



ISSN: 0975-833X

Available online at <http://www.journalera.com>

INTERNATIONAL JOURNAL  
OF CURRENT RESEARCH

International Journal of Current Research  
Vol. 13, Issue, 01, pp.16024-16026, January, 2021

DOI: <https://doi.org/10.24941/ijcr.40581.01.2021>

## RESEARCH ARTICLE

### CARING FOR PARKINSON'S DISEASE: THE CAREGIVER AS A HIDDEN PATIENT

Dellaiane Caroline Barbosa, Marco Orsini, Jacqueline Fernandes do Nascimento, Antônio Marcos da Silva Catharino, \*Thais de Rezende Bessa-Guerra, Adalgiza Mafra Moreno and Nicolle Nunes

Professor da escola de Medicina UNIG e Instituto CADUCEU de Educação Médica Especializada – SP

#### ARTICLE INFO

##### Article History:

Received 14<sup>th</sup> October, 2020

Received in revised form

25<sup>th</sup> November, 2020

Accepted 10<sup>th</sup> December, 2020

Published online 30<sup>th</sup> January, 2021

##### Key Words:

Acute myocardial infarction; Cardiac arrhythmias; In-hospital mortality; Serum potassium concentration.

#### ABSTRACT

**Background:** Dyskalemia is a risk factor for poor prognosis in patients with acute myocardial infarction (AMI). There is still controversy regarding the optimal level of serum potassium in these patients. **Method:** We studied patients who were admitted with a recorded diagnosis of AMI retrospectively. Using multivariable logistic regression models, we assessed the relationship between admission serum potassium concentration (SPC) and the risk of in-hospital mortality and arrhythmias. Potassium levels were divided as follows:  $K^{+} < 3.5$ ;  $K^{+} = 3.5 - < 4.0$ ;  $K^{+} = 4.0 - < 4.5$ ;  $K^{+} = 4.5 - 5.0$ ;  $k^{+} > 5.0$  mmol/l; with  $K^{+} = 4.0 - < 4.5$  mmol/l as reference group. **Results:** Of the 2698 patients included in this study, 38.1% were diagnosed with ST-segment elevation myocardial infarction (STEMI) and 60.3% with non ST-segment elevation myocardial infarction (NSTEMI). Frequency of patients with diabetes, renal failure, atrial fibrillation and 2<sup>nd</sup>/3<sup>rd</sup> degree AV block were higher in the  $K^{+} > 5.0$  mmol/l group and those with Hypertension and ventricular arrhythmia in the  $K^{+} < 3.5$  mmol/l group. A U-shaped association between admission SPC and in-hospital mortality was observed (OR 1.30; 95% CI: 0.50, 7.35) and (OR 1.21; 95% CI: 0.55, 4.38) in patients with  $K^{+} > 5.0$  mmol/l and  $K^{+} < 3.5$  mmol/l respectively. However patients with AMI and diabetes demonstrated a J shaped curve with the highest in-hospital mortality observed in the  $K^{+} > 5.0$  mmol/l group. The lowest risk for in-hospital mortality was observed in  $K^{+} = 3.5 - < 4.0$  (OR 0.82; 95% CI: 0.53, 2.19) followed by  $K^{+} = 4.0 - < 4.5$  mmol/l. **Conclusion:** Potassium levels between 4.0 and 4.5 mmol/l was relatively safe but not superior to levels between 3.5 and 4.0 mmol/l. It might be beneficial to target SPC between 3.5 and 4.0 mmol/l.

Copyright © 2021, Dellaiane Caroline Barbosa et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Citation:** Dellaiane Caroline Barbosa, Marco Orsini; Jacqueline Fernandes do Nascimento; Antônio Marcos da Silva Catharino et al. 2021. "Caring for parkinson's disease: the caregiver as a hidden patient", *International Journal of Current Research*, 13, (01), 16024-16026.

