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Long-term effects of 24-week telemedicine program in patients with functional motor disorders: a prospective cohort study

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Introduction: Motor symptoms in functional motor disorders (FMDs) are disabling neurological conditions manifesting involuntary but learned altered movement patterns [1,2]. They are associated with long-term disability, poor quality of life, and economic burden on health and social care [3]. Multidisciplinary 5-day rehabilitation programs reduce motor and non-motor symptoms, and a 12-week telemedicine program appears useful in providing support [4]. However, the telemedicine management of these patients through long-term monitoring is lacking.

Objective: To compare a 24-week telemedicine program against a 12-weeks telemedicine program after 5 days of rehabilitation on the motor, non-motor symptoms and quality of life in FMDs.

Methods: This prospective cohort study involves 52 consecutive FMDs patients who underwent a 5-day in-person rehabilitation program. The experimental group (n=26) underwent 12 sessions telemedicine program (1/7 days) followed by 12 sessions telemedicine program spread over 24 weeks (1/14 days). The control group underwent only 12 sessions telemedicine program (1/7 days). Validated measures of motor and non-motor symptoms such as fatigue and pain, quality of life, perception of change, anxiety, and depressive symptoms were recorded before (T0), after completion of rehabilitation (T1), at three months (T2), and nine months (T3).

Results: So far, 50 patients have completed all assessments and were included in the preliminary analyses. At the 9-month follow-up, only an effect of time was found in both groups for motor symptoms ($p<0.001$), physical fatigue ($p=0.015$), physical quality of life ($p=0.007$), and anxiety symptoms ($p=0.004$). Other variables were not significant.

Conclusions: Our preliminary results support the fundamental role of multidisciplinary management through telemedicine in the first critical months after diagnosis and a 5-day rehabilitation program. A 9-month telemedicine program consisting of multidisciplinary expert monitoring of patients with FMDs does not seem to impact patients' condition with respect to the usual three months telemedicine program [4].

References:

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