

## Therapy on Parkinson's Disease

Ronald Kirwa\*

### Abstract

Parkinson's disorder (PD) is a central nervous condition that causes tremors and affects mobility. Symptoms appear slowly, generally beginning with a slight shaking in one hand. Tremors are typical, but the disease can also cause stiffness or sluggish movement. Dopaminergic levels drop when nerve cells in the brain are damaged, leading to Parkinson's disease. The condition can start with tremors and progress to additional symptoms such as sluggish movements, stiffness, and a loss of balance. Therapy can help reduce the symptoms of Parkinson's disease, but it can't cure it. It is critical to obtain diagnostic testing by laboratory or imaging tests. A therapy expert can show how to make the proper motions to improve movement, flexibility, and balance while still allowing the patient to maintain personal independence. Exercising can help strengthen the muscles, improve flexibility and balance. Therapy can also boost mood and help the patient cope with sadness or anxiety.

**Keywords:** Parkinson's disorder; Therapy; Neurons; Physiotherapy; Patient.

### Introduction

Parkinson's disease is caused due to the loss of specific neuron in the midbrain of humans. These neurons are dopaminergic neurons [1,2]. These neurons die due to the accumulation of a toxic protein alpha-synuclein. Alpha-synuclein along with other proteins combine to form lewy bodies [3-5]. These proteins have shown their ability to

form aggregates in different parts of the human brain. However, only dopaminergic neurons die more due to these aggregates as compared to other neurons [6]. The reasons why neurons die is still unclear [7,8], but scientists have found evidence based on impaired autophagy, excessive synaptic pruning, synaptic degeneration, dendritic

<sup>1</sup>Kabarak university, Eldamaravine Road, Nakuru, Kenya

\*Corresponding Author: Ronald Kirwa  
Kabarak university, Eldamaravine Road, Nakuru, Kenya.

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and axonal growth deficits, impaired nuclear size and shape, mitochondrial dysfunction, faulty differentiation or increased neuroinflammation [9-15]. These neurons when generated in culture can be used for study drug targeting [16], biomarkers identification or understanding their transcriptomics profile to identify new drug candidates for therapy [17-21].

## Discussion

Therapy on Parkinson's disease. Various therapies can make the experience with Parkinson's disease more manageable and assist the patient in dealing with the conditions daily. Through increased physical activity, a therapist may help patients lower muscular rigidity, all the fatigue and discomfort [22]. The therapist's goal is to assist patients in walking quickly and improve their flexibility and movement. They also work to increase the patient's fitness and capacity to handle their affairs. While no combination of diet has been proven to alleviate the symptoms associated with the disease, several foods may assist [1]. Consuming high-fibre meals and taking enough water, for instance, can hopefully minimize constipation, which is prevalent in Parkinson's patients.

Physiotherapy. Complementary therapies can assist with pain, tiredness, and sadness, which are some of the indications and consequences of Parkinson's disease. Massage treatment can help patients relax and relieve muscular tension. Massage therapies also help the patients to meditate and bring a sense of calmness to the brain. Meditation can help

patients feel better by reducing stress and discomfort. Furthermore, Tai chi is another ancient Chinese type of exercise that uses slow, flowing movements to enhance flexibility, stability, and muscular strength. Tai chi may also aid in the prevention of falls since it provides the body with balance. A few types of tai chi are appropriate for persons of all ages and physical abilities [23,24]. According to academic research, Tai chi can enhance balance in patients with mild to medium symptoms more than stretching and strength training.

Progressive stretches, motions and positions in yoga can help patients gain postural stability. Most functions may be altered to suit their physical ability. Reciprocal patterns, like flailing hands still walking, are instances of reciprocal motions. Parkinson's disease may impact these trends. The therapist can also use gymnastic cycling or a treadmill to help the patient to reinforce reciprocal routines [25]. Strengthening training is vital for everybody with Parkinson's disease since muscles decrease with ageing. However, evidence shows that muscular rigidity is a more significant issue for people with Parkinson's. A psychotherapist may ask patients to undertake workouts with lightweight dumbbells or a pressure band based on their condition phase. It has also been demonstrated that little physical exercise leads to enhanced cognition and memory [26].

## Occupational therapy

Occupational therapy's job is to assist Parkinson's disease patients in maintaining

their average level of personal care, employment, and recreational activities for as much as feasible [27]. When a person's daily tasks are no longer available, occupational therapy practitioners help them change and adjust their interaction with their personal, social, physical, and cognitive surroundings to establish new cherished activities and responsibilities. An occupational therapist professional can help patients discover problems in their daily lives, like bathing, clothing, or going to the store [28]. They can assist patients in devising realistic solutions and ensuring that their house is secure and appropriately configured for them. This will help them in preserving their freedom as long as needed [29,30].

Despite the prevalence of impairments in hand functioning and decreased flexibility in everyday tasks, these issues are frequently overlooked since most rehabilitation centers concentrate on movement and stability issues [31]. As a result, patients are typically directed to an occupational therapist in the advanced stages of Parkinson's disorder when suffering from substantial impairment. Recent research by has looked at occupational therapists' usefulness for Parkinson's Disease patients. Occupational therapists attempt to cure hand impairments to minimize reliance or restore occupational dependency in everyday tasks.

### **Psychotherapy**

This therapy teaches patients to recognize and modify negative thinking and social behaviours and adjust or accommodate psychological processes that contribute to mild depression. The patient analyzes

personal connections with a psychotherapist and strives to reduce friction and negative sentiments that might induce or aggravate sadness [32,33]. The patient is trained to cope with the anxiety by mastering relaxation methods and exposing themselves to the causes of their worry regularly. Meeting in the space with fellow patients who have Parkinson's may well be beneficial to them. Patients can acquire coping strategies and discuss emotions in a comfortable environment in such a program [34]. They could also discover much about how others see you versus how you see yourself.

### **Conclusion**

Therapies can help patients with Parkinson's disorder feel better. Most alternative treatments and remedies have been confirmed helpful with Parkinson's disease effects. However, there is no scientific proof that they help manage Parkinson's pathological changes. It is indeed natural to feel frustrated, upset, or disappointed when you have Parkinson's disease [35]. It may be exasperating since walking, communicating, and even feeding get increasingly challenging and time-consuming. Patients with Parkinson's disease are prone to depression, and therefore, Relatives and friends can be their most prominent supporters. Still, individuals who know what they are going through can be highly beneficial. Therefore, therapy sessions are useful to such patients because the therapists know all the aspects of the disease and can help them better cope with the disease.

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