Technology use in Parkinson's disease and parkinsonism: a multicenter survey in real-life Healthy East Lombardy Parkinson (HELP) network

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Introduction: Technology use is increasing in the ageing population but no large studies evaluated the access to internet and digital technology in parkinsonian patients.

Objective: To evaluate the real-life use of internet and technological devices in parkinsonian patients.

Methods: A real-life survey in a network of movement disorder outpatient clinics in Lombardy Region, Italy was conducted. Consecutive Parkinson's disease (PD) or atypical parkinsonism patients were asked to complete a standardized questionnaire evaluating the use of technology, internet and devices; the severity of the disease and milestones of disability were evaluated in the cohort.

Results: Four hundred-fifty-four patients in 11 centres were included (mean age 70.5 ± 9.7 years, mean dis duration 7.1 ± 5.2 years), namely 411 PD (16.3% with dementia and 44% with motor fluctuations) and 43 atypical parkinsonism. 43% PD and 23.7% of atypical parkinsonism had access to email with a mean use of 6.4 hours per week. 75% of patients had smartphone 12% tablet and 14% computer with no difference between patients with and without motor fluctuations. OFF-line patients were older and exhibited worse motor and non-motor symptoms compared to patients with internet access.

Conclusions: The survey highlighted an heterogeneous use of digital technology and internet in the population. The wide global internet access, prominent via smartphone highlight its potential for monitoring symptoms in clinical routine or in clinical trials. OFF-line patients have an increased risk of disability thus requiring specific interventions from clinicians and health care systems.

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