

## **Quantify diurnal changes of cognitive abilities among 60-70 years old Parkinson's**

**Karthikeyan T**

Physiotherapist, NIMHANS, India

**C**ognitive dysfunctions are commonly present in most of the neurological disorders. Few of them are multiple sclerosis, post stroke cases, Alzheimer's disease, and in geriatric population. The prevalence of cognitive dysfunctions in Parkinson's disease (PD) is also well documented. In majority of the non demented Parkinson's patients cognitive deficits are present. Motor deficits are accompanied by cognitive impairments in PD. Selective cognitive impairments present in PD are attention deficits, impaired concentration, executive functions, learning and memory. These cognitive dysfunctions adversely affect the social and occupational life of the patient. These impairments could be serious problem to plan rehabilitation programme for patients. There are fluctuations in the cognitive abilities in neuro pathological conditions like multiple sclerosis and post stroke cases. These fluctuations could be related to changes in attention and executive functions, which is essential for performing motor task while giving neurological rehabilitation. It is important for us to know that when patient can perform

cognitively better over the course of the day as, we need to structure and schedule their rehabilitation programme accordingly. For the successful therapeutic approach and restoration of patient and to improve their quality of life, we should plan the programme according to cognitive functioning of the patient. As learning can occur when patients are cognitively better. Objectives: To evaluate the diurnal changes in cognitive abilities of patients with PD Over the course of the day Methods: Ten PD patients diagnosed confirmed through neuro psychiatrist. The cognitive functions quantified through "Mini mental Scale examination" for screening. Next, the subjects who met inclusion criteria were tested at three different times of the day (morning, noon and in the evening) using PDCRS. Entire scores on the PD-CRS were deliberated by total the subcortical and cortical PD-CRS scores (0-134). Each session lasted for 10-15 minutes Results: There was a significant difference in the cognitive abilities on the total score of PDCRS between morning to afternoon.

e: karthik\_77in@yahoo.co.in