REFACS

Original Article
Rev. Fam., Ciclos Vida Saúde Contexto Soc.
http://seer.uftm.edu.br/revistaeletronica/index.php/refacs/index
ISSN: 2318-8413 DOI: 10.18554/refacs.v10i4.6006

Quality of life and occupational performance in people diagnosed with Parkinson's disease

A qualidade de vida e o desempenho ocupacional em pessoas diagnosticadas com Doença de Parkinson

Calidad de vida y desempeño ocupacional en personas diagnosticadas de Enfermedad de Parkinson

Sarah Almeida Rodrigues Basilio[1], Tarciana Martins da Silva Ventura[2], Aline Lobato de Farias[3], Lane Viana Krejčová[4], Kátia Maki Omura[1], Victor Augusto Cavaleiro Corrêa[1]

Received: 22/01/2022 **Accepted:** 02/11/2022 **Published:** 15/12/2022

Objective: to evaluate the quality of life and occupational performance of people diagnosed with Parkinson's disease. **Methods:** a descriptive quantitative research, carried out in a public educational institution, between December 2017 and October 2018. An instrument was used to capture sociodemographic data, the SF-36 Quality of Life Questionnaire, Canadian Occupational Performance Measure and Hoen Scale and Yahr. **Results:** 13 patients in the initial phase of the disease, male (61.3%), with a mean age of e 57.8 for men and 70.2 for women; married (22.5%), single (22.5%); who had over nine years of education (85.0%); Catholic (77.5%); retirees (53.8%), and the Hoehn Scale rating 2 (62.5%). Median scores were found in the domains Mental Health, Vitality, Social Aspects, Emotional Aspects, Functional Capacity, General Health State and Pain. The lowest score was for Physical Aspect Limitations, as well as low averages for the assessment of Performance and Occupational Satisfaction, with emphasis on the self-care problem area. **Conclusion:** the research revealed the influence of the disease on quality of life and occupational performance. The importance of Occupational Therapy is highlighted in promoting the individual's potential to actively participate in occupations in the most independent way possible.
Descriptors: Occupational Therapy; Parkinson Disease; Quality of life; Work performance; Activities of daily living.

Objetivo: avaliar a qualidade de vida e o desempenho ocupacional de pessoas diagnosticadas com doença de Parkinson. **Método:** pesquisa quantitativa descritiva, realizada em instituição pública de ensino entre dezembro de 2017 e outubro de 2018. Utilizou-se instrumentos para captar dados sociodemográficos, o Questionário de Qualidade de Vida SF-36, Medida Canadense de Desempenho Ocupacional e Escala de Hoehn e Yahr. **Resultados:** participaram 13 pacientes em fase inicial da doença, sexo masculino (61,3%), com média de idade de 57,8 para homens e 70,2 para mulheres; casados (22,5%), solteiros (22,5%); escolaridade acima de nove anos (85,0%); católicos (77,5%); aposentados (53,8%) e Escala de Hoehn classificação 2 (62,5%). Verificou-se escore medianos nos domínios Saúde Mental, Vitalidade, Aspectos Sociais, Aspectos Emocionais, Capacidade Funcional, Estado Geral de Saúde e Dor. O menor escore foi em Limitações por Aspectos Físicos, bem como médias baixas para a avaliação do Desempenho e da Satisfação Ocupacional, com destaque na área problema autocuidado. **Conclusão:** a pesquisa revelou a influência da doença na qualidade de vida e no desempenho ocupacional. Ressalta-se a importância da Terapia Ocupacional em promover o potencial do indivíduo de participar ativamente nas ocupações de modo o mais independente possível.
Descritores: Terapia Ocupacional; Doença de Parkinson; Qualidade de vida; Desempenho profissional; Atividades cotidianas.

Objetivo: evaluar la calidad de vida y el desempeño ocupacional de personas diagnosticadas de enfermedad de Parkinson. **Método:** pesquisa cuantitativa descriptiva, realizada en institución pública de enseñanza, entre deciembre de 2017 y octubre de 2018. Se utilizó instrumentos para obtener datos sociodemográficos, el Cuestionario de Calidad de Vida SF-36, la Medida Canadiense de Desempleo Ocupacional y la Escala de Hoehn y Yahr. **Resultados:** Participaron 13 pacientes en la fase inicial de la enfermedad, de sexo masculino (61,3%), con edad media de 57,8 años para los hombres y 70,2 para las mujeres; casados (22,5%), solteros (22,5%); escolaridad superior a nueve años (85,0%); católicos (77,5%); jubilados (53,8%) y clasificación 2 de la Escala de Hoehn (62,5%). Se hallaron puntuaciones medias en los dominios Salud Mental, Vitalidad, Aspectos Sociales, Aspectos Emocionales, Capacidad Funcional, Estado General de Salud y Dolor. La menor puntuación fue en las Limitaciones por Aspectos Físicos, así como bajos promedios para la evaluación del Desempeño y la Satisfacción Ocupacional, con destaque en el área problema autocuidado. **Conclusión:** la investigación reveló la influencia de la enfermedad en la calidad de vida y el desempeño ocupacional. Cabe destacar la importancia de la Terapia Ocupacional en la promoción del potencial del individuo para participar activamente en ocupaciones de la forma más independiente posible.
Descriptores: Terapia Ocupacional; Enfermedad de Parkinson; Calidad de vida; Rendimiento laboral; Actividades cotidianas.

