

Conceptual paper





# Efficiency of complementary integrative practices in patients with Parkinson's disease

### **Abstract**

**Introduction:** Parkinson's disease is a disorder that causes damages to brain cells responsible for producing dopamine at the encephalic region known as black matter, a chronic and progressive disease which has as symptom hand trembling, as well as slowness and stiffness of movement and loss of balance, symptoms that compromises the daily life of the patient. The treatment is generally administered through medication. Another course to treat Parkinson's disease is through Integrative and Complementary Practices, also known as non-pharmacological therapies, which are regarded as traditional practices for preventing and reducing symptoms related with the pathology.

**Objective:** This study has as its goal to verify the efficacy in the application of Integrative and Complementary Practices to decrease symptoms in patients with Parkinson's Disease.

**Methodology:** This is an exploratory, descriptive study, with a qualitative approach with integral literature review, analyzed from PubMed and SCIELO databases. There were selected 05 articles for review.

**Results:** The study demonstrates that, though the benefits of medication and other procedures administered to treat the disease are well known, the complementary therapies also contribute to improve the motor and non-motor symptoms of the patient. It was observed that Yoga, Relaxation, Music Therapy, Acupuncture and Anma Massage Therapy all resulted on improvement for the patient.

**Conclusion:** Therefore, it is concluded that the usage of complementary therapies in patients with Parkinson's disease is efficient and aids in the motor and mental development of an individual.

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### Introduction

Parkinson's disease (PD) is a neurodegenerative disease that affects the black matter located in the encephalon of the individual. Is a chronic and progressive pathology, characterized by symptoms such as: hand trembling in rest, muscular stiffness, difficulty in performing voluntary movements and slow body movement.<sup>1</sup>

The etiology of the disease is unknown, but studies show that it may be influenced by genetic and environmental factors, in which age, especially between 55 and 70 years, is the most prevalent factor. The diagnosis is made through the symptoms, firstly being observed by the own individual or a close relative, which may confound and complicate the discovery of the disease.

According to the World Health Organization (WHO), 1% of the world's population above 65 years of age has PD, and men are the largest group. In Brazil, the number of cases is around 200 thousand people, and in the US is 59 thousand cases. The treatment is administered to diminish the symptoms, and not for the total cure of the pathology. It is administered through medication chosen regarding the necessity of the patient, and among them are Carbidopa + Levodopa; Levodopa + Benserazide; Bromocriptine; Amantadine; Biperiden; Trihexyphenidyl; Selegiline; Tolcapone e Entacapone.<sup>2</sup>

These medicaments may bring unwanted effects for the patient, leading the patient to withdraw from the treatment and live with the aches that the disease offers. Therefore, another efficient method to hinder the symptoms are the Complementary Integrative Practices (CIP), which are non-pharmacological, non-invasive complementary therapies that propose an improvement of mobility, acquisition of motor abilities and cognition, aiming for the enhancement of the quality of life of the individual.<sup>3</sup>

# **Methodology**

This is an exploratory, descriptive study, with a qualitative approach with an integral literature review, intending to ordinate and summarize the results of studies on the determined subject. This study was based on bibliographical revisions, along with scientific articles located in databases from the health field, the *PubMed* (PM), the Scientific Electronic Library Online (SCIELO), and the Health Virtual Library of the Brazilian Ministry of Health. The articles were chosen from articles registered in the databases with the following keywords: Mental Health, Complementary Therapies, Parkinson's Disease, and Symptoms.<sup>4-7</sup>

The articles were selected with the following inclusion criteria: studies published in English or Portuguese, with the main theme on Parkinson's disease. The exclusion criteria were incomplete studies, duplicated studies, or studies not related to the theme. Eight studies were selected for a better presentation of this present paper.

### **Result and discussion**

This study emphasizes that complementary therapies have great efficiency to improvement of symptoms in patients with PD. After analyzing the selected articles for this research, it was possible to verify the efficiency of practices such as Yoga, Relaxation, Music Therapy, Acupuncture and Anma Massage Therapy.

Yoga is physical activity that works the body and mind through the execution of exercises that include a sequence of movements, breathing techniques, meditation and increase in body balance. This activity is helpful for the patient with Parkinson's disease aiding to decrease anxiety, back pain, stress, and other symptoms.<sup>8</sup>



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Relaxation is a set of practices that help with relief of physical, mental, and emotional tensions. With the study it was possible to evaluate how the trembling reacted after the patient was relaxed. In conclusion, it was observed that the patient could contain the trembling for any period between 1 and 13 minutes.

Music Therapy is a type of complementary therapy that may reach various parts of the brain, since music, either listened to or played by the person, improves mood, aids with cognition, improves the temper, among other positive effects. Acupuncture comes from the traditional Chinese medicine. It is based on the use of needles in various parts of the body to balance out the Qi flow. For patients with PD, it is used according to the complaints of the patient, using the needles on the correct location to improve the symptom.8

Anma Massage Therapy is a series of movements where pressure, slides and stretches. According to the research, it was observed that symptoms such as muscular stiffness, pain, fatigue, and better body movement got better.

### Conclusion

The present study enabled the development of the understanding of the public Parkinson's disease and the Integrative Complementary Practices. In this manner, it is essential to improve the knowledge of the subject, as well as to diminish the use of pharmacological means for every type of treatment, and demonstrate that complementary therapies may also be effective to improve symptoms in patients

Therefore, it is concluded that it is indispensable the knowledge of all means that may be used as a treatment for any kind of patient that is suffering from any pathology, pursuing the best course of action and therapy that may be applied to their symptoms.

# **Ackowledgments**

None.

### Conflicts of interest

The authors declare no conflicts of interest.

## References

- 1. Perternella FMN, Marcon SS. Diagnosed with Parkinson's Diesease: impact on patients and family members. Revista Bras Enferm. 2009;62(1):25–31.
- 2. Magalhães AB. World Parkinson's Disease Awareness Day. World Parkinson's Disease Awareness Day. Blog da Sáude, 2021.
- 3. Castro, PHCG, Souza SMG. Non-pharmacological therapies in the additional treatment of parkinson's disease patients. 2019.
- 4. De Sousa Moreiraa JL, Gomes Feitosa PW, Mendonça Araújoa L, et al. Integrative health practices in the treatment of parkinson's disease: an Integrative review. Rev de Lierar. 2020;80(1).
- 5. Calderaro SG, Amadei JL, Conter CC. Parkinson's disease: complementary treatments and life quality. Saude e pesquisa, Maringa. 2015;8(1):97-103.
- 6. Cesar Iwamoto FM. Acupuncture in Parkinson Disease: experimental and clinical trials review. Revista Neurociências. 2007;15(2):147-152.
- 7. Rodriguez-Pallares J, Garcia-Garrote M, Parga JA, et al. Combined cell--based therapy strategies for the treatment of Parkinson's disease: focus on mesenchymal stromal cells. Neural Regen Res. 2023;18(3):478-484.
- 8. Sobrinho HM, Stefano Machado. Non-pharmacological therapies in complementary treatment of patients with parkinson's disease. Pontifical. Pontifical Pontifical University Catholic of Goiás. 2019;1-24.