- Eating		3	4	3	
d560- Drinking		1	4		
d570- Looking after one's health		2		3	1
d640- Doing housework		1	5	4	2
d710- Basic interpersonal interactions		2	2	1	1
d730- Relating with strangers		1	2	2	1
d760- Family relationships			2		1
d920- Recreation and leisure		1	4	1	2

Key: 0 (no problem), 1 (mild problem), 2 (moderate problem), 3 (severe problem), 4 (complete problem).

Table 4 features the breakdown of qualifiers related to *Activity and Participation* for the group with Parkinson's, according to family members' perceptions.

In the Activity and Participation component (Table 4), the categories that showed greater difficulty were associated with oral and written language, specifically in the categories of speaking (d330), fine hand use (d440), conversation (d350), hand and arm use (d445), basic interpersonal interactions (d710) and relating with strangers (d730). Given the sample size, these perceptions

reflect only the group of family members included in the study.

Regarding written language and activities of daily living, some family members described the impact of PD and the strategies used by the individuals in their care for communicating and performing daily tasks, as illustrated below:

"For writing, even for writing on the cell phone, now he's starting to have difficulty, so he's sending more audio messages (...). His handwriting is getting smaller every day (...) and he no longer eats with a fork, only with a spoon." (Family Member 2)



In the *Activity and Participation* component, the activities of daily living reported as difficult included: carrying out daily routine (d230), handling stress and other psychological demands (d240), walking (d450), dressing (d540), eating (d550) and doing housework (d640) (Table 3). The example below relates to carrying out daily routine (d230), based on the question "Is the family member with PD able to perform daily activities independently?":

"He is; he makes breakfast. I help with showering a bit, but he can shower on his own too. We go for walks, I don't like him going alone, so I always go with him. He gets up on his own, and watches movies. He can do some things on his own, yes." (Family Member 3) Regarding the category handling stress and other psychological demands (d240), the narratives showed daily concerns about the progression of PD, as illustrated below:

"For those of us who knew them before the disease and now throughout this slow process... for those of us who live with it daily, it is painful, both for them and for us (...). When these groups started, I thought: I'm going to have to witness all this, it's very difficult, there are mild cases, moderate cases and advanced cases, and I will have to take part in all of this... and we end up without answers: oh my God, how am I going to cope with this?" (Family Member 2)

**Table 5.** Breakdown of the qualifiers of the environmental factors component for people with Parkinson's disease according to family members' perceptions

Categories/Qualifiers*	.4	.3	.2	.1	0	+1	+2	+3	+4
e410- Individual attitudes of immediate family members						2	2	3	6
e420- Individual attitudes of friends	1			1		2	4	2	3
e425- Individual attitudes of acquaintances, peers, colleagues, neighbors and community members				1		3	3	1	5
e540- Transportation services, systems and policies	1	2	2			2	1	1	4
e585- Health services, systems and policies	2			1		1	2	3	4

Key: .4 (complete barrier), .3 (severe barrier), .2 (moderate barrier), .1 (mild barrier), 0 (no facilitator), +1 (mild facilitator), +2 (moderate facilitator), +3 (severe facilitator), +4 (complete facilitator).

Table 5 features the breakdown of qualifiers related to *Environmental Factors* in the group with Parkinson's, according to family members' perceptions.

In the *Environmental Factors* component (Table 5), most categories were identified as facilitators. The category individual attitudes of friends (e420) was classified by two family members as a complete barrier and as a mild barrier. Transportation Services, Systems and Policies (e540) was rated as complete, severe and moderate barriers. Health Services, Systems and Policies (e585) was classified as complete and mild barriers. Individual attitudes of friends and using transportation were cited as barriers to autonomy and independence, illustrated by the following statements:

"Some friends make things harder, they want to know everything and say he can't do things. He can do them, even if more slowly or with less intensity, but he can. They tell him: 'You have Parkinson's, you can't do that.' Just imagine how irritating that is. He can do it!" (Family Member 2)

"Uber is difficult, she has trouble using the app. Generally, people with Parkinson's are older, not always, but they often struggle to order the Uber alone, figure out where it will stop, and many times the driver doesn't stop exactly at the address, so the person must walk to the car (...). And the bus is even worse because she loses her balance, climbing stairs or standing is difficult, pulling the cord to request a stop, and the bus is usually crowded. It isn't designed with people with Parkinson's in mind (...)." (Family Member 13)

## **Discussion**

The purpose of this study was to analyze functioning from the perspective of family members of people with PD, using the ICF as the analytical framework. The 32 ICF categories used to characterize the components of *Body Functions* and *Activity and Participation* revealed aspects related to



limitations and difficulties that, in interaction with *Environmental Factors*, contributed to impairments in functioning among people with PD.