Corresponding Author: Sarah Almeida Rodrigues Basilio– sarahrodrigues530@gmail.com

1. Graduation Course in Occupational Therapy. Universidade Federal do Pará (UFPA). Belem/PA, Brazil.
2. Occupational Therapist. Belem/PA, Brazil.
3. Graduate Program in Health, Environment and Society in the Amazon. UFPA. Belem/PA, Brazil.
4. Institute of Art Sciences. UFPA. Belem/PA, Brazil.

INTRODUCTION

Parkinson's disease (PD) is a chronic progressive neurodegenerative disease that occurs in the central nervous system and is characterized by the loss of dopamine-producing neurons in the substantia nigra. Its description dates back to 1817, when James Parkinson described the main symptoms of the disease, which later received his name[1]. Chronic degenerative diseases are characterized by the inability of the affected system to regenerate and, as they develop progressive and severe effects, they can cause pain and distress to the elderly[2].

This pathology has a higher incidence in men. It affects the population over 65 years of age, for which approximately 10 million people in the world and 200,000 people in Brazil have a confirmed diagnosis[2]. However, although PD affects the elderly more, there is a small number of young adults with the disease, appearing around 21 to 40 years old[3].

Because of the heterogeneous nature of the disease, there is still no fully reliable diagnostic test. Therefore, the diagnosis is currently based on clinical symptoms, which look for two of some of the characteristics that can be: tremor at rest, bradykinesia, rigidity and/or postural instability, this analysis deduces a probable diagnosis[1].

The SPECT TRODAT or DaTscan helps confirm uncertain clinical diagnoses of PD by analyzing the dopamine transporter through brain imaging. Transcranial ultrasonography and PET-CT (Positron Emission Computed Tomography) can also be used to assist in this evaluation[4].

The motor characteristics revolve around disturbances in movement, balance and changes in fine motor control, namely: tremor at rest, bradykinesia, muscle rigidity, postural instability, gait disturbance, voice impairment, seborrhea, urinary incontinence, muscle weakness and hypomimia which would be a decrease in facial expression[5].

The lack of dopamine does not only cause motor symptoms, cognition and emotions are also affected and can cause: depression, dementia, autonomic dysfunctions, psycho-organic disorders and sleep disorders, memory deficits, visual-spatial dysfunction, difficulties in carrying out movements with some sequence and that are repetitive, and slowness in psychological responses[4].

Studies reveal that physical and functional impairments become progressively evident at each stage of the disease, being perceived in occupations[2], that is, daily activities performed by people, in families and in communities and which are valuable and meaningful occupations. Occupations include what people need, want and hope to do[6].

Occupation represents human existence. And it is by performing it that one has self-expression and experiences meaning in everyday life, in addition to giving it meaning. The occupation can be physical, mental, social, sexual, political, spiritual in nature and be contemplative, reflective, meditative or based on actions[7].

As a result of this, both quality of life that encompasses physical health, mental state, degree of independence, social relationships, personal beliefs, relationship with the environment, and occupational performance, reflect the disease on the life of a person. Thus, participation and performance in occupations become fundamental for a good quality of life[8]. Thus, this research aims to evaluate the quality of life and occupational performance of people diagnosed with Parkinson's disease.

METHODS

This research is based on the descriptive quantitative approach[9]. The research was carried out between December 2017 and November 2018, in the *Parkinson Project and Group* of the Neuroplasticity Laboratory of the Health Sciences Institute of the Universidade Federal do Pará (ICS/UFPA). The Parkinson Group emerged in 2015 from Research in Neurosciences Applied to Dance at the UFPA School of Theater and Dance, exploring possibilities from a multidisciplinary perspective. Among these, this project focused on the assessment of quality of life and occupational performance[10].

Participants were people diagnosed with Primary Parkinsonism, according to the London Brain Bank criteria, under a pharmacological scheme; who were in the evaluation phase to start services, aged between 40 and 80 years, of both sexes. In the selection of the sample, patients registered at the ICS/UFPA with PD were considered, for convenience, who were classified without determining a specific level in the Hoehn and Yahr Scale[11].

The following inclusion criteria were used: people with a confirmed diagnosis of Parkinson's disease, who were treated at the ICS/UFPA and who agreed to participate in the research by signing the Free and Informed Consent Form (FICF). To preserve the identity of the participants, random names were used.

This work is part of a research project entitled: *"As ocupações, o desempenho ocupacional, a qualidade de vida e a capacidade funcional em pessoas diagnosticadas com Doença de Parkinson"* (Occupations, occupational performance, quality of life and functional capacity in people diagnosed with Parkinson's disease).

