# APPLYING TELEMEDICINE IN REHABILITATION AND TREATMENT OF PARKINSON'S DISEASE

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**ABSTRACT**

**Introduction:** Applying technology increases telemedicine usage in rehabilitation and treatment. Parkinson's is the second common disease in neurology problems. Elder people face this problem more than the young. Fast diagnosis can help patients to heal better and easier, and telemedicine can help improve access. We are going to characterize different aspects of telemedicine in rehabilitation of Parkinson's disease, especially wearable devices and sensors usage.

**Methods:** The required data in the present systematic research were derived from published electronic sources and credible academic articles published in such databases as PubMed, Scopus and Science Direct in the past five years. The following keywords were searched for, in separation and in combination: telemedicine, tele-care, tele-health, Parkinson's disease. Finally, 60 articles were found that met our criteria. Only 30% of them reported wearable devices and sensors and their use in tele-Parkinson.

**Results:** The common use of tele-Parkinson is transferring and receiving information by wearing devices, sensors and mobile applications (reported 30% of chosen articles). These devices can achieve physical and emotional data and use them for choosing doze of patient's drugs. Thus, using tele-Parkinson can increase quality of life and access to treatment.

**Conclusion:** For implementing tele-Parkinson, wearing devices and sensors are needed. Thus, it can decrease cost and improve good and fast treatment. As a recommendation, it is better to classify technologies that were used for tele-Parkinson and discuss all of them; in this paper, we simply classified them and explained wearing devices, sensors, and mobile applications.

**KEYWORDS:** Telemedicine, Tele-care, Tele-health, Parkinson's disease, Wearable device