Family members reported limitations, barriers and facilitators experienced by the people with PD under their care across the components of *Activity and Participation, Body Functions* and *Environmental Factors*. These findings are similar to those of study<sup>15</sup>, which, when analyzing accounts from spouses of people with PD using the ICF, also identified difficulties in these same components. This reinforces the consistency of this study's results, even considering that the perspective analyzed here came from a wider group of family members, not only spouses.

In the *Body Functions* component, in the categories mental functions of language (b167), voice functions (b310) and articulation functions (b320), family members highlighted communication difficulties experienced by people with PD, corroborating the literature, which estimates that human communication disorders affect 80–90% of individuals with PD<sup>16-19</sup>. The similarity between family members' accounts and what is described in the literature underscores the importance of communication as a central dimension of functioning.

Group-based intervention strategies were also recognized as facilitators, with family members highlighting shared experiences and social interaction. This finding aligns with Piccoli, Chun and Zerbeto<sup>6</sup>, who showed that people with PD perceive group therapy as supporting engagement in therapeutic interventions and fostering new friendships, thereby serving as a facilitating environmental factor. Such convergence demonstrates that communication and social interaction, when supported in group contexts, play an important role in enhancing functioning and quality of life.

The relationship between the motor symptoms of PD associated with the components of *Activity and Participation* and *Environmental Factors* influences the limitations observed in daily activities and social participation, as evidenced by this study's results. Thus, the motor symptoms of PD may be closely linked to difficulties described by family members in performing simple tasks, such as carrying out daily routine, dressing and using transportation. Studies show that bradykinesia and other motor symptoms directly affect functioning and independence in daily life<sup>20</sup>. In addition, authors<sup>21</sup> emphasize that multidisciplinary rehabilita-

tion programs can reduce these impacts, reinforcing the need for integrated approaches.

In this study, individuals with PD had a mean age of 67 years, most being older adults. Family members reported that Transportation Services, Systems and Policies (e540) posed barriers to autonomy and independence, highlighting difficulties such as climbing steps, maintaining balance, standing for long periods and dealing with crowded buses. Santos et al.<sup>22</sup> identified increased risks of falls and social exclusion among older adults with reduced mobility when using public transportation. This study, which characterized the functioning of people with PD, emphasized that transportation-related barriers arise not only from the disease condition but also from aging, further limiting social participation.

The results reaffirm the idea that understanding functioning and disability helps guide actions to maximize functional activities, reduce limitations and expand social participation. As a universal framework, the ICF contributes to the development of interdisciplinary and intersectoral policies and initiatives<sup>23</sup>. Therefore, the findings of this investigation reinforce the relevance of multiprofessional therapeutic approaches and public policies aimed not only at symptom management but also at improving functioning, accessibility and participation for this population.

Family members reported that the attitudes of friends may act as barriers to the autonomy and independence of people with PD. These findings are consistent with studies showing that visible PD symptoms, such as tremor or changes in gait, are often viewed as atypical, leading to negative social perceptions<sup>24</sup>. Additionally, research<sup>24</sup> indicates that the attitudes and comments of friends and strangers significantly affect the lives of people with PD, often causing embarrassment and prompting them to avoid social interactions or hide symptoms to escape stigma, as seen in this study. These results highlight the complexity of social interactions for individuals with PD and the importance of a more empathetic and understanding societal response.