At first, a research protocol was used that contained sociodemographic data such as: name, address, contact information, history of the disease and time since diagnosis. Then, the

SF-36 Quality of Life Questionnaire (SF-36) and the Canadian Occupational Performance Measure (COPM) were applied.

The SF-36 (Medical Outcomes Study 36 – Item Short Form Health Survey) is a questionnaire developed by Ware and collaborators that allows the assessment of the quality of life of people affected by various diseases and healthy people. It originated in the United States in the 1980s[13].

The questionnaire consists of 36 questions grouped into 8 categories: Functional Capacity (presence and extent of limitations related to physical capacity), Physical Aspects (limitations regarding the type and amount of work and how much these limitations hinder work and activities of daily living), Pain (presence and intensity of pain and its interference with activities of daily living), General Health State (how the person feels about their overall health), vitality (level of energy and fatigue), Social Aspects (integration of the individual in social activities), Emotional Aspects (impact of psychological aspects on the participant's well-being) and Mental Health (questions about anxiety, depression, changes in behavior or lack of emotional control and psychological well-being), and a question focused on the person's current self-perception compared to the previous year[13].

The protocol in general has easy applicability, being very versatile since its application can be done by self-completion, face-to-face interviews or even by telephone calls. The results are generated through a score given to each question that is transformed into a scale from 0 to 100, with 0 being the worst health condition and 100 being the best, with each category being analyzed separately[13]. The questionnaire was validated for the Portuguese language and was validated for Brazil in 1999 by Ciconelli et al[14].

COPM, on the other hand, was an instrument developed in 1982 by the Canadian Association of Occupational Therapy with a review carried out in 1997 and aims to analyze the performance and satisfaction of the client when carrying out activities, the analysis being made by the client themself, that is, it considers the person's self-perception of the problems encountered in their own occupational performance. The COPM was instituted for the use of occupational therapists[15].

The COPM was based on the Canadian Model of Occupational Performance (MCDO), where the practice is centered on the client, with the individual themself determining their performance. At MCDO, it is recommended that performance is the result of interaction between people (physical, affective and cognitive components), environment (physical, social, cultural and institutional elements) and occupation (self-care, productivity and leisure categories)[15].

It is a semi-structured interview, divided into five steps, in which the activities that the person performs are identified, categorizing them into Self-Care, Productivity and Leisure. Activities that present occupational performance problems are selected, and the degree of importance that each activity has for the individual is assigned. Thus, an initial assessment of performance and satisfaction in these activities is carried out and a reassessment of the same after a period of time to verify the increase or decrease of the values. The measure verifies the results of the intervention applied, through administration at the beginning of the occupational therapeutic intervention and at the end or at intervals predetermined by the client and the therapist[15].

Values are given within a scale of 1 to 10, where 1 represents a lower performance/satisfaction and 10 a better one. The scores are formed in the initial assessment and in the reassessment, allowing the verification of the difference in values, if there was a decrease or increase[15].

Since its translation into Portuguese, the COPM has been used in Brazil and is known to be culturally sensitive, reliable and effective. It was validated in Brazil in 2012, through the study by Chaves[16].

Data analysis was performed by allocating the data in a database to carry out the statistical analysis. According to the nature of the variables, descriptive analysis was used, informing the percentage values of the results of categorical variables, in addition to obtaining means, medians, standard deviation of numerical variables and Pearson's correlation coefficient, which were analyzed in the BioEstat software 5.4. The database, as well as the tables and graphs were built in Microsoft EXCEL™ 2007.

This research followed the precepts of Resolution 466/12 of the National Health Council[12], the project was submitted and approved by the Ethics Committee and Research in Human Beings (CEP), of the João de Barros Barreto University Hospital of the Universidade Federal do Pará, under opinion No 2,403,099.

RESULTS

Thirteen patients with early-stage PD participated. Table 1 shows the socio-demographic profile, in which the following stand out: male (61.3%), with a mean age of 57.8 for men and 70.2 for women; married (22.5%), single (22.5%); with over nine years of education (85.0%); Catholic (77.5%); retired (53.8%) and had different jobs - homemakers, salesperson, civil employee and industrial mechanic (38.7%). According to the Hoehn and Yahr

Scale[11], three were in classification 1 (22.5%), eight in classification 2 (62.5%) and two in classification 3 (15.0%).

Table 1. Sociodemographic profile of people diagnosed with Parkinson's disease. Belém/PA, 2019.

	Participants No = 13		
Variables	**No**	**F (%)**	**Mean**
Sex			
Female	05	38.7%	
Male	08	61.3%	
Age			
Women	-	-	70.2 (mean)
Men	-	-	57.8 (mean)
Marital status			
Single	03	22.5%	
Married	06	47.5%	
Divorced	02	15.0%	
Widowed	01	07.5%	
Civil union	01	07.5%	
Educational level (years)			
<9	02	15.0%	
>9	11	85.0%	
Religion (self reporter)			
Christian	02	15.0%	
Catholic	10	77.5%	
Evangelical	01	07.5%	
Profession			
Retired	07	53.8%	
Assistance	01	07.5%	
Others	05	38.7%	
Hoehn and Yahr Scale			
1	03	22.5%	
1.5	08	62.5%	
2	02	15.0%	
2.5	00	00.0%	
3	00	00.0%	
4	00	00.0%	
5	00	00.0%	

Note: Age is expressed as an average. The other data are expressed as follows, (No): absolute frequency. F (%) frequency in percentage. Hoehn and Yahr Scale[11].

