## Parkinson's Disease

## NEUROPSYCHIATRIC SYMPTOMS IN CLINICALLY DEFINED PARKINSON`S DISEASE: AN UPDATED REVIEW OF LITERATURE

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Background: Neuropsychiatric symptoms (NPS) are a common and potentially serious manifestation of Parkinson's Disease (PD) but are frequently overlooked in favor of a focus on motor symptomatology. Here we review the prevalence and type of NPS experienced by PD patients with a clinically defined course of their illness.

Methods: We identified reports of NPS in patients with PD and mean disease duration over 3 years. Three databases – PubMed, Scopus and Dialnet – were searched for relevant literature published between 2010 and 2020. Search terms included 'neuropsychiatric' and 'parkinson'. Predefined exclusion criteria were applied prior to a descriptive analysis of the literature base.

Results: 87 unique reports were identified and 30 met inclusion and exclusion criteria. These included 7142 patients with PD (male: 67.3%; mean age: 66.2 years; mean disease duration: 6.7 years). The most frequent NPS were mood disorders (apathy, depression, anxiety), psychosis, and impulse control disorders (ICD). Treatment with dopamine agonists was identified as an important risk factor for ICD. Co-occurrence of NPS and cognitive dysfunction was also evidenced in a number of studies. Patients with more significant cognitive deficits and higher levels of NPS appeared to be of older age with a longer disease duration, and to have more severe motor symptoms.

Conclusions: NPS, most commonly mood disorders (depression, apathy, anxiety), psychosis, and ICDs, are frequent manifestations of PD. The results of this review reflect the need to develop unified validated assessment protocols for NPS in PD, as well as to improve their management in clinical practice.