The findings of this study indicate that the progression of PD affects not only the individual but also close family members. The difficulties reported by caregivers in doing housework and the need to supervise the person with PD even when they are able to carry out certain activities reveal additional emotional and physical burdens. These findings



align with studies showing increased concern among family members regarding the symptoms and effects of PD on daily life, including issues related to safety, social isolation, limited access to appropriate health support and the need for more information about the disease. Various authors emphasize the importance of support not only for individuals with PD but also for their families, to ensure a more informed, supportive and compassionate care environment for all involved in dealing with this health condition<sup>25–28</sup>.

The statements by family members analyzed in this study regarding how they cope with disease progression emphasize the importance of interventions directed at families. One study<sup>29</sup> identified benefits of support groups for family members and caregivers of individuals with PD, addressing topics such as self-care, support networks, medication effects, patient autonomy, diet, home safety, time management, grieving and shared experiences. These groups provide emotional and practical benefits<sup>30</sup>. Such parallels reinforce the need to design interventions not only for individuals with PD but also for their support networks, which may serve as facilitating environmental factors or, in the absence of support, as barriers.

The results reveal an interesting contrast between the perceptions of family members and the self-reported experiences of people with PD in a previous study<sup>6</sup>, particularly regarding the lower degree of difficulty perceived by family members in the categories of speaking (d330) and conversation (d350). This divergence highlights the importance of considering different viewpoints—both that of the individual and of their family member—when investigating the impact of PD. This underscores the need for a broader approach to studying PD, including both perspectives in order to achieve a more comprehensive and accurate understanding of the challenges faced by people with PD and by those who live alongside them.

This broader perspective can therefore support more effective intervention strategies directed at both the person and their family, within a patient-centered and comprehensive healthcare approach for the population studied. The ICF is a classification system that enables the characterization of the perceptions of different individuals, family members and healthcare professionals involved in the life of the person with PD.

Thus, adopting the ICF's biopsychosocial model contributed to expanding the understanding of the perceptions of all involved—people with PD, their family members and healthcare professionals—regarding the aspects that shape health and daily life, as previously discussed6. This approach considers not only the components of Body Functions and Body Structures, but also Activity and Participation and Environmental and Personal Factors, which influence the functioning of individuals with PD. This means that even among people with the same condition, there may be significant differences in terms of challenges, barriers and facilitating factors, according to the ICF<sup>12</sup>. Its widespread use is associated with the pursuit of more effective communication among healthcare professionals, providing an interdisciplinary model of care through the shared language provided by this classification<sup>29</sup>.

The findings reaffirm that by using the ICF, healthcare professionals are able to adopt a comprehensive and more detailed approach to care planning that considers the individual within their context. As it provides a common language across clinical practice, teaching and research, the ICF can also serve as a benchmark for analyzing health status<sup>29</sup>. However, it is important to note that the findings presented here refer exclusively to this sample and are not generalizable.

The difficulties reported in the components of *Activity and Participation* and *Environmental Factors* show that analyzing the ICF categories from the perspective of the family member made it possible to observe both the performance and involvement of the individuals studied in various spheres of life and in different environments, as noted in another study<sup>5</sup>. In addition, the results regarding functioning and disability in the population studied may contribute to more individualized therapeutic strategies tailored to the specific needs of each person, as recommended by the ICF<sup>6,12</sup>.

Given the small sample size, the findings cannot be generalized; however, they highlight relevant aspects of family members' perceptions regarding care for people with PD. When considered alongside other studies from the research group, they contribute to a broader understanding of the functioning of this population, serving as a basis for future investigations with larger and more representative samples.



## Conclusion

The results highlight the perceptions of family members caring for people with PD, in light of the ICF, regarding the components of *Body Functions* and *Activity and Participation*—especially the categories and domains related to language, activities of daily living (ADLs) and interpersonal interactions—which, combined with the component of *Environmental Factors*, play a significant role in the group's dependence on their family members.

Therefore, considering Speech-Language Pathology from the perspective of the family member, based on the ICF categories and the various aspects related to the functioning and disability of individuals with PD, broadens the scope toward a comprehensive and person-centered approach. This perspective aims to support quality of life and the management of the challenges faced by those affected by PD, such as the individuals in this study, as well as those who accompany them in daily life.

Understanding the family members' perceptions of the functioning of the people under their care, in addition to the self-perception of the person with PD, is essential for developing a personalized, person-centered therapeutic plan.

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