In the evaluation obtained by the SF-36, the highest average found in the scores of the domains were those related to the domain Mental Health (78.7617.15), Vitality (71.9218.08), Social Aspects (69.9225.02), Emotional Aspects (69,1541,93), followed by the domains of Functional Capacity (68,4624,01), General Health State (65,3816,23) and Pain (57,4632,17). The lowest score was given in the domain of Physical Aspect Limitations (38.4642.83) according to Table 2.

In the evaluation of the COPM it was verified that the participants with Parkinson's Disease presented results in the occupational performance of 4,072.32 and for the evaluation of satisfaction 3,842.67 (Table 3).

Table 2 - Values of components of the SF-36 questionnaire in people diagnosed with Parkinson's disease. Belém/PA, 2019.

	Participants N0=13
Dominion	**Mean ±SD**
Fuctional Capacity	68.46±24.01
Physical Aspects Limitations	38.46±42.83
Pain	57.46±32.17
General Health State	65.38±16.23
Vitality	71.92±18.08
Social Aspects	69.92±25.02
Emotional Aspects	69.15±41.93
Mental Health	78.76±17.15

Note: Data are expressed as mean±standard deviation. PD: Parkinson's disease.

Table 3. Evaluation of Occupational Performance and Satisfaction by the Canadian Occupational Performance Measure in people diagnosed with Parkinson's Disease. Belém/PA, 2019.

	Participants No=13
Variables	
Occupational performance	4.07±2.32
Emotional satisfaction	3.84±2.67

Note: Data are expressed as mean±standard deviation. PD: Parkinson's disease.

Table 4 presents data from the Canadian Occupational Performance Measure, listing the problem activities cited by respondents within each subarea of the Self-Care, Productivity, and Leisure domains.

Activities related to self-care were mentioned the most, with Personal Care being the most cited problem sub-area (20.0%). Then, Functional Mobility (18.0%) and then Independence Outside the Home (14.0%). In these questions, the problem activities were associated with getting dressed, eating, bathing, mobility on the street, mobility at home and transportation (Table 4).

Regarding Productivity, the sub-area of housework was mentioned most frequently (14.5%), where the other areas had a small value and/or equal to zero. With performance problems appearing in cooking, washing dishes, cleaning house, washing and ironing (Table 4).

In the Leisure occupation, the Active Recreation subarea was the subarea with the most problems, featuring 14.5% of the total citations, with the other subareas having a small value. The activities involved were walking, exercising and going to church (Table 4).

There was a positive and moderate correlation, however, very close to significant, between the pain domain of the SF-36 and Occupational Performance, and the Pain domain of the SF-36 and occupational satisfaction. In the other correlations, there was no significance, according to Table 5.

Table 4. Activities and problem areas of Occupational Performance identified by people diagnosed with Parkinson's Disease through the Canadian Measure of Occupational Performance. Belém/PA, 2019.

	F(No)	*F(%)*
SELFCARE		
Personal care	**21**	**20.0%**
Getting dressed	08	7.0%
Eating	06	5.5%
Bathing	06	5.5%
Self-care	01	1.0%
Functional mobility	**19**	**18.0%**
Mobility at home	09	7.5%
Mobility on the street	10	9.0%
Independence outside of home	**14**	**14.0%**
Shopping	05	5.0%
Transport	06	5.5%
Finances	03	3.0%
PRODUCTIVITY		
Work	**04**	**4.0%**
Working	04	4.0%
House chores	**15**	**14.5%**
Cooking	04	4.0%
Washing dishes	04	4.0%
Cleaning house	03	3.0%
Doing laundry	03	3.0%
Ironing	01	1.0%
Holding objects	00	0.0%
Playing/school	**00**	**0.0%**
LEASURE		
Quiet/passive recreating	**09**	**7.5%**
Writing	03	3.0%
Reading	03	3.0%
Watching television	01	1.0%
Crossword puzzles	02	2.0%
Music	00	0.0%
Active recreation	**15**	**14.5%**
Traveling	02	2.0%
Strolling	07	6.0%
Church	01	1.0%
Exercising (hiking, trails, sports)	05	5.0%
Socializing	**09**	**7.5%**
Going to birthday parties	02	2.0%
Going to parties	02	2.0%
Visiting friends and relatives	05	5.0%
Driving	-	-

Note: (No): number of times the Occupational Performance Areas were mentioned during the assessment. F(%) frequency in which the Occupational Performance Areas were mentioned during the evaluation.