## INTRODUCTION

Parkinson's disease can be characterized as a chronic and progressive neurological entity, common in individuals over 65 years of age, of idiopathic etiology and marked by the depletion of neurons of the substantia nigra in the region of the nuclei of the base. The pathological process of PD involves motor disorders, such as stiffness, tremor at rest, bradykinesia and loss of postural balance. This multisystemic disease also causes the presence of non-motor symptoms, such as depression, hyposmia, gastroparesis, sleep disturbance, among other disorders. Motor and non-motor symptoms corroborate the functional disability of the Parkinsonian individual, causing dependence, social isolation and impact on quality of life (QOL), which compromises the performance of their daily activities and instrumental activities of daily living. In view of the progression of the pathology, the role of the

transdisciplinary team that aims to minimize the chronicity of the disease, providing alternatives related to QOL and autonomy is essential. Thus, the need for the presence of the caregiver, whether that professional or family member who offers constant assistance, from medication administration to promoting actions that can preserve the biopsychosocial well-being of the patient, is highlighted. It is worth mentioning that the act of caring results in overload, adequacy of the routine and time spent, which causes damage to the caregiver's quality of life, causing the same to have physical and mental strain, as the professional or family member offers support emotional to the subject and is still responsible for managing all care, soon develops psychiatric symptoms, sleep disorder, fatigue and hypertension. Given this context, the present study aims to list data from the literature related to the change of roles that goes from caregiver to hidden patient.

## METHODS

This is a study of systematic literature review directed by the following research question: How does the caregiver become a hidden patient of the disease?

\*Corresponding author: *Thais de Rezende Bessa-Guerra*, Professor da escola de Medicina UNIG e Instituto CADUCEU de Educação Médica Especializada – SP.

### The collection of information was hampered by the reduced availability of studies on the topic

Base	Title	Author	Year
Scielo	The caregiver's perspective of people with Parkinson's: an integrative review	Ferreira D.P.C, Coriolano M.G.W.S, Lins C. C. S.A	2017
Scielo	Quality of life of subjects with Parkinson's disease and their caregivers	Filippin N.T. et al	2014
Lilacs	The hidden patient: Quality of life between caregivers and patients diagnosed with Amyotrophic Lateral Sclerosis	Mello M. P. et al	2009
Pubmed	Impact of support for people with advanced Parkinson's disease on quality of life and burden of caregivers	Modugno N. et al	2020
Scielo	Adaptation of family caregivers of elderly people with Parkinson's disease: transition process	Nunes S. F. L. et al	2019
Scielo	Care in Parkinson's disease: response patterns of elderly family caregivers	Nunes S. F. et al	2020
Scielo	Being a caregiver of a person with Parkinson's disease: experienced situations	Padovani C. et al	2018
Lilacs	Caregiver of elderly people with Parkinson's disease: feelings experienced by family caregivers	Reis R. D et al	2019
Lilacs	Parkinson's disease: Feelings attributed to living with the family caregiver	Reis R. D. et al	2019
Pubmed	Psychiatric symptoms in patients and caregivers with Parkinson's disease	Saadat P. et al	2020

The search for the articles was carried out in the Scielo, Pubmed and Lilacs database, considering the period from 2009 to 2020, selecting ten articles. The main keywords were: Parkinson's disease, caregivers, quality of life and hidden patients. The inclusion and exclusion criteria were based on a careful reading of the abstracts of scientific articles, taking into account studies that could significantly contribute to the preparation of this study.

## RESULTS OF THE SYSTEMATIC REVIEW

The compilation of data from the systematic review was carried out by selecting 10 articles, according to the aforementioned criteria. They were stratified from the Scielo, Pubmed and Lilacs database. The collection of information was hampered by the reduced availability of studies on the topic.

## DISCUSSION

The act of caring has different repercussions on the caregiver's life, affecting social, emotional and economic spheres, since the experiences lived during the care are related to individualized care, excessive responsibility, difficulty in dealing with the plurality of signs and symptoms of PD and lack of support from health institutions. Such amount of demands and effective concern reflects on the physical and mental health of the caregiver, causing suffering and making him considered a hidden patient during the care process of Parkinsonian subjects. In this perspective, we cannot fail to emphasize the daily overload in the care provided to patients with this pathology, which favors the emergence of the hidden patient who is sympathetic to physical and psychogenic diseases.

## CONCLUSION

Given the complexity of PD, the possibility of the caregiver behaving like a hidden patient and the need to guarantee QOL, the professional / family needs technical and emotional support, which would be possible through participation in support groups, training, involvement of health institutions, among other actions with the purpose of contributing to the quality of life of the caregiver and consequently of the person with PD.