Table 5. Correlation between quality of life and occupational performance in people diagnosed with Parkinson's disease. Belém/PA, 2019.

Dominion SF-36	(COPM)			
	Occupational performance		Occupational satisfaction	
	r	P-value	r	P-value
Functional Capacity	-0.2820	0.3505	-0.3277	0.2743
Physical Aspect Limitations	0.2912	0.3344	0.4060	0.1685
Pain	0.5346	0.0597*	0.5355	0.0592
General Health State	-0.1880	0.5385	0.0154	0.9601
Vitality	-0.4239	0.1488	-0.3033	0.3137
Social Aspects	0.1423	0.6428	0.2520	0.4063
Emotional Aspects	0.4715	0.1038	0.3420	0.2526
Mental Health	0.2738	0.3653	0.1878	0.5389

Note: Pearson's linear correlation ($p<0.05$). SF-36: Abbreviated Health Assessment Form 36 (from English, Medical Outcomes Study 36 – Short Form Health Survey item). COPM: Canadian Occupational Performance Measure Abbreviated Form.

DISCUSSION

The prevalence of Parkinson's disease in the general population is around 0.3%, and increases with age by an average of 1.0% in individuals over 60 years old and 3.0% for those over 80 years old, with an incidences equivalent to estimates of 8 and 18 per 100,000 people/year[17].

In the analyzed sample, most participants were male. In a study carried out in Salvador, in the state of Bahia, there was a predominance of men (55 men and 24 women)[18]. Another study also showed the presence of more cases in males[19]. Some studies have sought to understand the reason for this higher incidence among men, which has been indicating that the estrogen hormone present in women delays and interferes with the progression of the disease[20].

It was observed that the involvement in men, in addition to being greater, occurs earlier than in women, which is in line with another investigation that found the average age of women is higher than that of men[21].

Education in more than nine years of study, which could favor educational programs and instructions, which are important to guide living with the progressive and irreversible condition of the disease, as well as helping to improve the quality of life and relationship with the disease, and the level of education is consistent with the enlightenment and instruction of the elderly[22].

In the evaluation of the eight domains of the SF-36 protocol, a median score was obtained for pain, a low average score for limitations due to physical aspects and other domains with means slightly above the median, such as General Health State, Functional Capacity, Emotional Aspects, Social Aspects, Vitality and Mental Health. Generally speaking, most domains are in intermediate scores. In the Hoehn and Yahr Scale, a classification of 1 to 3 refers

to mild to moderate disability, that is, there is minimal or no functional impairment, with some restriction in activities, still having independence, with mild or moderate impairment in those affected by the disease[23]. Thus, possibly the reason why most scores were slightly high medians may be related to the very initial stage of the disease in which the sample participants are on the Hoehn and Yahr scale, which is from 1 to 3.

Although average, these domains are already revealed, with a reduction in self-perception about their quality of life. Low performance and low satisfaction in occupations can influence changes in the perception of quality of life of those affected[24]. In addition, not performing leisure activities also has a significant influence on the perception of quality of life[17].

For the domain limitations due to physical aspects, the score was below the median, which may be related to a lower average found in occupational performance and satisfaction. Physical factors can cause an imbalance in occupational performance, however, when added to the emotional effects that problems in occupational performance can generate, the complexity in these cases is revealed. The inability to engage satisfactorily can bring the feeling of incapacity, worthlessness and lack of autonomy, which can lead to isolation and limitation in their occupational role[24].

The COPM presented scores that reveal a decrease in the perception of occupational performance, with self-care being the most cited area, that is, activities such as personal care (getting dressed, eating and bathing), functional mobility (mobility on the street and at home) and independence outside the home (transportation and shopping). It can be assumed that subjects with less impairment are still experiencing the loss of skills, which means that the most basic occupations begin to demand problems. This result is consistent with the statement that PD leads to a gradual loss of skills, especially when there are no obvious symptoms of cognitive deficits, which makes the individual's own vision painful[25].

It is possible that due to their age, few people mentioned work as an affected occupation. However, activities related to domestic chores subcategory were cited 15 times, both by men and women, as an impaired occupation. Most being retired may be related to more activities involving the domestic sphere to occupy their free time. When the disease and the consequent symptoms begin to appear, they end up making it difficult to engage in these occupations, limiting occupational possibilities[2], which may reflect on performance and satisfaction.

Another limitation in the occupational list was in the Active Recreation subcategory, mentioned 15 times, and which may be related to the physical limitations mentioned in the SF-36, consequently causing a reduction in occupations related to social life and leisure activities[26]. On the other hand, quiet/passive recreation was less cited as a problem area, that is, the

occupational form that is related to what people do[27], acquiring this new format, writing, reading, watching television and crossword puzzles, became part of everyday life, making the home the place where leisure is practiced the most, bringing occupations that demand less physical effort to this environment.

PD causes occupational deprivation, which is a state in which a person cannot do necessary and meaningful things in their life. In this state, engagement opportunities related to society, culture and individuals become difficult, or even impossible[28]. Based on the analysis of the COPM, it can be seen that there are occupational restrictions arising with the disease, even at a mild to moderate stage on the Hoehn and Yahr Scale, with occupational changes for some occupations.

An almost significant correlation was observed between the Pain domain of the SF-36 and Occupational Performance, and the Pain domain of the SF-36 and Occupational Satisfaction, that is, pain may be starting to influence the lower average found in performance and occupational satisfaction (SF-36). Pain is characteristic of PD, which may be preceded or accompanied by motor symptoms of the disease, so that the person ends up suffering for a longer time[29]. Also, the score a little below the average in the SF-36 in the field of limitations due to physical aspects, followed by an average pain score may be generating progressive occupational changes and in the individual's potential to participate actively and satisfactorily in their occupations.

No significant correlation was identified between the other domains of quality of life of the SF-36 (Functional Capacity, Physical Aspect Limitation, General Health, Vitality, Social Aspects, Emotional Aspects, Mental Health) and performance/occupational satisfaction of the COPM . This may have happened due to the small number of participants in the sample, not being statistically sufficient to find a correlation, or even due to the initial phase of the disease. At the beginning of PD, people are still trying to understand how the disease is affecting them and the need to carry out the adaptation process[7].

Aging, as a process with biological, psychological and social facets, is a context that alters the perceptions that human beings have of their relationships with the world, with themselves and with their own history. Being able to carry out occupations independently and autonomously until the end of life is what is sought, which represents a beneficial aging level[30].

Given this, there is the importance of Occupational Therapy to help adapt the occupational role to the progress of the disease, increasing the individual's potential to actively participate in their occupations in the most independent way possible.

CONCLUSION

The factors gender, age, education, profession and stage of the disease were shown to be influential in certain areas of the domains, performance and satisfaction.

Although the participants are in the initial stage of the manifestation of PD symptoms, there are indications of a decrease in self-perception of quality of life and low scores for performance and satisfaction. The results reveal the need for occupational therapists to use different assessment strategies, methods and techniques for their interventions in the occupational context.

Regarding the limitations of the study, an important point was the sample size and the non-comparison with other groups in more advanced stages of the disease.

REFERENCES

1. Kouli A, Torsney KM, Wei-Li K. Parkinson's Disease: Etiology, Neuropathology, and Pathogenesis. In: Parkinson's Disease: Pathogenesis and Clinical Aspects. Brisbane (AU): Codon Publications; 2018. p. 4-5.
2. Silva TP, Carvalho CRA. Doença de Parkinson: o tratamento terapêutico ocupacional na perspectiva dos profissionais e dos idosos. Cad Bras Ter Ocup. [Internet]. 2019 [cited in 08 Mar 2021]; 27(2):331-44. DOI: https://doi.org/10.4322/2526-8910.ctoAO1229
3. Post B, Heuvel LVD, Prooije TV, Ruissen XV, Warrenburg BV, Nonnekes J. Young Onset Parkinson's Disease: A Modern and Tailored Approach. J Parkinsons Dis. [Internet]. 2020 [cited in 08 Mar 2021]; 10(1):29–36. DOI: https://doi.org/10.3233/JPD-202135
4. Fernandes RC, Rosso ALZ, Vinceni, MB, Araujo NC. A Ultrassonografia transcraniana como método diagnóstico em neurologia. Parte II: Revisão da literatura. Rev Bras Neurol. [Internet]. 2011 [cited in 15 Oct 2021]; 47(2):32-41. Available from: http://files.bvs.br/upload/S/0101-8469/2011/v47n2/a2211.pdf
5. Souza MJS, Doná F, Duim E. Perfil sociodemográfico, clínico e funcional de idosos com Doença de Parkinson. Brazilian Journal of Health Review [Internet]. 2021 [cited in 20 Oct 2022]; 4(3):10548-57. DOI: https://doi.org/10.34119/bjhrv4n3-076
6. American Occupational Therapists Association. Therapy Practice Framework: domain and process. The American journal of occupational therapy. [Internet]. 2020 [cited in 17 Mar 2021]; 74(2):2-32. Available from: https://research.aota.org/ajot/article-abstract/74/Supplement_2/7412410010p1/8382/Occupational-Therapy-Practice-Framework-Domain-and?redirectedFrom=fulltext
7. Faria I. Disfunções neurológicas. In: Cavalcanti A, Galvão C. Terapia Ocupacional: Fundamentação e Prática. Rio de Janeiro: Guanabara Koogan; 2007; p. 187-204.
8. Gritti CC, Paulino VU, Marques LHN, Castiglioni L, Bianchin MA. Desempenho ocupacional, qualidade de vida e adesão ao tratamento de pacientes com epilepsia. Rev Ter Ocup Univ São Paulo. [Internet]. 2015 [cited in 17 Mar 2021]; 26(1):93-101. DOI: https://doi.org/10.11606/issn.2238-6149.v26i1p93-101
9. Dalfovo MS, Lana RA, Silveira A. Métodos quantitativos e qualitativos: um resgate teórico. Revista Interdisciplinar Científica Aplicada [Internet]. 2008 [cited in 17 Mar 2021]; 2(4):1-13. Available from: https://portaldeperiodicos.animaeducacao.com.br/index.php/rica/article/view/17591/11376
10. Grupo Parkinson: Pesquisa e cuidado [Internet]. Belém: Ocupa Parkinson; 2017 [cited in 05 Dec 2021]. Projeto Ocupa Parkinson; [cerca de 1 tela]. Available from: https://www.grupoparkinson.org/projetos