## REFERENCES

- Ferreira D.P.C, Coriolano M.G.W.S, Lins C.C.S.A. 2017. A perspectiva do cuidador da pessoa com Parkinson: Revisão integrativa. *Revista Brasileira de Geriatria e Gerontologia*, Rio de Janeiro, vol.20, n.1, pp.99-109, Disponível em: <[https://www.scielo.br/scielo.php?script=sci\\_abstract&pid=S180998232\\_017000100099&lng=en&nrm=iso&tlng=pt](https://www.scielo.br/scielo.php?script=sci_abstract&pid=S180998232_017000100099&lng=en&nrm=iso&tlng=pt)>. Acesso em 04 Jan. 2021. Epub 2017. <https://doi.org/10.1590/1981-22562017020160088>.
- Filippin N.T. *et al.*, 2014. Qualidade de vida de sujeitos com doença de Parkinson e seus cuidadores. *Fisioterapia em Movimento*, Curitiba, vol.27, n.1, p.57-66, Jan. Disponível em: <[https://www.scielo.br/scielo.php?pid=S010351502014000100057&script=sci\\_abstract&tlng=pt](https://www.scielo.br/scielo.php?pid=S010351502014000100057&script=sci_abstract&tlng=pt)>. Acesso em 03 Jan. 2021. Epub Mar. 2014. <https://doi.org/10.1590/0103-5150.027.001.AO06>.
- Mello Mariana Pimentel *et al.*, 2009. O paciente oculto: qualidade de vida entre cuidadores e pacientes com diagnóstico de Esclerose Lateral Amiotrófica. *Revista Brasileira de Neurologia*. Dez; 45(4):5-16.
- Modugno Nicola *et al.*, 2020. Impacto do apoio às pessoas com doença de Parkinson avançada na qualidade de vida e sobrecarga dos cuidadores. *Neuropsychiatr Dis Treat*. Dec; 2(16): 2899-2912. doi: 10.2147/NDT.S256217. PMID: 33293815. PMID: PMC7719333.
- Nunes Simony Fabíola Lopes *et al.*, 2019. Adaptação dos familiar es cuidadores de idosos com doença de Parkinson: Processo de transição. *Psicologia: Teoria e Pesquisa*, Brasília, vol. 35, no.spe, Oct. 2019. Disponível em: <[https://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S010237722019000200204](https://www.scielo.br/scielo.php?script=sci_arttext&pid=S010237722019000200204)>. Acesso em 02 Jan. 2021. Epub Oct 28, 2019. <https://doi.org/10.1590/0102.3772e35nspe4>.
- Nunes Simony Fabíola Lopes *et al.*, 2020. Cuidado na doença de Parkinson: padrões de resposta do cuidador familiar de idosos. *Saúde e Sociedade*, São Paulo, vol. 4, n.4. Dec.. Disponível em: [https://www.scielo.br/scielo.php?pid=S0104-12902020000400310&script=sci\\_arttext&tlng=pt](https://www.scielo.br/scielo.php?pid=S0104-12902020000400310&script=sci_arttext&tlng=pt). Acesso em: 02 Jan. 2021. Epub Dec 11, 2020. <http://dx.doi.org/10.1590/s0104-12902020200511>.
- Padovani Camila *et al.*, 2018. Ser cuidador de pessoa com doença de Parkinson: situações vivenciadas. *Revista Brasileira de Enfermagem*, Brasília, vol.71, suppl.6, p.2628-2634.. Disponível em: <[https://www.scielo.br/scielo.php?pid=S0034-71672018001202628&script=sci\\_abstract&tlng=pt](https://www.scielo.br/scielo.php?pid=S0034-71672018001202628&script=sci_abstract&tlng=pt)>. Acesso em 03 de Jan. 2021.

- Epub 2018. <http://dx.doi.org/10.1590/0034-7167-2017-0008>.
- Reis Rogério Donizeti *et al.*, 2019. Cuidador de idosos com doença de Parkinson: sentimentos vivenciados pelo cuidador familiar. Portal de Revistas Científicas em Ciências da Saúde. Dez; 10(5): 155-160. ID: biblio-1097698.
- Reis Rogério Donizeti *et al.*, 2019. Doença de Parkinson: Sentimentos atribuídos ao convívio à luz do cuidador familiar. Portal de Revistas Científicas em Ciências da Saúde. Dez; 24(3): 115-127. ID: biblio-1104166.
- Saadat Pavam *et al.*, 2020. Sintomas psiquiátricos em pacientes e cuidadores com doença de Parkinson. Oman Med J. Nov 30;35(6):e205. doi: 10.5001/omj.2020.91. PMID: 33274072. PMCID: PMC770352.

\*\*\*\*\*