11. Rabey JM, Korczyn AD. The Hoehn and Yahr Rating Scale for Parkinson's Disease[Internet]. In: Instrumental Methods and Scoring in Extrapyramidal Disorders. Berlin: Springer; 1995 [cited in 19 Dec 2021]. p. 7-17. Available from: https://link.springer.com/content/pdf/10.1007/978-3-642-78914-4.pdf?pdf=button
12. Conselho Nacional de Saúde (Brasil). Resolução nº 466, de 12 de dezembro de 2012. Normas e diretrizes regulamentadoras de pesquisas envolvendo seres humanos [internet]. Diário Oficial [da] República Federativa do Brasil, Brasília, DF: [Ministério da Saúde]; 2012 [cited in 13 Dec 2021] 1-12p. Available from: https://conselho.saude.gov.br/resolucoes/2012/Reso466.pdf
13. Silva RO, Pereira JN, Milan EGP. Avaliação da qualidade de vida com o instrumento SF-36 durante a pandemia do COVID-19: um estudo piloto. Research, Society and Development. 2021; 10(9):1-8.
14. Ciconelli RM, Ferraz MB, Santos W, Meinão I, Quaresma MR. Tradução para língua portuguesa e validação do questionário genérico de avaliação de qualidade de vida SF-36 (Brasil SF-36). Rev Bras Reumat. [Internet]. 1999 [cited in 20 Aug 2021]; 39(3):143-50. Available from: https://www.ufjf.br/renato_nunes/files/2014/03/Valida%C3%A7%C3%A3o-do-Question%C3%A1rio-de-qualidade-de-Vida-SF-36.pdf
15. Law M, Baptiste S, Carswell A, Mccoll MA, Polatajko HL, Pollock N. Medida canadense de desempenho ocupacional (COPM). Trad. Lívia de Castro Magalhães, Lilian Vieira Magalhães e Ana Amélia Cardoso. Belo Horizonte: Editora UFMG, 2009. 50p.
16. Chaves GFS. Estudo da Confiabilidade e validade da Medida Canadense de Desempenho Ocupacional (COPM) em idosos com Comprometimento Cognitivo Leve (CCL) [Internet]. [Dissertação]. São Paulo: Faculdade de Medicina, Universidade de São Paulo; 2012 [cited in 20 Dec 2021]. 89p. Available from: https://www.teses.usp.br/teses/disponiveis/5/5160/tde-06112012-111613/publico/GiselideFatimadosSantosChaves.pdf
17. Filippin NT, Martins JS, Libera LB, Halberstadt BF, Severo AR. Qualidade de vida de sujeitos com doença de Parkinson e seus cuidadores. Fisioter Mov. [Internet]. 2014 [cited in 20 Aug 2021]; 27(1):57-66. DOI: http://dx.doi.org.10.1590/0103-5150.027.001.AO06
18. Fernandes I, Filho ASA. Estudo clínico-epidemiológico de pacientes com Doença de Parkinson em Salvador-Bahia. Rev Bras Neurol Psiquiat. [Internet]. 2018 [cited in 07 Feb 2022]; 22(1):45-59. Available from: https://www.revneuropsiq.com.br/rbnp/article/view/244/141
19. Silva ABG, Pestana BC, Hirahata FAA, Horta FBS, Oliveira ESBE. Doença de Parkinson: revisão de literatura. Brazilian Journal of Development. [Internet]. 2021 [cited in 07 Feb 2022]; 7(5):47677-98. DOI: http://dx.doi.org.10.34117/bjdv7n5-258
20. Lee YH, Cha J, Chung SJ, Yoo HS, Sohn YH, SeokYe B, Lee PH. Benefcial efect of estrogen on nigrostriatal dopaminergic neurons in drug-naïve postmenopausal Parkinson's disease. Scientific Reports. [Internet]. 2019 [cited in 07 Feb 2022]; 9(1):1-9. DOI: 10.1038/s41598-019-47026-6
21. Hayes MT. Gender Differences in Parkinson's Disease. Neurology and Psychiatry of Women [Internet] 2019. [cited in 25 Nov 2021]; 1(1):213-7. DOI: https://doi.org/10.1007/978-3-030-04245-5_24
22. Navarro-Peternella FM, Marcon SS. Qualidade de vida de indivíduos com Parkinson e sua relação com tempo de evolução e gravidade da doença. Rev Latino-Am Enf. [Internet]. 2012 [cited in 25 Nov 2021]; 20(2):1-8. Available from: https://www.scielo.br/j/rlae/a/G7XtWrnhBdm33mFmJNFbSXj/?format=pdf&lang=pt
23. Silva FS, Pabis JVPC, Alencar AG, Silva KB, Navarro-Peternella FM. Evolução da doença de Parkinson e comprometimento da qualidade de vida. Rev Neurociênc. [Internet]. 2010 [cited in 20 Dec 2021]; 18(4):463-8. DOI: https://doi.org/10.34024/rnc.2010.v18.8432
24. Sanches KC, Cardoso KG. Estudo da fadiga e qualidade de vida nos pacientes com doença de Parkinson. J Health Sci Inst. [Internet]. 2012 [cited in 25 Nov 2021]; 30(4):391-400. Available from: http://repositorio.unip.br/wp-content/uploads/2020/12/V30_n4_2012_p391a394.pdf
25. Valcarenghi RV, Alvarez AM, Santos SSC, Siewert JS, Nunes SFL, Tomasi AVR. O cotidiano das pessoas com a doença de Parkinson. Rev Bras Enferm. [Internet]. 2018 [cited in 25 Nov 2021]; 71(2):272-9. DOI: http://dx.doi.org/10.1590/0034-7167-2016-0577

26. Santos PL, Foroni PM, Chaves MCF. Atividades físicas e de lazer e seu impacto sobre a cognição no envelhecimento. Medicina (Ribeirão Preto). [Internet]. 2009 [cited in 25 Nov 2021]; 42(1):54-60. Available from: http://www.fmrp.usp.br/revista
27. Costa EF, Oliveira LSM, Corrêa VAC, Folha OAAC. Ciência ocupacional e terapia ocupacional: algumas reflexões. Rev Interinst Bras Ter Ocup. [Internet]. 2017 [cited in 12 Dec 2021]; 1(5):650-63. DOI: http://dx.doi.org.10.47222/2526-3544.rbto9687
28. Hammell KW. Ações nos determinantes sociais de saúde: avançando na equidade ocupacional e nos direitos ocupacionais. Cad Bras Ter Ocup. [Internet]. 2020 [cited in 12 Dec 2021]; 28(1):378-400. DOI: https://doi.org/10.4322/2526-8910.ctoARF2052
29. Scalzo PL, Santos RMS, Carvalho DV, Magalhães HC, Christo PP, Souza MS, et al. Caracterização da dor em pacientes com Doença de Parkinson. Revista Brasileira de Neurologia [Internet]. 2018 [cited in 12 Dec 2021]; 54(4):19-25. Available from: https://docs.bvsalud.org/biblioref/2018/12/967831/revista544v20-artigo-3.pdf
30. Souza IP, Santos LM, Santana VS, Feitosa AG. Capacidade funcional em idosos com doença de Alzheimer e doença de Parkinson: revisão bibliográfica. Rev Pesqui Fisioter. [Internet]. 2014 [cited in 20 Nov 2021]; 4(1):78-84. DOI: https://doi.org/10.17267/2238-2704rpf.v4i1.377

Associated Publisher: Rafael Gomes Ditterich.

Conflict of Interests: the authors declared there is no conflict of interests.

Financing: none.

CONTRIBUTIONS

Sarah Almeida Rodrigues Basilio and **Aline Lobato de Farias** contributed to data collection and analysis and writing. **Tarciana Martins da Silva Ventura** participated in the design, collection and analysis of data and writing. **Lane Viana Krejčová** and **Kátia Maki Omura** collaborated in the writing and revision. **Victor Augusto Cavaleiro Corrêa** contributed to the design, data analysis and revision.

How to cite this article (Vancouver)

Basilio SAR, Ventura TMS, Farias AL, Krejčová LV, Omura KM, Corrêa VAC. Quality of life and occupational performance in people diagnosed with Parkinson's disease. Rev Fam, Ciclos Vida Saúde Contexto Soc. [Internet]. 2022. [cited in *insert day, month and year of access*]; 10(4):777-90. Available from: *insert access link*. DOI: *insert DOI link*

How to cite this article (ABNT)

BASILIO, S. A. R.; VENTURA, T. M. S.; FARIAS, A. L. ; KREJČOVÁ, L. V.; OMURA, K. M.; CORRÊA, V. A. C. A. Quality of life and occupational performance in people diagnosed with Parkinson's disease. **Rev. Fam., Ciclos Vida Saúde Contexto Soc.**, Uberaba, MG, v. 10, n. 4, p. 777-90, 2022. DOI: *insert DOI link*. Available from: *insert access link*. Access in: *insert day, month and year of access*.

How to cite this article (APA)

Basilio, S.A.R., Ventura, T.M.S., Farias, A.L., Krejčová, L.V., Omura, K.M., & Corrêa, V. A. C. (2022). Quality of life and occupational performance in people diagnosed with Parkinson's disease. *Rev. Fam., Ciclos Vida Saúde Contexto Soc.*, 10(4), 777-90. Retrieved in *insert day, month and year of access* from *insert access link*. DOI: *insert DOI link.*